# CURRENT AFFAIRS for UPSC

11TH TO 17TH SEPTEMBER 2022

**DreamIAS** 





### INTERNATIONAL

#### WHAT'S IN A NAME? KING CHARLES III'S NAME HAS LOADED HISTORY

Britain's new monarch is named King Charles III — but that was not inevitable. Charles Philip Arthur George could have chosen another royal name when he took the throne after the death of his mother Queen Elizabeth II on Thursday. While the queen used her first given name, her father, King George VI, was named Albert Frederick Arthur George and called Bertie by friends and family.

Some observers thought the new king might prefer a different name because of the historical baggage associated with the two previous British monarchs called Charles.

#### KING CHARLES I

King Charles I is the only British sovereign whose rule led to revolution and the temporary abolition of the monarchy. He took the throne in 1625, and his reign saw a growing power struggle between the crown and Parliament, which sought to limit the king's powers.

After the king attempted to arrest lawmakers in the House of Commons in 1642, hostilities erupted into the English Civil War, which ended with victory for the parliamentary forces of Oliver Cromwell. Charles was convicted of high treason and beheaded in 1649 outside the Banqueting House in London, just up the street from Parliament.

#### KING CHARLES II

The son of Charles I spe<mark>nt his youth abroad during Britain's 11 years</mark> of rule under Cromwell. He took the throne when the monarchy was restored in 1660.

He had considerably less power than his father had enjoyed. The monarch was stripped of the power to make law without the consent of Parliament. Further reforms in the following decades established that the Crown must accept the will of the democratically elected Parliament, the basis of Britain's constitutional monarchy.

Charles II's 25-year reign saw the return of public entertainment after the austere years under the Puritan Cromwell, when theaters were shut and Christmas celebrations were banned. Charles II was nicknamed the "merry monarch" because of his hedonism and many romances. The King Charles Spaniel is named after the dog-loving monarch.

# WHAT IS LYING-IN-STATE, THE SOLEMN TRADITION PART OF QUEEN ELIZABETH'S FINAL JOURNEY?

Thousands of mourners will be allowed to pay their last respects to Queen Elizabeth II beginning Wednesday till the day of her funeral next Monday. During this period, the Queen's coffin will lie in state in Westminster Hall. Those wanting to visit have been warned of mile-long queues and airport-like stringent security arrangements. Visitors, meanwhile, will be allowed round-the-clock.

#### What is the meaning of lying-in-state?

Lying-in-state is a term used to describe a formal, solemn occasion during which a deceased person's coffin is placed on view at a primary government building for the public to pay their





respects before the last rites. The body, as per local customs, can be placed inside or outside the coffin.

According to the UK Parliament website, lying-in-state in the UK is given to "the Sovereign, as Head of State, the current or past Queen Consort and sometimes former Prime Ministers".

After her death in 2002, the Queen Mother lay in state for three days. The lying-in-state tradition in the UK can be traced back to the Stuart dynasty that reigned in England and Scotland in the 17th century.

In the US, lying-in-state is accorded to the president or, occasionally, another high-ranking official or military leader. The coffin bearing the deceased's body is placed inside the US Capitol or a state capitol.

About lying-in-state at the US Capitol, the decision is made by a concurrent resolution of the US House of Representatives and the US Senate. The states in the US have their own customs and rules to make that decision.

According to The National Conference of State Legislatures (NCSL), a bipartisan US outfit that servers members and staff of the country's state legislatures, "(In the US) the practice of lying-instate began in 1852 when Henry Clay, a US Senator from Kentucky, was the first person to lie in state in the US Capitol."

Abraham Lincoln was the first US President to lie in state in the US Capitol.

A deceased Pope customarily lies in state inside the chapel of the Apostolic Palace.

#### What 'lying-in-state' protocol does India follow?

India accords 'state funerals' to departed dignitaries like the sitting president, prime minister, a former prime minister, president or governor among others, with the Centre having the power to announce it for any individuals it deems fit for the honour. Lying-in-state is observed during the time leading up to the state funeral, which also has protocols that involve observing 'days of mourning' with the flag flying at half mast and no official entertainment.

Guidelines by the Ministry of Home Affairs say that a state funeral will be accorded to any dignitary when ordered by the Government of India.

"Before the arrangements are made for the funeral, and after the customary/religious rituals have been performed, the body will lie in state to enable last homage being paid to the deceased. In the case of the death of the President a vigil party from the senior officers of the three services down to the rank of Brigadier and equivalent will be on vigil duty while the body is lying-in-state," according to the guidelines.

The lying-in-state general instructions state that the body should be placed in an open ground or large verandah on a raised mound or a platform; the path for mourners should be broad enough to enable 4-5 persons to walk abreast.

Further, the lying-in-state can be of as long a duration as the religious and other considerations may permit.

After Mahatma Gandhi's death, his body lay in state at Birla House, while Indira Gandhi's body was kept at Teen Murti and Atal Bihari Vajpaye lay in state at the BJP headquarters.





#### What is lying-in-rest/laying-in-repose?

In the UK, when the coffin of the high-ranking official is displayed at a place that is not the principal government building earmarked for lying-in-state, it is termed as lying-in-rest or lying-in-repose. It is so called as the setting is considered less formal.

In Canada, for example, when a deceased dignitary – governor generals or prime ministers – lie anywhere outside of the Centre Block of Parliament Hill, they are referred to as lying-in-repose.

On Monday, the Queen's coffin lay at rest in St Giles' Cathedral in Edinburgh, where thousands queued up to pay their last respects.

In the US, another term – lying-in-honour – is used instead of lying-in-state if the person who is being given this honour is not an elected official, but is considered to have made significant contributions to America.

'#NotMyKing' |With King Charles III's accession to the throne, why are anti-monarchy protestors being arrested?

### UNDERSTANDING UKRAINE'S COUNTER-OFFENSIVE

The story so far: Ukraine has launched a lightning counter-offensive in the country's northeast that saw surprising territorial gains. Its forces have pushed back Russian soldiers from most of Kharkiv Oblast, retaking thousands of square kilometres of territory. Russia has confirmed the retreat, saying it withdrew troops for "regrouping". Ukraine's fresh momentum has triggered debates on whether the country, which has lost swathes of territories in the north, east and south since the Russian invasion began on February 24, is finally turning around the war. It has also raised questions on Russia's battlefield tactics.

### How significant are Ukraine's gains?

Ukraine says it has retaken some 3,500 square milesof territories since its counter-offensive began earlier this year, including Izium and Kupiansk, two strategically important towns in the northeast that served as logistical hubs for the Russian forces. This is a significant battlefield gain for Ukraine because this is the first time, since the war began, that Ukrainian troops have pushed back the Russians through combat. In March, Russia had voluntarily announced withdrawal from the Kyiv area and around Kharkiv, Ukraine's second largest city, after the Istanbul talks between the two sides. But this week's withdrawal was different. It looked like the Russians were caught off guard when Ukraine launched the blitz. This provides a much needed morale booster for the Ukrainian troops that suffered a series of defeats in recent months — in Mariupol, Severodonetsk and Lysychansk. Ukraine has now said the fighting would continue till the "liberation" of all lost territories (including Donbas and Crimea), practically ruling out any negotiated settlement. The Russians have also ruled out talks.

#### How did Ukraine manage to beat the Russians back in Kharkiv Oblast?

Ukraine has been planning for this counter-offensive for months. After capturing Lysychansk in July, which saw the whole of Luhansk province coming under its control, Russia's battlefield combat came to a halt. By that time, Russia was controlling almost 25% of Ukraine, Europe's largest country. Russia, which also took huge losses in the battle for Donbas, seemed to have decided to halt the ground offensive as its troops were regrouping and recovering. This opened a





window opportunity for Ukraine to move ahead with its counter-offensive plans. This was also the time when Ukraine started receiving advanced mid-range rocket systems such as High Mobility Artillery Rocket Systems (HIMARS) from the U.S. The Biden administration, which has committed military assistance worth more than \$14.5 billion to Ukraine, and British and other European governments made sure that Ukraine is replenished despite the military setbacks it suffered. On the other side, the sanctions-hit Russia found it difficult to make sure their supply is intact and had to turn to Iran and North Korea, according to western intelligence, for drones and shells.

American and British intelligence officials were directly involved in planning the Ukrainian counter-offensive, according to a report in the NYT. U.S. intelligence agencies also provided information to Ukraine on the weak links of the Russian defence. Ukraine started attacks in southern Ukraine —including a ground offensive in Kherson, one of Russia's early gains in the war, and sabotage hits in Crimea, which Russia annexed in 2014. But as it appears now, Ukraine's main target was not the southern region, but Kharkiv. As Russia, faced with the Ukrainian attacks in the south, bolstered the defences of Kherson and Zaporizhzhia, Ukraine broke into the relatively weaker defence lines in the northeast, pushing the Russians back. Russia had two options — resist the Ukrainian attack with the limited number of soldiers deployed in Kharkiv or retreat and regroup elsewhere. The Russian Generals seem to have opted for the latter.

# What is Russia's response?

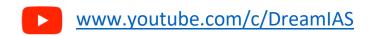
Russia has stepped up air and missile attacks in Kharkiv and elsewhere in Ukraine. That's understandable as Russia still possesses the capability to strike anywhere in Ukraine. But the question is whether such attacks would have any meaningful effect on the battlefield. Several defence analysts, including those at the U.S.-based Institute for the Study of War and the London-based Royal United Services Institute, have pointed out that Russia faces several challenges on the battlefield such as manpower crunch and supply disruptions. This explains why the Russian battlefield advances came to a halt after the capture of Luhansk. Russian President Vladimir Putin still hasn't declared war on Ukraine. His original plan was to meet his military objective with a limited deployment of Russian troops (what he calls "the special military operation"). But the Ukrainian resistance and the current counter-offensive have made it difficult for Mr. Putin to maintain the momentum with the limited deployment.

So unless he changes the current plan of the war and deploys more soldiers, the Russian focus is likely to be on holding the line in the south and east — Kherson, Zaporizhzhia, Luhansk and Donetsk — until the winter (say, November). Once the winter sets in and the conflict gets frozen, Mr. Putin will have more time to prepare his forces for future battles. He can also use the energy card, which he is more than willing to do, to wreak havoc in European economies, which are already battered by high inflation, during winter. On the other side, Ukraine knows that it has a small window of opportunity to make maximum territorial gains before winter sets in, and that's what Ukraine is trying to achieve. So the coming weeks would be crucial for both sides. While it's too early to say whether Ukraine has turned around the war, it has clearly pushed Russia to the defensive.

#### How is it going to affect Mr. Putin?

Russia's retreat from Kharkiv has triggered rare public criticism inside the country of the way the war is conducted. Defence Minister Sergei Shoigu is particularly targeted. Even Ramzan Kadyrov, the strongman of Chechnya and a Putin ally, has said the Defence Ministry has made mistakes.





Russian forces' inability to take a quick, decisive victory in Ukraine had already raised questions about Mr. Putin's decision to invade the country. But the dominant Russian narrative was that its troops were making incremental advances in Ukraine (which they were) and Russian officials and Generals have made it clear several times that they want to take the whole of Ukraine's east and south, stretching from Kharkiv to Odesa. But Ukraine has drilled holes in this narrative with its gains in Kharkiv. That leaves Mr. Putin in a spot.

As Walter Russel Mead wrote, "the Kremlin is no place for the weak". Historically, bad wars have cost Russian rulers dearly. Tsar Nicholas II never recovered from Russia's humiliating defeat to the Japanese in 1904-05. The Soviet withdrawal from Afghanistan in 1989 turned out to be politically costly for Mikhail Gorbachev. Russia's situation in Ukraine is far from an outright defeat or forced withdrawal. But the prolonged battle has already affected Russia's power projections and if Ukraine continues its small but significant battlefield advances, Mr. Putin would face more questions from his own allies. He can't afford to lose this war.

#### WHAT IS THE G7 PLANNING ON RUSSIAN OIL?

The story so far: On September 2, Finance Ministers of all G7 countries, the U.S., Canada, the U.K., France, Germany, Italy, Japan, as well as the European Union announced their plan to "finalise and implement a comprehensive prohibition of services which enable maritime transportation of Russian-origin crude oil and petroleum products globally", unless they are purchased at or below a "price cap" they will fix. The plan, however, doesn't include Russian gas, which Europe is still quite dependent on.

### What is the price cap plan?

The price cap plan is the latest of the sanctions proposed by Western countries against Russia for its invasion of Ukraine, as well as Belarus for its support to Russia. For the past few weeks, U.S. and EU officials have been trying to convince countries including India, China and Turkey to join the coalition or to at least support the price cap, which they say is in the interests of all oil buyers from Russia as it will give them leverage to lower purchase prices.

#### How will it be enforced?

For countries that join the coalition, it would mean simply not buying Russian oil unless the price is reduced to where the cap is determined. For countries that don't join the coalition, or buy oil higher than the cap price, they would lose access to all services provided by the coalition countries including for example, insurance, currency payment, facilitation and vessel clearances for their shipments. G7 countries say they are aiming to reduce the price of oil, but not the quantity of oil that Russia sells, so as to control inflation globally while hurting the Russian economy and its ability to fund the war in Ukraine. This could only work, of course, if all countries joined the coalition.

### How has Russia reacted to the plan?

Russian President Vladimir Putin has lashed out at the plan, warning that Russia would not supply "anything at all" if it contradicts Russian interests. Speaking at the Eastern Economic Forum (EEF) in Vladivostok this week, that Prime Minister Narendra Modi joined virtually, he threatened that Russia could stop supplies of gas, oil, coal, heating oil... leaving European countries to "freeze". On September 5, Russia also announced a halt on all supplies via the Nord Stream 1 pipeline to Europe





due to "maintenance issues" arising from the EU sanctions already in place, raising fears of a very difficult winter for European countries.

#### Will the Modi government comply with the price cap?

The price cap is only the latest in a number of sanctions to hurt the Russian economy that the U.S. and EU have tried to bring India on board with: from asking India to change its uncritical stance on Russia at the United Nations, to cutting down oil imports, to stopping defence and other purchases from Russia, and to avoid the rupee-rouble payment mechanism that circumvent their sanctions. Thus far, India has not obliged, and there is little indication that New Delhi is likely to, just yet. India's oil intake from Russia, which was minuscule prior to the war has soared 50 times over. When asked, Petroleum Minister Hardeep Puri rejected any "moral" duty to join the price cap coalition, and said his only duty was to providing affordable oil to Indian consumers. At the EEF, Mr. Modi said he wanted to "strengthen" ties with Russia in the energy field and boost India's \$16 billion investment in Russian oilfields. This week, Mr. Modi will also join President Putin, Chinese President Xi Jinping, Turkish President Recep Tayyip Erdogan and other leaders at the Shanghai Cooperation Organisation summit in Uzbekistan, where the price cap issue will no doubt be discussed from the opposite viewpoint to the G7's. It also remains to be seen whether India will bargain with the U.S. to set aside sanctions against Iran and Venezuela, from which it cancelled oil imports under pressure from the U.S. in 2017-18, in exchange for joining the price cap coalition.







# **NATION**

### **ENGAGE WITH CAUTION**

India and China on September 13 confirmed the disengagement of their troops from a fifth friction point in Eastern Ladakh along the LAC. With the latest withdrawal of troops from Patrolling Point (PP) 15 in the Gogra-Hot Springs area, buffer zones have now been established by the two sides in five locations, including in Galwan Valley, north and south of Pangong Lake, and at PP17A in Gogra. The arrangements in the four earlier established buffer zones have so far helped keep the peace over the past two years. No patrolling is to be undertaken by either side in the buffer zones, which have been established on territory claimed by both India and China. The latest disengagement came just three days before Prime Minister Narendra Modi and Chinese President Xi Jinping are to attend the Shanghai Cooperation Organisation (SCO) Summit in Uzbekistan.

Reflecting the current state of relations, the two leaders have not directly spoken in more than two-and-a-half-years, an extraordinary situation for the world's two most populous countries. Whether they meet at the SCO Summit — as of September 14, neither side had confirmed or ruled out a meeting — or at the G20 in Indonesia later this year, India will need to proceed with caution as it inevitably resumes high-level engagement with China. While the buffer zones may serve as a temporary measure to prevent a recurrence of clashes, the reality is that this is an arrangement that has been forced on India. The Indian military, by holding the line and showing its capacity to match China's deployments, has been able to reverse China's multiple territorial ingresses of April 2020 in the five areas. That has, however, come at the cost of India's ability to access patrolling points that it was reaching previously, which, in the view of some military observers, might have been China's game-plan all along, given the favourable logistics and terrain on the Chinese side that enable faster deployments. Moreover, China has neither agreed to resolve stand-offs in Demchok and Depsang, suggesting they pre-dated the current tensions, nor shown any intent to de-escalate, instead continuing to build forward infrastructure aimed at permanently housing a large number of troops closer to the LAC. Indeed, signs are that both sides are in for a prolonged period of uncertainty on the borders thanks to China's decision to mobilise tens of thousands of troops in April 2020, in contravention of past border agreements. Unless Beijing reverses its recent, and still unexplained, moves to militarise the LAC and in the process undo the carefully constructed arrangements that helped keep the peace for 40 years, India will have little incentive to consider a return to relations as they were prior to 2020. The latest disengagement, while certainly a welcome step, by no means implies an end to the crisis on the border.

# THREE TO TANGLE

India is understandably upset with the U.S.'s decision to refurbish the F-16 fighter fleet of Pakistan. The fleet has been the backbone of the Pakistan Air Force since the early 1980s, upgraded, and replenished periodically. As the partnership between the two countries grew over the years, including and particularly in the defence sector, India continuously raised its concerns on this account with U.S. interlocutors. Successive U.S. administrations have maintained that the defence partnership with Pakistan, which is a major non-NATO ally, is a critical component of its global war on terror — a point contested by India. In 2016, the U.S. Congress stalled the Obama administration's move to give more F-16 fighters to Pakistan. New Delhi's apprehensions came true in February 2019, a day after the Balakot air strike by the Indian Air Force, when Pakistan deployed its F-16s to target Indian military bases close to the Line of Control. The Indian Army recovered debris of the Advanced Medium Range Air-to-Air Missile fired by the F-16s. On





September 7, the U.S. Defense Security Cooperation Agency notified a possible Foreign Military Sales worth \$450 million for engine, electronic warfare and other hardware and software upgrades and spares for Pakistan's F-16s. Though it said that the proposed sale does not include any new capabilities, weapons, or munitions, the move clearly marks a thaw in the U.S.'s attitude towards Pakistan.

The External Affairs Ministry has chosen to maintain its silence on the issue, unlike its public expression of summoning the U.S. Ambassador in 2016. The U.S. move strains its relationship with India which has been making great strides, though it is not without obstacles. New Delhi and Washington have been skilfully managing their differences over Afghanistan, the crisis in Ukraine, and the lingering threat of U.S. sanctions under its Countering America's Adversaries Through Sanctions Act. Washington's new warmth with Islamabad also comes amid a flurry of India-U.S. diplomatic and military engagements. India and the U.S. have committed to deepening defence and security cooperation, but the indulgence of Pakistan dampens that spirit. The Trump administration had tried to hold Pakistan accountable for duplicity in its approach towards terrorist groups operating from its territory, which amounts to running with the hare and hunting with the hounds. To stay in Afghanistan, the U.S. needed Pakistan; now to stay away from Afghanistan it needs Pakistan even more. While the U.S. may have its reasons to keep Pakistan humoured and incentivised, India's concerns are immediate and real. Terrorism against India has been Pakistan's state policy for decades. Far from seeking accountability, the U.S. is rewarding Pakistan, and more on the same lines may in the offing. India and the U.S. need to work to ensure that the spectacular gains made in bilateral ties are preserved and nourished.

#### INDIA RAISES SRI LANKAN TAMIL ISSUE IN UN

India on Monday voiced concern over the "lack of measurable progress" in Sri Lanka's promised political solution to the long-pending Tamil national question, while making an unusual reference to the crisis-hit island nation's "debt-driven" economy in the context of its current crisis.

In its statement at the 51st session of the United Nations Human Rights Council in Geneva, India said it has "always believed in the responsibility of states for promotion and protection of human rights and constructive international dialogue and cooperation" guided by the UN Charter. "In this regard, the Indian delegation notes with concern the lack of measurable progress by Government of Sri Lanka on their commitments of a political solution to the ethnic issue — through full implementation of the 13th Amendment of the Constitution, delegation of powers to Provincial Councils and holding of Provincial Council elections at the earliest," India said. The terms of Sri Lanka's nine provincial councils expired about three years ago, and they have remained defunct since.

India's statement comes ahead of a resolution on Sri Lanka that will likely face a vote at the Council. Since 2009, India has voted thrice in favour of the UN resolution on Sri Lanka — two were critical — and abstained twice, in 2014 and 2021. Irrespective of its vote, India has consistently underscored the need for a political settlement "within the framework of a united Sri Lanka, ensuring justice, peace, equality and dignity for the Tamils of Sri Lanka," as it reiterated on Monday as well.

Over 13 years since the end of Sri Lanka's civil war, in which tens of thousands of civilians were killed and disappeared, survivors continue demanding justice and accountability for war-time crimes. In the post-war years, Sri Lanka's human rights defenders have frequently flagged concerns over persisting militarisation, especially in the Tamil-majority north and east;





repression, and the shrinking space for dissent. In her latest report on Sri Lanka, the UN Human Rights chief said "embedded impunity for past and present human rights abuses, economic crimes and corruption" were among the "underlying factors" that led to the country's "devastating" economic crisis.

India has extended nearly \$4 billion crucial assistance to Sri Lanka this year but has not made any public remark on the island's economic choices so far. However, at the 'Interactive Dialogue' segment of the ongoing Council session, India said Sri Lanka's current economic crisis "demonstrated the limitations of debt driven economy and the impact it has on the standard of living". China, Japan, and India are Sri Lanka's three main bilateral creditors, while the island nation owes the biggest chunk of its foreign debt to International Sovereign Bond holders.

#### THE SPIRIT OF 1971

Bangladesh Prime Minister Sheikh Hasina's ongoing state visit to India and meeting with Prime Minister Narendra Modi have resulted in positive outcomes and seven agreements, which include the conclusion of the first water sharing agreement in 26 years, the launch of free trade agreement talks, and infrastructure projects particularly in the railways sector. The water sharing agreement on the Kushiyara, which was preceded by the first Joint River Commission meeting in 12 years, is a particularly hopeful sign on resolving water management, and a very contentious issue, of 54 trans-boundary rivers. While there has been a smaller agreement on the withdrawal of 1.82 cusecs from the Feni in the interim period, the Kushiyara agreement is the first time the Centre has been able to bring on board Assam and other north-eastern States, for the agreement since the 1996 Ganga water treaty. However, the Teesta agreement, of 2011, held up by West Bengal, remains elusive, a point Ms. Hasina made several times. Clearly, the Teesta river agreement will require more efforts by the Modi government, and flexibility from the Mamata Banerjee-led State government, if the deal is to be sealed soon. The timeline grows more important for Ms. Hasina, who is due to hold elections at the end of next year, after three terms in office. Much of her focus was also on attracting investment by Indian industry, which now constitutes a small fraction of Bangladesh's FDI inflows. Ms. Hasina made particular mention of two dedicated Special Economic Zones for Indian companies, coming up at Mongla and Mirsarai.

Ms. Hasina's visit, which follows her previous state visit in 2017, and Mr. Modi's visit to Bangladesh in 2021, have set India-Bangladesh ties on a firmer footing, and on course for closer engagement in trade, connectivity and people-to-people ties. However, the positive trend in ties goes further back, to Ms. Hasina's advent to power in 2009, her unilateral moves to shut down terror training camps, and to hand over more than 20 wanted criminals and terror suspects to India. It is incumbent on New Delhi, which has benefited from such outcomes and the turnaround in relations with what used to be an inimical neighbour, to be equally sensitive to Dhaka's concerns, particularly when it comes to comments made by ruling party leaders on deporting Rohingya refugees, comparing undocumented migrants to "termites", the Citizenship (Amendment) Act, and more recent references to annexing Bangladesh for "Akhand Bharat". While cross-border sensitivities in South Asia often run high over such political rhetoric, it is necessary that New Delhi and Dhaka remain focused on their future cooperation, built on their past partnership, and what is referred to as the "Spirit of 1971".

#### WHY IS THE KUSHIYARA RIVER TREATY IMPORTANT?

The story so far: During Bangladesh Prime Minister Sheikh Hasina's visit to India from September 5 to 8, the two sides signed a slew of agreements, including the first water sharing agreement since





the landmark Ganga Waters Treaty, 1996. A memorandum of understanding (MoU) was signed on sharing of the waters of the Kushiyara river, a distributary of the Barak river which flows through Assam, and then on to Bangladesh. The agreement comes in a year when both lower Assam in India and Sylhet in Bangladesh have witnessed deadly floods highlighting the requirement for greater cooperation on flood control and irrigation-related issues between the two countries.

#### What is the Kushiyara agreement?

Over the last century, the flow of the Barak river has changed in such a way that the bulk of the river's water flows into Kushiyara while the rest goes into Surma. According to water expert, Dr. Ainun Nishat, the agreement is aimed at addressing part of the problem that the changing nature of the river has posed before Bangladesh as it unleashes floods during the monsoon and goes dry during the winter when demand of water goes up because of a crop cycle in Sylhet. Though the details of the agreement are not yet known, Dr. Nishat says that under this MoU, Bangladesh will be able to withdraw 153 cusecs (cubic feet per second) of water from the Kushiyara out of the approximately 2,500 cusecs of water that is there in the river during the winter season. There are various estimates about the area that will benefit from this supply but it is generally understood that approximately 10,000 hectares of land and millions of people will benefit from the water that will flow through a network of canals in Sylhet benefiting the farmers involved in Boro rice, which is basically the rice cultivated during the dry season of December to February and harvested in early summer. Bangladesh has been complaining that the Boro rice cultivation in the region had been suffering as India did not allow it to withdraw the required water from the Kushiyara. The agreement addresses Bangladesh's concern over water supply along the river, during the winter months but flood control in the basin of Kushiyara is expected to require much more work.

# How will Bangladesh use the water?

The water of Kushiyara will be channelled through the Rahimpur Canal project in Sylhet. The Rahimpur Canal project in Zakiganj upazila or subdivision of Sylhet was built to help the farmers access Kushiyara's water but the facility used to remain dry during the lean season without serving the purpose for which it was built. The eight km long canal is the only supplier of water from the Kushiyara to the region and Bangladesh has built a pump house and other facilities for withdrawal of water that can now be utilised.

### Why is the water from the Kushiyara so important for Rahimpur Canal?

The water of the Kushiyara has been used for centuries in Sylhet's subdivisions like the Zakiganj, Kanaighat and Beanibazar areas. But Bangladesh has witnessed that the flow and volume of water in the canal has reduced during the lean season. The utility of the river and the canal during the lean/winter season had gone down, affecting cultivation of rice as well as a wide variety of vegetables for which Sylhet is famous. The additional water of Kushiyara through the Rahimpur Canal therefore is the only way to ensure steady supply of water for irrigation of agriculture fields and orchards of the subdivisions of Sylhet.

# What was India's objection to the Rahimpur Canal?

The Kushiyara water sharing agreement finalised during the August 25 Joint River Commission and signed during Prime Minister Hasina's visit was made possible as India withdrew its objection to withdrawal of Kushiyara's waters by Bangladesh through the Rahimpur Canal. Withdrawal of India's objection is likely the main part of the agreement, said Dr. Nishat. Before this, Bangladesh had carried out the Upper Surma Kushiyara Project which included clearing and dredging of the





canal and other connected channels of water; but the channels could not be of much use to Bangladesh because India objected to the move and claimed that the dyke and other infrastructure interfered in border security as Kushiyara itself forms part of the border between the two sides. However, the agreement indicates that the economic benefits possible from the river outweighed the security concerns.

#### What are the hurdles to the Teesta agreement?

The Kushiyara agreement is relatively smaller in scale in comparison to Teesta that involves West Bengal, which has problems with the proposal. The Kushiyara agreement did not require a nod from any of the States like Assam from which the Barak emerges and branches into Kushiyara and Surma. The reduced water flow of the Kushiyara during winter and Teesta too, however, raise important questions about the impact of climate change on South Asian rivers that can affect communities and trigger migration. Bangladesh has cited low water flow in its rivers during the winter months as a matter of concern as it affects its agriculture sector. Dr. Nishat contends that the coming decades will throw up similar challenging issues involving river water sharing as the impact of the climate crisis becomes more visible with water levels going down in several cross-border rivers.

#### SC REJECTS PETITION LINKING PORNOGRAPHY TO SEX CRIMES

The Supreme Court did not entertain a plea advocating a link between watching Internet porn and sex crimes, including child abuse.

A Bench of Chief Justice of India U.U. Lalit and S. Ravindra Bhat on Monday said child sex abuse was a crime by itself. Investigation into individual cases by the police would reveal whether or not viewing of pornography had triggered the crime. That aspect would be part of evidence of each individual case. "Seeking a judicial declaration from the Supreme Court that porn on the Internet has led to child sex crimes would be equal to giving a go-ahead to online surveillance," it said.

The court said the government, if necessary, had enough material in its arsenal to ensure that criminal material was not uploaded on the Internet. It may be "unmanageable" for the court to do so.

"So your final goal is that such material should not be uploaded... Can a court intervene? What you are advocating may be surveillance and collection of data..." the Bench addressed senior advocate Nalin Kohli, who is the petitioner-in-person.

The court made it clear that it was worried where such surveillance of the Internet, if allowed, "may lead to". "This is a tiger if it gets loose, problem is at what point we control it... The issue of the link between viewing pornography and crime is individual case specific," Chief Justice Lalit observed.

Justice S. Ravindra Bhat, on the Bench, referred to how the U.S. Supreme Court had in the 1990s dealt with a question of banning the Internet to a certain class in order not to give them access to porn. "Justice Kennedy said we cannot set the house on fire to roast the pig," Justice Bhat observed.

Mr. Kohli, who withdrew the petition, had sought a direction to the Bureau of Police Research and Development to study the link between free access to Internet pornography and child sexual abuse cases as well as rape.





### THE SUPREME COURT'S THREE-QUESTION TEST FOR VALIDITY OF 10% EWS QUOTA

Beginning Tuesday, the Supreme Court will examine whether The Constitution (103rd Amendment) Act, which introduced a 10 per cent quota for Economically Weaker Sections (EWS) in government jobs and admissions, violates the basic structure of the Constitution.

A five-judge Constitution Bench led by Chief Justice of India (CJI) U U Lalit and also comprising Justices S Ravindra Bhat, Dinesh Maheshwari, S B Pardiwala, and Bela Trivedi last week decided to examine three key issues to ascertain the validity of the amendment.

The challenge to the EWS quota was referred to a five-judge Bench in August 2020.

# EWS quota: What are the issues fixed by the Supreme Court?

Attorney General K K Venugopal had drafted four issues for the consideration of the Bench. On September 8, the court decided to take up three of them:

- \* "Whether the 103rd Constitution Amendment can be said to breach the basic structure of the Constitution by permitting the state to make special provisions, including reservation, based on economic criteria";
- \* "Whether it (the amendment) can be said to breach the basic structure...by permitting the state to make special provisions in relation to admission to private unaided institutions";
- \* Whether the basic structure is violated by "excluding the SEBCs (Socially and Educationally Backward Classes)/ OBCs (Other Backward Classes)/ SCs (Scheduled Castes)/ STs (Scheduled Tribes) from the scope of EWS reservation".

#### What is the 103rd Amendment?

The 103rd Amendment inserted Articles 15(6) and 16(6) in the Constitution to provide up to 10 per cent reservation to EWS other than backward classes, SCs, and STs in higher educational institutions and initial recruitment in government jobs. The amendment empowered state governments to provide reservation on the basis of economic backwardness.

Article 15 prohibits discrimination on grounds of religion, race, caste, sex, or place of birth. Article 16 guarantees equal opportunity in matters of public employment. The additional clauses gave Parliament the power to make special laws for EWS like it does for SCs, STs, and OBCs.

The EWS reservation was granted based on the recommendations of a commission headed by Major General (retd) S R Sinho. The commission, which was constituted by the UPA government in March 2005, submitted its report in July 2010.

The Sinho Commission recommended that all below-poverty-line (BPL) families within the general category as notified from time to time, and also all families whose annual family income from all sources is below the taxable limit, should be identified as EBCs (economically backward classes).

#### How is EWS status determined under the law?

The EWS criteria for employment and admission was notified on January 31, 2019 by the Department of Personnel and Training (DoPT) based on the 103rd Amendment.





Under the 2019 notification, a person who was not covered under the scheme of reservation for SCs, STs, and OBCs, and whose family had a gross annual income below Rs 8 lakh, was to be identified as EWS for the benefit of reservation. The notification specified what constituted "income", and excluded some persons from the EWS category if their families possessed certain specified assets.

In October 2021, the Supreme Court, while hearing a challenge to reservation for EWS in the All-India quota for PG medical courses, asked the government how the threshold of Rs 8 lakh had been reached. The Centre told the court that it would revisit the income criterion, and set up a three-member panel for this purpose.

In January this year, the government accepted the committee's report, which said that the "threshold of Rs 8 lakh of annual family income, in the current situation, seems reasonable for determining EWS" and "may be retained". However, the committee said, "EWS may...exclude, irrespective of income, a person whose family has 5 acres of agricultural land and above". Also, the committee recommended, "the residential asset criteria may altogether be removed".

# What is the basis of the challenge to the amendment?

When a law is challenged, the burden of proving it is unconstitutional lies on the petitioners. The primary argument in this case is that the amendment violates the basic structure of the Constitution. Although there is no clear definition of basic structure, any law that violates it is understood to be unconstitutional.

This argument in the present case stems from the view that the special protections guaranteed to socially disadvantaged groups is part of the basic structure, and that the 103rd Amendment departs from this by promising special protections on the sole basis of economic status.

The petitioners have also challenged the amendment on the ground that it violates the Supreme Court's 1992 ruling in Indra Sawhney & Ors v Union of India, which upheld the Mandal report and capped reservations at 50 per cent. The court had held that economic backwardness cannot be the sole criterion for identifying a backward class.

Another challenge is on behalf of private, unaided educational institutions. They have argued that their fundamental right to practise a trade/ profession is violated when the state compels them to implement its reservation policy and admit students on any criteria other than merit.

#### What has been the government's stand in this matter so far?

In counter affidavits, the Ministry of Social Justice and Empowerment argued that under Article 46 of the Constitution, part of Directive Principles of State Policy, the state has a duty to protect the interests of economically weaker sections: "The state shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation."

Against the argument of violation of the basic structure, the government said that "to sustain a challenge against a constitutional amendment, it must be shown that the very identity of the Constitution has been altered".

On the Indra Sawhney principle, the government has relied on the SC's 2008 ruling in Ashoka Kumar Thakur v Union of India, in which the court upheld the 27 per cent quota for OBCs. The





argument is that the court accepted that the definition of OBCs was not made on the sole criterion of caste but a mix of caste and economic factors; thus, there need not be a sole criterion for according reservation.

#### SUPREME COURT TO TAKE UP CAA CHALLENGE: WHERE DOES THE CASE STAND?

A three-judge Bench of the Supreme Court led by Chief Justice of India (CJI) U U Lalit will hear the challenge to the contentious Citizenship (Amendment) Act on Monday.

# The Act and the legal challenge

The Citizenship Amendment Act, 2019 seeks to grant citizenship to a class of migrants belonging to Hindu, Sikh, Buddhist, Jain, Parsi or Christian communities from Afghanistan, Bangladesh or Pakistan.

The Act was passed on December 12, 2019 and was notified on January 10, 2020.

While the government claimed the amendment was sympathetic and inclusionary, critics said it was unconstitutional and anti-Muslim. The law provoked widespread protests in the country.

The law, an amendment to the Citizenship Act, 1955, was challenged before the Supreme Court under Article 32 of the Constitution. The lead petitioner is the Indian Union Muslim League (IUML); other petitioners include politicians such as Asaduddin Owaisi, Jairam Ramesh, Ramesh Chennithala, and Mahua Moitra, and political parties and groups such as the Assam Pradesh Congress Committee, the Dravida Munnetra Kazhagam, and the Asom Gana Parishad.

The challenge rests primarily on the grounds that the law violates Article 14 of the Constitution that guarantees that no person shall be denied the right to equality before law or the equal protection of law in the territory of India.

The Supreme Court has developed a two-pronged test to examine a law on the grounds of Article 14. First, any differentiation between groups of persons must be founded on "intelligible differentia"; and second, "that differentia must have a rational nexus to the object sought to be achieved by the Act".

Simply put, for a law to satisfy the conditions under Article 14, it has to first create a "reasonable class" of subjects that it seeks to govern under the law. Even if the classification is reasonable, any person who falls in that category has to be treated alike.

Those challenging the law argue that if protecting persecuted minorities is ostensibly the objective of the law, then the exclusion of some countries and using religion as a yardstick may fall foul of the test.

Further, granting citizenship on the grounds of religion is seen to be against the secular nature of the Constitution which has been recognised as part of the basic structure that cannot be altered by Parliament.

In the CAA challenge, the petitioners have asked the Court to look into whether the special treatment given to so called "persecuted minorities" from three Muslim majority neighbouring countries only is a reasonable classification under Article 14 for granting citizenship, and whether the state is discriminating against Muslims by excluding them.





#### The status of the case

The challenge has had only one substantive hearing since 2020. On May 28, 2021, the Government of India issued an order under Section 16 the Citizenship Act, 1955, giving district collectors in 13 districts with a high migrant population the power to accept citizenship applications from groups identified in the 2019 amendment.

The IUML filed an application requesting an interim stay on this order, after which the Union government filed a response. Since then, the case has not been heard.

#### The Government's stand

The Home Ministry has told the Supreme Court in an affidavit that the May 2021 notification "has no relation whatsoever with the CAA (Citizenship (Amendment) Act, 2019)".

The government cited instances of such delegation of power in the past. In 2016, the government used Section 16 and delegated its powers to grant citizenship by registration or naturalisation to collectors of 16 districts and home secretaries of governments of seven states in respect of migrants belonging to six specified minority communities of Afghanistan, Pakistan and Bangladesh, for a period of two years, the affidavit pointed out. This, it said, was done to fast-track the decision on citizenship applications of this category of foreigners.

In 2018, this delegation of power was extended until further orders.

The government argued that the notification "does not provide for any relaxations to the foreigners and applies only to foreigners who have entered the country legally".

It also opposed the challenge to the notification and said that "it is inconceivable" that the intervention application can be filed in the original writ petition against the CAA.

# What happens next

The listing of the CAA challenge indicates that the hearing will be fast-tracked. The court will have to ensure that all pleadings, written submissions are filed and served to the opposite party before it is listed for final hearing. Some petitioners could also seek a referral to a larger Constitution Bench. However, the challenge is to a statute and does not directly involve interpretation of the Constitution. These issues are also likely to be debated before the court allots time for the final hearing.

#### GYANVAPI MOSQUE CASE: WHAT THE VARANASI COURT SAID

The Varanasi District Court on Monday dismissed the challenge by Anjuman Intezamia Masajid Committee against the civil suits that sought the right to worship Maa Shringar Gauri and other deities within the Gyanvapi mosque premises. The preliminary ruling by District Judge A K Vishvesha means that the cases can now be heard on merits where the parties have to present evidence to prove their claims.

#### The case so far

Last year, five women filed a civil suit seeking enforcement of their right to worship deities within the Gyanvapi mosque complex. In April, the Civil Judge (Senior Division) allowed a video survey of the mosque where a Shivling was said to have been found in the wazukhana. The Anjuman





Intezamia moved the Supreme Court, arguing that the proceedings were an attempt to change the religious character of the mosque. The Places of Worship Act, 1991 bars the conversion of the religious character of a place of worship from how it existed on August 15, 1947

On May 20, the Supreme Court, underlining the "complexity of the issues involved in the civil suit", transferred the case to the District Judge. The SC subsequently said it would intervene only after the District Judge had decided on the preliminary aspects of the case.

#### **Preliminary ruling**

District Judge Vishvesha ruled on Monday that he did not find any law that barred the petitioners from filing such a suit.

Under the Code of Civil Procedure, in the initial stage, averments made in a suit must be prima facie accepted without going into the veracity of the claims, unless such a suit is barred by law. Once the suit is accepted, the onus of proving the claims would be on the plaintiffs.

The mosque side had argued that the suits were barred under three specific laws.

The Places of Worship Act, 1991: Section 4 of the Act is a declaration that "the religious character of a place of worship existing on the 15th day of August, 1947 shall continue to be the same as it existed on that day". The provision states that if "any suit, appeal or other proceeding with respect to the conversion of the religious character of any place of worship, existing on [that day]... is pending before any court, tribunal or other authority, the same shall abate, and no suit, appeal or other proceeding with respect to any such matter shall lie on or after such commencement in any court, tribunal or other authority".

The Muslim side argued that allowing the civil suits would alter the character of the mosque as it has existed for over 600 years. The Hindu petitioners argued that until 1993, regular prayers were offered inside the Gyanvapi mosque complex to Hindu deities — and since 1993, prayers have been allowed on a designated day annually. Relying on the argument that even after August 15, 1947, the religious character of the Gyanvapi mosque allowed for prayers to Hindu deities, the Varanasi court said in its order that the Places of Worship Act does not bar the civil suit.

In May, the Supreme Court too had observed that "finding the nature of the religious place" is not barred under the 1991 law. "But the ascertainment of a religious character of a place, as a processual instrument, may not necessarily fall foul of the provisions of Sections 3 and 4 (of the Act)... These are matters which we will not hazard an opinion in our order at all," Justice D Y Chandrachud had said.

The court will now have to look into evidence on the situation in 1947 before deciding on the issue. Legal experts have pointed out that this is a tricky reading of the law since such broad claims can be made in civil suits, opening the door for a wider religious divide in the country.

The Wakf Act, 1995: The Muslim side argued that the subject matter of the civil suit is a Wakf property and, according to Section 85 of the Act, only the Wakf Tribunal, Lucknow, can decide the suit. The mosque made two submissions to prove that the mosque is built on Wakf property. First, that it is published in the Varanasi gazette that the mosque is built on Wakf land; and second, that the Allahabad High Court has held that land that is used from time immemorial for a religious purpose, such as for a mosque or Muslim burials, would be dedicated to God almighty, and would be treated as Wakf.





But the court agreed with two arguments made by the petitioners to decide that the suit is not barred by the Wakf Act.

First, it relied on rulings which held it could "never have been the intention of the legislature to cast a cloud on the right, title or interest of persons who are not Muslims". The Wakf Act, according to the court, is to solve disputes within the community and not to extinguish claims from outside the community. Second, the court agreed with the petitioners that since the land belonged to the deity Adi Vishveshwar from time immemorial, it could have never been Wakf property.

Kashi Vishwanath Temple Act, 1983: The Muslim side also challenged the civil suits on the grounds that under this Act, the "temple land" was clearly demarcated, and that the Board of Trustees appointed under law did not interfere in the case.

The court cited Section 4 (9) of the Act, which defines "Temple", to hold that it does not bar the mosque premises. The provision defines the temple as "the Temple of Adi Vishveshwar, popularly known as Sri Kashi Vishwanath Temple...which is used as a place of public religious worship, and dedicated to or for the benefit of or used as of right by the Hindus, as a place of public religious worship of the Jyotirlinga and includes all subordinate temple, shrines, sub-shrines and the Asthan of all other images and deities, mandaps, wells, tanks and other necessary structures and land appurtenant thereto...".

### RELIEF, AT LAST

Even for a system in which foisting of false cases is not uncommon, the prolonged imprisonment of journalist Siddique Kappan in Uttar Pradesh was quite an egregiously malevolent instance. In directing his release on bail, subject to conditions that are not onerous, the Supreme Court has rightly bypassed the bail-denying feature of the Unlawful Activities (Prevention) Act by posing pertinent questions and concluding that there was no reason for keeping him in custody any further. Mr. Kappan was arrested in October 2020 while he was on his way to Hathras, where a Dalit girl had been gang-raped and murdered. In a baffling move that could only be explained as an attempt to divert attention from the public outcry caused by the incident and float a conspiracy theory with communal overtones, he was charged with plotting a divisive campaign in the area. And to ensure that he was kept in prison for a long time, the police invoked provisions of the antiterror law — ones that related to raising funds for a terrorist act and a conspiracy to commit it besides penal provisions concerning promoting enmity between communities and outraging religious feelings. He was described as a member of the Popular Front of India. Pamphlets calling for justice for the victim and literature in English (which turned out to be instructions given in English for use in the 'Black Lives Matter' protests in the United States), were cited as material to implicate him.

It is to the credit of the Bench under the Chief Justice of India, Justice U.U. Lalit, that it did not go by the usual penchant for citing Section 43D(5) of the UAPA to deny bail. The provision contains a legal bar on granting bail if the Court is of the opinion that there are reasonable grounds to believe that the accusation against those held is prima facie true. A 2019 judgment forbids a detailed analysis of the evidence at the bail stage. However, a common-sense approach to the facts of a case may lead to a better appreciation of the question of bail. By orally asking how raising one's voice in support of justice for a victim would amount to a crime and wondering why a person planning to foment communal violence would use pamphlets in English written for a protest in another country, the Bench proved the shaky foundations of the whole case. The bail order demonstrates how a clear-headed approach can help judges relieve officials and political leaders





of their smug belief that by invoking anti-terror laws, they can keep disfavoured accused in prison for long years without any basis. At the same time, it reflects poorly on the judiciary that it took two years for the courts to grant liberty to Siddique Kappan. One should hope that this order will send a message down the judicial hierarchy on how courts should not allow the police to persecute people through stringent laws.

#### CONTROVERSIAL SURVEY OF MADRASAS STARTS IN U.P.

Amid the ongoing controversy over madrasas in Uttar Pradesh, the State government started the process of conducting a survey of the Islamic educational institutions from Saturday.

The much-discussed survey of "unrecognised" madrasas will be conducted over a 25-day period by the District Minority Welfare Officers and their teams, along with officials of the Education Department, across the 78 districts of the State.

"Survey of madrasas to start today. We will analyse whether survey teams have been formed in all districts. Our aim is to bring these institutions into the mainstream and produce IAS and IPS [officers], engineers and doctors; hence the teaching of mathematics, English, Hindi and social sciences is also necessary," said Dharmpal Singh, the State's Minister for Minority Welfare, Waqf and the Haj Department.

On September 7, Mr. Singh chaired a high-level meeting at Vidhan Bhavan and has issued directions to form survey teams by September 10 and set a 25-day limit to conduct the whole exercise. The teams formed in the districts have to submit the report to the District Magistrates. The report will then be sent to the State government by October 25.

Mr. Singh on Saturday took potshots at Opposition parties who have been criticising the survey. "The Opposition parties consider minorities as a vote bank but the BJP government believes in providing rights to the minority community," Mr. Singh said.

The survey aims to gather information about the details of teachers and students, curriculum, and affiliation of unrecognised madrasas with non-governmental organisations. Uttar Pradesh has more than 16,000 madrasas.

Since the announcement of the survey, a war of words is raging in the State with all the major Opposition parties, including the Samajwadi Party (SP) and the Bahujan Samaj Party (BSP), targeting the State government.

# Evil intent, says BSP

BSP supremo Mayawati said that the ruling dispensation was terrorising the Muslim community with such acts. "The BJP government has an evil intent on madrasas in Uttar Pradesh. The attempts to interfere in the private madrasas, which are run on donations by the Muslim community, in the name of a survey is inappropriate. The government should focus on improving the condition of the government and government-aided madrasas," she said.

Leading Muslim organisations, including the All India Muslim Personal Law Board and the Jamiat Ulema-e-Hind, called the survey a "malicious move" to disparage the madrasa system, and asked why the same rules did not apply for Hindu religious institutions such as maths and dharmshalas.





The Minority Welfare Department survey has argued that the exercise will be conducted to the requirements of the National Commission for Protection of Child Rights (NCPCR), which wanted to check whether basic facilities were being provided to students in madrasas.

During the survey, details such as the name of the madrasa and the institution operating it, number of students studying there, and the information regarding facilities available will be collected, said the department.

#### PARLIAMENTARY BUSINESS AND AN ESSENTIAL PIT STOP

It was heartening to have the recently concluded monsoon session of Parliament (July-August), even though it was adjourned sine die on August 8, 2022, witnessing the Competition (Amendment) Bill, 2022 and the Electricity (Amendment) Bill, 2022 being sent to the Standing Committee of Parliament for detailed examination and a report thereon.

This is a significant step in light of the fact that Parliament had only limited legislative time this session and could pass only five pieces of legislation. This has also come in the wake of constant criticism by the Opposition that has been alleging that the Government has been trying to steamroll various pieces of legislation in the last few sessions. The worry of the Government has been that so much time is lost in disruptions in Parliament that the legislative process, as it is, becomes unduly delayed and therefore, referring the bills to the Standing Committees may be counterproductive — that could only add to this delay.

## Relevant parliamentary data

The functioning of the monsoon session of Parliament this year bears testimony to this fact: the Lok Sabha's productivity was 47% and the Rajya Sabha only 42%. It may be mentioned here that Parliament has 24 Department Related Parliamentary Standing Committees (DRSC), comprising members of the Parliament of both the Lok Sabha and the Rajya Sabha in the ratio 2:1, which are duly constituted by the Speaker of the Lok Sabha and the Chairman of the Rajya Sabha, jointly.

The mandate of these committees is to examine various legislations referred to it, the budget proposals of different Ministries, and also to do policy thinking on the vision, mission and future direction of the Ministries concerned. The objective of this article is to examine whether these committees have been able to achieve their stated objectives, and if not or if done inadequately, what the corrective actions could be to increase their efficacy and their relevance.

The percentage of Bills having been referred to the DRSCs during the tenures of the 14th (2004-2009), 15th (2009-2014) and 16th Lok Sabhas (2014-2019) has been 60%, 71% and 27%, respectively. The fall in this percentage during the 16th Lok Sabha was witnessed largely in the second half of its session, when the Government was in a hurry to push its big ticket reforms through and the Opposition was equally adamant to stall it in view of high stakes involved in the 2019 elections.

#### **Committee versus Parliament**

Even though it is not obligatory for the Government to agree to refer each Bill to the DRSC, the experience, both nationally and internationally, has been that referring a Bill to the DRSC has been of use to the process of lawmaking. It has been alleged that Bills which are not being referred to the parliamentary committees, are not examined properly, especially from the perspective of consumers and stakeholders and remain just a bureaucratically conceived piece of legislation. As





proof of this, the case of the three Farm Bills is cited as they were passed without being referred to the DRSC and had to be withdrawn later.

Even though there could be many reasons for the withdrawal of the three Farm Bills — some of it political — it needs to be understood that the examination of the Bills by the parliamentary committees is more to the benefit of the Government than the Opposition. The simple reason for this is that the tenor and the ambience of the discussions in the parliamentary committee and in Parliament are two entirely different things. The committee meetings are in camera and, therefore, the meetings are held in a comparatively congenial atmosphere of bonhomie and cordiality than they would be in Parliament.

The deliberations in these committees mostly add value to the content of the legislation and, more often than not, the Members, their party positions notwithstanding, try to reach a consensus. Additionally, such pieces of legislation after examination in the committees, have some sort of ownership of the members of the committee, both from the ruling side and the Opposition, even though it is also a function of the skill of the chairman of the committee.

Governments and the ruling party should not be wary of these committees, as in most of these committees, the government has a majority and the final decision is always by the process of majority voting. Therefore, there is no reason why any government should shy away from referring Bills to the committee. Skilled and experienced Ministers know this and generally have no aversion to a Bill being referred to to the committees. So, fostering the trust of parliamentarians, both from the ruling party and the Opposition parties, in the relevance and usefulness of the system of the committees is of paramount importance.

#### CURSE OF GOA

Eight of the Congress's 11 MLAs have merged with the ruling BJP, in the latest iteration of a Goan curse. The State has gained a particular notoriety for its politicians brazenly switching sides in utter disregard for the people's verdict. BJP Chief Minister Pramod Sawant has succeeded in splitting the Goa Congress twice in three years. In the previous Assembly, 15 of the 17 Congress MLAs left the party, a majority of them for the BJP. In the February Assembly election, the Congress fielded a large number of newcomers. All 37 of its candidates had twice taken a 'loyalty pledge,' once with leader Rahul Gandhi, in a temple, a church and a dargah, and signed affidavits vowing not to defect. All the gods could do little to prick the conscience of these MLAs who betrayed the mandate. If anything, all that drama only made this latest episode of the curse that much more of a mockery of democracy. It is not that Goa is the only place where this happens — in Bihar, the recent realignment in which the JD(U) replaced the BJP with the RJD as its partner amounted to dishonouring the popular verdict. Bihar was a rare instance of the BJP being at the receiving end of its own strategy.

The party has swung back, and in style, in Goa, though it did not need any more MLAs to be in power. In the 40-member strong Assembly, it had 20 MLAs of its own and support from three independents and two MLAs of the Maharashtrawadi Gomantak Party (MGP). With the merger of eight Congress MLAs, the government now has the support of 33. The Congress has lost its capacity to be an effective opposition. This was in the making for months now, and the Congress had tried to avert it. As soon as it got wind of the move, the Congress removed Michael Lobo from the post of Leader of the Opposition in the Assembly and Digambar Kamat from his position of being a permanent invitee to the Congress Working Committee (CWC). While both Mr. Lobo and Mr. Kamat have cited disaffection with the Congress high command as reasons, the true reasons





are all too transparent. Despite serving as a Congress CM, Mr. Kamat, a seven-time MLA from Margao, has a history of being with the BJP as he was one of the four BJP MLAs who won in 1994. In 2014, the BJP had linked him with a multi-crore mining scam case, whose probe is still hanging over his head. BJP Minister Viswajit Rane had called for an investigation into Mr. Lobo's assets. Mr. Lobo and his wife Delilah are among the richest MLAs in the coastal State. With the defections of Aleixo Sequeira and Rodolfo Fernandes, the BJP now has a strong foothold in the Catholic-dominated South Goa. Mr. Kamat has said he went back to the temple and got the god's permission to renege on his pledge of loyalty to the Congress. The people of Goa, meanwhile, are left wondering whether their vote makes any difference.

### WEATHERING THE POLITICAL STORM

For more than a fortnight, Hemant Soren had been busy keeping his flock of legislators together after Governor Ramesh Bais reportedly received a communication from the Election Commission of India (ECI), seeking the Jharkhand Chief Minister's disqualification as an MLA in connection with a case lodged against him involving a stone chips mining lease in 2019. The mysterious envelope from the ECI was said to be received by the Governor's office on August 25. Fearing poaching of MLAs by the Opposition BJP, the Mr. Soren-led United Progressive Alliance (UPA) had even shifted some of them to neighbouring Chhattisgarh.

Amid the evolving situation in the tribal State, the UPA leaders met the Governor on August 31 and submitted a memorandum, urging him to clear the air regarding the ECI decision. The Governor reportedly assured them that he would bring the matter to a closure in two days.

On September 5, Mr. Soren went on to prove majority of his government on the floor of the House to assert his hold over the alliance. The Governor, meanwhile, left for Delhi and returned to State capital Ranchi after a week on September 8.

Mr. Soren faced the political stalemate with a composed demeanour, saying he was well-prepared to counter any move by the Opposition to bring down his government. During the trust motion in the 81-member Assembly, as many as 48 UPA MLAs voted for the government, while the BJP staged a walkout. Speaker Rabindra Nath Mahto said since the government had won the trust vote, "there is absolutely no uncertainty" over its fate. Though the mystery over the ECI communication is far from over, Mr. Soren seems to have weathered the political storm, at least for now.

# WHY JHARKHAND WANTS TO DEFINE A 'LOCAL' WITH 1932 AS THE CUT-OFF FOR DOMICILE

The Jharkhand Cabinet Wednesday approved the draft 'Local Resident of Jharkhand Bill' for defining a local, keeping 1932 as the cut-off year for 'proof of land records' for the purpose.

According to sources, the draft Bill, titled 'Jharkhand Definition of Local Persons and for Extending the Consequential, Social, Cultural and Other Benefits to Such Local Persons Bill, 2022', will be passed by the Assembly next and then sent to the Centre with a proposal to place it in the Ninth Schedule of the Constitution.

#### The 2022 draft Bill

The Bill states that the local residents' policy of 2002 was challenged before the Jharkhand High Court in two Public Interest Litigations which set aside the definition of the local persons and also



gave direction to decide "afresh/redefine" and "prescribe the guidelines for determination of local persons taking into account the relevant history of the state".

As per the draft Bill, a local will be a person whose name or his ancestors' name is recorded in the survey/khatiyan of 1932 or before. In case of persons who are landless, local persons shall be identified by the Gram Sabhas based on the culture, local customs and tradition, among others.

#### The 2016 executive order

In 2016, the Raghubar Das government redefined 'locals' through an executive order, essentially setting the cut-off year as 1985 for proof of residence in Jharkhand. It said that the decision was arrived at after discussions with "different political parties, intellectuals, and various social organisations".

However, the current draft Bill says that the MLAs from the state have been consistently raising the issue in the Assembly to recall 'the local persons' criteria' as defined in 2016. It adds that several demands were made to define and identify local persons on the basis of 1932 khatiyan.

#### Why 1932?

The draft Bill says the definition of local persons on the basis of '1932 khatiyan' is based upon the fact that "living conditions, customs and the traditions and social development" of the 'moolwasis and people from tribal community' have been negatively impacted due to pre and post 1932 migration of people from other states to Jharkhand (erstwhile Bihar).

It argues that the percentage of people from Scheduled Tribes and moolwasis has seen a steady decline since the census of 1941 in Jharkhand. It attributes various reasons behind such decline, but the Bill says that it "cannot be denied" that there needs to be "affirmative action at the policy level" for the development of STs and moolwasis. The Bill states that identification of the local persons was a "compelling necessity" to provide "social, cultural, educational, service and other benefits to them".

#### Benefits for 'locals'

According to the Bill, the locals will receive "certain rights, benefits, and preferential treatment" over their land; in their stake in the local development of the rivers, lakes, fisheries; in their local traditional and cultural and commercial enterprises; in their rights over agricultural indebtedness or availing agricultural loans; in maintenance and protection of their land records; for their social security; and even in case of employment both in private and public sector; and for trade and commerce in the state.

# Sidestepping legal challenge

The Babulal Marandi government too brought a similar policy in 2002, but it was struck down by the courts. But the current government seems to have thought about sidestepping that legal hurdle.

The Cabinet note gives a clear indication that the Act will not come into force until it is included in the Ninth Schedule of the Constitution to avoid judicial scrutiny.

Telegram: http://t.me/DreamIAS Jamshedpur





The Ninth Schedule of the Constitution contains a list of central and state laws which cannot be challenged in courts. However, the courts in the past have said that it can be reviewed if it violates the fundamental rights or the basic structure of the Constitution.

The state government will send the Act to the Centre and request for a Constitutional amendment for the Act's inclusion in the Ninth Schedule.

If this is done, there will be lesser chance of a legal challenge.

# WHY THE UTTARAKHAND SELECTION COMMISSION IS UNDER THE SCANNER OVER 'IRREGULARITIES' IN RECRUITMENT EXAMS

The Uttarakhand state cabinet, last Friday (September 9), passed a proposal to transfer the underprocess recruitment process for 7,000 vacancies by the Uttarakhand Subordinate Service Selection Commission (UKSSSC) to the Uttarakhand Public Service Commission, in the wake of allegations of irregularities in the recruitment exam conducted by the Commission. On Sunday, the state government ordered a vigilance inquiry against six persons, including top state officials, over the alleged irregularities.

#### What is the UKSSSC?

The Uttarakhand Subordinate Service Selection Commission, set up in 2014, is meant for direct recruitment for all vacant Group 'C' posts in various state departments, and the posts falling under the purview of the Public Service Commission. The UKSSSC prepares guidelines on the method of recruitment, conducts examinations, holds interviews and makes the selection of candidates. It also selects and invites experts, and appoints examiners.

As per the process, the appointing authority has to determine and intimate to the Commission the number of vacancies to be filled up, as well as the number of vacant posts reserved for candidates belonging to Scheduled Castes, Scheduled Tribes and other categories.

#### Paper leak allegations in last year's exam

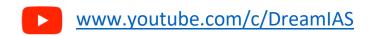
The case pertains to a written exam conducted by the UKSSSC on December 4 and 5 last year, in which nearly 1.6 lakh candidates appeared and 916 were selected for different departments.

After the exam results were announced, representatives of unemployed student organisations and several other students met Chief Minister Pushkar Singh Dhami and submitted a memorandum allegi<mark>ng i</mark>rre<mark>gul</mark>aritie<mark>s in</mark> the con<mark>duc</mark>t o<mark>f the</mark> t<mark>est.</mark> It w<mark>as</mark> alle<mark>ged</mark> that the examination papers for a few tests were leaked and sold to the examinees before the exams.

Following these allegations, CM Dhami asked the director general of police to take strict action against those responsible, and an FIR was registered on July 22 this year. The secretary of the Selection Commission was also removed from his post and the case was later handed over to the Special Task Force (STF).

The investigation revealed that more than 50 candidates were selected due to the leaked paper and the selection of several others was found to be suspicious. According to the STF, question papers for the UKSSSC exam held last year were sold for Rs 15 lakh each. The UKSSSC question paper was allegedly leaked by a staffer at a Lucknow-based printing press, which was tasked with printing and sealing the question paper.





Since the matter came to light, the Opposition has also been attacking the state government and has alleged its involvement in the scam. Congress's state unit president Karan Mahara has alleged that those arrested so far are the 'smaller fish' in the game and they were working under the shadow of 'much bigger politicians'. The Congress has demanded an inquiry by the Central Bureau of Investigation (CBI) in the case.

#### TAMIL NADU'S NEW BREAKFAST SCHEME IN SCHOOLS

The story so far: Tamil Nadu Chief Minister M. K. Stalin on Thursday, at the Madurai Corporation Primary School Aathimoolam II in Simmakal, Madurai, launched the Chief Minister's Breakfast Scheme for students of Class I to V in government schools. The scheme covers around 1.14 lakh students in 1,545 schools which include 417 municipal corporation schools, 163 municipality schools and 728 taluk and village panchayat-level schools. A sum of ₹33.56 crore has been set apart for the scheme. The inauguration of the scheme marks an important milestone in the State's history of providing free meals to school students.

#### How has the idea evolved?

In November 1920, the Madras (now Chennai) Corporation Council approved a proposal for providing tiffin to the students of a Corporation School at Thousand Lights at a cost not exceeding one anna per student per day. P. Theagaraya Chetty, the then President of the Corporation (the modern-day equivalent of Mayor) and one of the stalwarts of the Justice Party, said the boys studying at the school were poor, which affected the strength of the institution 'greatly'. The scheme, which was extended to four more schools and facilitated higher enrollment of students, suffered a setback in 1925 when the British government disallowed the expenditure on the supply of mid-day meals to students from the Elementary Education Fund. It was revived two years later, benefitting around 1,000 poor students in 25 schools.

The concept saw a State-wide application in 1956 when the then Chief Minister K. Kamaraj decided to provide free noon meal to poor children in all primary schools across the State. The Budget for 1956-57 contained a provision for supplying mid-day meals to schoolchildren for 200 days a year, initially covering 65,000 students in 1,300 feeding centres.

In July 1982, it was left to the then Chief Minister M. G. Ramachandran to extend the programme to children in the 2-5 age group in Anganwadis and those in 5-9 age group in primary schools in rural areas. Subsequently, the scheme — now called Puratchi Thalaivar M.G.R. Nutritious Meal Programme — was extended to urban areas as well. Since September 1984, students of standards VI to X have been covered under the scheme.

Over the years, there have been improvements to the programme. M. Karunanidhi, as Chief Minister during the short-lived Dravida Munnetra Kazhagam Ministry (1989-91), introduced the provision of boiled eggs once every fortnight, starting June 1989. His successor, Jayalalithaa, in March 2013, extended the scheme by including variety meals along with masala eggs as per the children's choice.

# What are the number of beneficiaries of the programme?

As of now, there are nearly 46.7 lakh beneficiaries spread over 43,190 nutritious meal centres. This includes around 3,500 students of National Child Labour Project (NCLP) special schools. The State budget for 2022-23 has provided around ₹2,077 crore for the nutritious meal programme.





Besides, as a consequence of the collaborative implementation of the Integrated Child Development Scheme (ICDS) and the nutritious meal programme, around 15.8 lakh children in the age group of 2+ to 5+ years receive nutritious meals.

#### What was the impact of the mid-day meal scheme on school education?

After the improved version of the mid-day meal scheme in 1982, the Gross Enrollment Ratio (GER) at primary level (standards I to V) went up by 10% during July-September, 1982 as compared to the corresponding period in 1981.

The rise in boys' enrollment was 12% and in the case of girls, 7%, according to a publication brought out by the Tamil Nadu government on the occasion of the launch of the Chief Minister's Breakfast Scheme.

Likewise, attendance during July-September 1982 rose by 33% over the previous year's figure.

Kamaraj – An Era (2008), a biography authored by senior Congress functionary A. Gopanna, states that after the inauguration of the mid-day meal scheme in 1956, the number of primary schools went up from 15,800 in 1957 to 29,000 in 1962.

# Where should the programme focus more?

Anaemia is a major health problem in Tamil Nadu, especially among women and children, says the 2019-21 National Family Health Survey (NFHS)-5's report. From 50% during the period of the 2015-16 NFHS-4, the prevalence of anaemia in children now went up to 57%. This and many other health issues can be addressed through the combined efforts of the departments of School Education, Public Health and Social Welfare and Women Empowerment.

Based on expert advice, those in charge of the implementation of the ICDS and the nutritious meal programme can enhance the component of nutrition to those children having specific problems. The latest Breakfast Scheme is a step in this direction.

Besides, a continuous and rigorous review of the progress of the scheme and nutritious meal programme should be carried out in a sustained manner, says a senior government official.

### IN TELANGANA TODAY, SAME EVENT, 2 CELEBRATIONS

To mark 75 years of the merger of the princely state of Hyderabad with the Indian Union, the central and state governments will hoist national flags at separate events in Telangana on Saturday. Union Home Minister Amit Shah will unfurl the flag at 8.45 am at the Parade Ground in Secunderabad to celebrate 'Hyderabad State Liberation Day', while Chief Minister K Chandrasekhar Rao will hoist the Tricolour at 10.30 am in Public Gardens in Hyderabad as part of 'Telangana National Unity Day' celebrations.

# The history of union

When India became independent on August 15, 1947, it was still struggling to bring the 500-odd princely states dotting its territory into the union. Among the states that had not acceded to the union was Hyderabad, leading Sardar Vallabhbhai Patel to famously note that an independent Hyderabad would constitute a "cancer in the belly of India".





In the 1940s, a strong peasant movement, led by the communists, had started against the government of the Nizam. When discussions about accession to India started, the Nizam and the nobility were in favour of an independent Hyderabad, but the majority of the population, including peasant protesters, wanted to join the Union of India.

The Nizam used a paramilitary force called the Razakars to terrorise and suppress the peasantry, and to lead the armed resistance against joining the Union. The Razakars plundered villages and killed indiscriminately to crush the demand for merger with India, including 96 villagers in Bhairanapally on August 27, 1948.

On September 17, 1948, the Indian Army entered the princely state, which consisted of modern-day Telangana and some areas of Maharashtra and Karnataka, as part of Operation Polo. In less than a week, the Nizam and the Razakar squads surrendered.

### The political context

With the Assembly polls in the state scheduled for next year, the BJP is seeking to turn the anniversary of the historic occasion into an opportunity to score political points against the TRS and its ally, the All India Majlis-e-Ittehadul Muslimeen (AIMIM) led by Hyderabad MP Asaduddin Owaisi. It has attacked the ruling party for not observing the occasion in the eight years it has been in power, and has sought to link it to the TRS's alleged "reluctance" to upset Owaisi.

The Razakars had links with an outfit called the Majlis-e-Ittehad-ul-Muslimeen, or MIM. The Owaisi-led party says that this original Majlis ceased to exist after September 17, 1948. According to historian Mohammed Nooruddin Khan, the president of the MIM, Kasim Razvi, and other senior leaders of the outfit left for Pakistan after handing over the reins of their party to Abdul Wahed Owaisi, who was the grandfather of Asaduddin Owaisi. Abdul Wahed Owaisi had not been associated with the outfit before that, says Mohammed Nooruddin Khan.

BJP national general secretary Tarun Chugh has claimed that the TRS was forced to announce plans to observe 'Telangana National Unity Day' after the Centre said that it would commemorate the 'Day of Liberation'.

While Maharashtra and Karnataka already commemorate this day as Marathwada Liberation Day and Hyderabad-Karnataka Liberation Day (some areas in the two states fell under the Hyderabad princely state) respectively, the Centre aims to celebrate the day across the three states.

"It is only after the Centre's announcement that the state government decided to celebrate it. Not only the TRS, the Congress and the AIMIM have also been forced to acknowledge it. It is the BJP that has been demanding for many years that this event should be celebrated as Telangana liberation day," state BJP chief Bandi Sanjay Kumar said earlier this month.

# THE INDIRA GANDHI URBAN EMPLOYMENT GUARANTEE SCHEME IN RAJASTHAN

The story so far: The Indira Gandhi Urban Employment Guarantee Scheme has rolled out in Rajasthan with the objective of providing economic support to the poor and needy families living in the cities through work to be provided on demand for 100 days in a year. The Congress government has touted it as the country's biggest scheme to give guaranteed jobs to the people residing in cities, on the lines of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for villagers started by the UPA government at the Centre in 2006.





#### Who are eligible to get jobs?

Those in the age group of 18 to 60 years residing within the limits of urban local bodies are eligible to demand and get employment in the identified segments. There is no income limit, though the poor and destitute people, especially those who lost their livelihood during the pandemic, will be given preference. More than 3.5 lakh people across the State have got themselves registered under the scheme so far and job cards have been issued to 2.25 lakh of them.

A budgetary provision of ₹800 crore, announced by Chief Minister Ashok Gehlot in the State Assembly earlier this year, has been made for the scheme in 2022-23. At least 50 persons in each ward of urban local bodies will be given employment and the work permitted under the scheme will be approved and executed through committees at the State, district and local body levels. The State government will also reward the municipal bodies doing good work under the scheme. The cost of material and the payment for the labour for work of general nature will be in the ratio of 25:75 and will vary for special work which needs technical expertise. The State government's Department of Local Bodies will be responsible for the scheme's implementation.

# What are the categories of tasks?

The tasks to be carried out under the scheme have been clubbed mainly under eight heads. The first is environment protection, which will involve tree plantation at public places, maintenance of parks and watering plants on footpaths and dividers. The next is water conservation, where the tasks may be allotted for cleanliness and improvement of ponds, lakes and stepwells, construction, repair and cleaning of rain water harvesting structures and restoration of water sources. Other categories are heritage conservation, removal of encroachments and illegal boards, hoardings and banners, stopping defacement of property and service-related works.

As part of convergence, the people engaged under the employment guarantee scheme can be employed elsewhere in other schemes, already having a material component, which require the labour. Eligible people will get work such as tree plantation, cleaning ponds, collecting garbage from door to door and segregating it and catching stray animals. Apart from all these categories, the State government can add new tasks or amend the ones already included in the list. A Jan Aadhar card, introduced by the State government, or its registration slip will be required for registration, which can be done at e-Mitra centres. While more than 31,000 muster rolls have been issued for the work, the wages will be paid at the rate of ₹259 a day to unskilled labourers and ₹283 a day to skilled labourers. The 'mates' or supervisors on top of the labourers will get ₹271 a day. Livelihood rights activists feel that though the scheme would help reduce distress among the urban population, the ultimate test of its success will be to ensure that it improves the wage rate in the labour market, which was one of the major contributions of MGNREGA.

# What will be its political implications?

The Congress government has tried to reach out to large sections of the population with the launch of the scheme and has sought to make an emotional connect by naming it after the former Prime Minister Indira Gandhi. While experts have opined that the labour force participation rate's gap between the rural and urban areas is widening, a few other schemes, including the payment of unemployment allowance, are already operative in the State. The latest initiative may benefit the ruling Congress in the run-up to the 2023 State Assembly election, as the party will highlight it as a major step to address the plight of urban poor, which had not received much attention earlier. The identification of unemployed youths in urban areas may require an approach different from the one adopted in the villages for MGNREGA. Besides, the kind of jobs provided under the scheme





will be different than those in the rural areas and will need a more skilled workforce. The scheme may turn out to be a game changer for the people who lost their jobs in the pandemic and are struggling to make ends meet amid high inflation.

#### Are similar schemes operative in other States?

The Rajasthan government has prepared the employment guarantee programme after studying similar such schemes operative in other States. Several States are looking favourably towards an urban version of MGNREGA. These schemes include the Ayyankali Urban Employment Guarantee Scheme in Kerala, Urban Wage Employment Initiative under UNNATI in Odisha, Mukhya Mantri Shramik Yojana in Jharkhand and Mukhya Mantri Yuva Swabhiman Yojana in Madhya Pradesh.

The demand for a job guarantee scheme in the cities is increasing because of the growing distress among the urban poor, higher unemployment rates in urban areas in comparison with villages, the persistently high inflation affecting the people and the prevalence of low-wage and poor quality informal work in urban areas. Moreover, as against the rural unemployment being mostly seasonal, unemployed people in the cities face problems throughout the year.

#### THE TEDIOUS PROCESS OF ADOPTION

The story so far: From September 1, District Magistrates (DM) have been empowered to give adoption orders instead of courts. All cases pending before courts have to be now transferred. Hundreds of adoptive parents in the country are now concerned that the transfer process will further delay what is already a long and tedious process. There are questions whether an order passed by the executive will pass muster when an adopted child's entitlements on succession and inheritance are contested before a court.

# What do the amended rules say? How did they come about?

The Parliament passed the Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021 in July last year in order to amend the Juvenile Justice Act (JJ Act), 2015. The key changes include authorising District Magistrates and Additional District Magistrates to issue adoption orders under Section 61 of the JJ Act by striking out the word "court". This was done "in order to ensure speedy disposal of cases and enhance accountability," according to a government statement. The District Magistrates have also been empowered under the Act to inspect child care institutions as well as evaluate the functioning of district child protection units, child welfare committees, juvenile justice boards, specialised juvenile police units, child care institutions etc.

# Why is there concern over the revised rules?

The revised rules have parents, activists, lawyers and adoption agencies worried as cases already before courts for the past several months will have to be transferred and the process will have to start afresh. A petition for adoption orders is filed after a parent registers for adoption, who is then assessed through a home study report, referred a child and subsequently allowed to take a child in pre-adoption foster care pending an adoption order. A delay in such an order can often mean that a child can't get admission into a school because parents don't yet have a birth certificate, or like in one case, parents unable to claim health insurance if a child is admitted to a hospital.

The Central Adoption Resource Authority (CARA) says there are nearly 1,000 adoption cases pending before various courts in the country. Parents and lawyers also state that neither judges,





nor DMs are aware about the change in the JJ Act leading to confusion in the system and delays. According to CARA, the Ministry of Women and Child Development is drafting a letter to be sent to State governments clarifying that where adoption orders have already been given, or will be given shortly, the DMs should consider them valid. But there are also larger concerns.

"District Magistrates don't handle civil matters that bestow inheritance and succession rights on a child. If these rights are contested when a child turns 18, a judicial order is far more tenable to ensure the child is not deprived of his or her entitlements."

### What is the adoption procedure in India? What are the challenges?

Adoptions in India are governed by two laws — the Hindu Adoption and Maintenance Act, 1956 (HAMA) and the Juvenile Justice Act, 2015. Both laws have their separate eligibility criteria for adoptive parents.

Those applying under the JJ Act have to register on CARA's portal after which a specialised adoption agency carries out a home study report. After it finds the candidate eligible for adoption, a child declared legally free for adoption is referred to the applicant. Under HAMA, a "dattaka hom" ceremony or an adoption deed or a court order is sufficient to obtain irrevocable adoption rights. But there are no rules for monitoring adoptions and verifying sourcing of children and determining whether parents are fit to adopt.

There are many problems with the adoption system under CARA but at the heart of it is the fact that there are very few children in its registry. According to the latest figures there are only 2,188 children in the adoption pool, while there are more than 31,000 parents waiting to adopt a child which forces many to wait for upto three years to be able to give a family to a child. This allows traffickers to take advantage of loopholes in HAMA. These concerns were also highlighted by a Parliamentary panel in August in its report on the "Review of Guardianship and Adoption Law", which recommended a district-level survey of orphaned and abandoned children.

According to Nilima Mehta, what is needed is a "child-centric, optional, enabling and gender-just" special adoption law like in other countries. "HAMA is a parent-centric law that provides son to the son-less for reasons of succession, inheritance, continuance of family name and for funeral rights and later adoption of daughters was incorporated because kanyadaan is considered an important part of dharma in Hindu tradition. As far as the JJ Act is concerned, the law handles issues of children in conflict with law as well as those who are in need of care and protection and only has a small chapter on adoptions," Dr. Mehta explains.

In 2015, the then Minister for Women and Child Development Maneka Gandhi centralised the entire adoption system by empowering CARA to maintain in various specialised adoption agencies, a registry of children, prospective adoptive parents as well as match them before adoption. This was aimed at checking rampant corruption and trafficking as child care institutions and NGOs could directly give children for adoption after obtaining a no-objection certificate from CARA. But the new system has failed in ensuring that more children in need of families are brought into its safety net.

"Yes, there was a need to check malpractices and improve monitoring. But in the new system the soul in adoption is gone. The human contact, bonding and psychological preparedness has been taken away. Therefore, parents may look at other ways to adopt a child." One other dangerous repercussion of this is that in the past few years, there is an increasing number of disruptions and dissolutions, where children are returned after an adoption is formalised.





### IAF TO FLY AN-32 ON BLENDED BIODIESEL FOR 200 HOURS

As part of efforts to reduce its carbon footprint, the Indian Air Force (IAF) is looking to fly an AN-32 transport aircraft modified to operate on 10% blended biodiesel for 200 flight hours in the next six months, Air Vice Marshal S. K. Jain, Assistant Chief of the Air Force (Maintenance Plans), said on Friday.

The aircraft took flight on biodiesel blended with aviation turbine fuel (ATF) for the first time in December 2018. "So far, an AN-32 has flown 65 hours with a 10% blend of biofuel and the performance has been very satisfactory," he said at a seminar on sustainable aviation biofuels organised by the Aeronautical Society of India.

A second aircraft, a Dornier, was now undergoing ground tests after it had been cleared by the original manufacturer of the engine, Honeywell, for use of 50% biofuel, he said.

The global aviation industry is one of the biggest emitter of greenhouse gases that cause global warming. The fuel consumption of the IAF for 2021-22 was 6.2 lakh kilo litres, which contributed 15 lakh tonnes of carbon dioxide.

On the civil aviation front, an official from aircraft manufacturer Airbus said it had plans to offer 100% sustainable aviation fuel (SAF) compatibility on its commercial aircraft latest by 2030.

### WHY CLOUDBURST FORECAST IN INDIA STILL REMAINS ELUSIVE

Cloudbursts — violent and voluminous amounts of rain pouring down in a short duration over a small area — have been reported since the mid-19th century. Yet, the characteristics of these events remain elusive, and our efforts in monitoring and forecasting them is at an embryonic stage. However, their disastrous impact that cause loss of lives and property are seemingly increasing in a changing climate and have led to close observations in the recent decade, advancing our understanding of these events.

Clouds blanket 70% of the Earth's surface at any given time. They are like a thin layer of the floating ocean, with enough water to cover the entire surface of Earth with about one inch of rain. A modest-sized cloud (1 cubic km) may contain more than 5,00,000 litres of water — equivalent to the mass of hundred elephants.

Cloudburst events are often associated with cumulonimbus clouds that cause thunderstorms and occasionally due to monsoon wind surges and other weather phenomena. Cumulonimbus clouds can grow up to 12-15 km in height through the entire troposphere (occasionally up to 21 km) and can hold huge amounts of water.

#### Characteristics

However, cloudbursts are not defined based on cloud characteristics and do not indicate clouds exploding. Cloudbursts are defined by the amount of rainfall. According to the India Meteorological Department (IMD), 100 mm of rain in an hour is called a cloudburst. Usually, cloudbursts occur over a small geographical region of 20 to 30 sq. km.

In India, cloudbursts often occur during the monsoon season, when the southwesterly monsoon winds bring in copious amounts of moisture inland. The moist air that converges over land gets lifted as they encounter the hills. The moist air reaches an altitude and gets saturated, and the





water starts condensing out of the air forming clouds. This is how clouds usually form, but such an orographic lifting together with a strong moisture convergence can lead to intense cumulonimbus clouds taking in huge volumes of moisture that is dumped during cloudbursts.

Tall cumulonimbus clouds can develop in about half an hour as the moisture updraft happens rapidly, at a pace of 60 to 120 km/hr. A single-cell cloud may last for an hour and dump all the rain in the last 20 to 30 minutes, while some of these clouds merge to form multi-cell storms and last for several hours.

#### More prone areas

Cloudbursts, hence, occur mostly over the rugged terrains over the Himalayas, the Western Ghats, and northeastern hill States of India. The heavy spells of rain on the fragile steep slopes trigger landslides, debris flows, and flash floods, causing large-scale destruction and loss of people and property.

Recent cloudbursts that caused significant devastation occurred over the Himalayan foothills in Himachal Pradesh (in the year 2003), Ladakh (2010), and Uttarakhand (2013). Cloudbursts were reported from the northeastern States and Western Ghats States during the current monsoon season (2022).

On July 8 2022, flash floods occurred in the Lidder Valley en route to Amarnath Temple in Jammu and Kashmir, taking the lives of several pilgrims. While the media linked this event to cloudbursts that occurred upstream of the temple, there is no meteorological record in the surrounding regions to validate this. Weather forecasts indicated scattered light rains for the region, and the IMD recorded moderate rainfall at the temple station.

Monitoring stations on the ground can hardly capture the cloudburst characteristics due to their highly localised and short occurrence. Hence, most of these events go unreported due to the lack of monitoring mechanisms in the region, weakening our ability to understand these events in complete perspective.

Heavy rains and waterlogging brought Bengaluru to a standstill during the first week of September 2022. Social media was abuzz, passing off a two-year-old video of cloudbursts in Perth, Australia, as Bangalore cloudbursts. None of the city's weather stations recorded a cloudburst but indicated heavy rains during the week as the monsoon winds gained strength due to a low-pressure area developing in the Arabian Sea.

Strong monsoon wind surges along the coast can also result in cloudbursts, as in the case of Mumbai (2005) and Chennai (2015). Coastal cities are particularly vulnerable to cloudbursts since the flash floods make the conventional stormwater and flood management policies in these cities dysfunctional.

# **Detecting cloudbursts**

While satellites are extensively useful in detecting large-scale monsoon weather systems, the resolution of the precipitation radars of these satellites can be much smaller than the area of individual cloudburst events, and hence they go undetected. Weather forecast models also face a similar challenge in simulating the clouds at a high resolution.

The skillful forecasting of rainfall in hilly regions remains challenging due to the uncertainties in the interaction between the moisture convergence and the hilly terrain, the cloud microphysics,





and the heating-cooling mechanisms at different atmospheric levels. The IMD's forecasts, and in general, the weather prediction scenario, have advanced such that widespread extreme rains can be predicted two-three days in advance. Cyclones can be predicted about one week in advance. However, cloudburst forecasts still remain elusive.

Multiple doppler weather radars can be used to monitor moving cloud droplets and help to provide nowcasts (forecasts for the next three hours). This can be a quick measure for providing warnings, but radars are an expensive affair, and installing them across the country may not be practically feasible.

A long-term measure would be mapping the cloudburst-prone regions using automatic rain gauges. If cloudburst-prone regions are co-located with landslide-prone regions, these locations can be designated as hazardous. The risk at these locations would be huge, and people should be moved, and construction and mining in nearby regions should be restricted as that can aggravate the landslides and flash flood impacts.

Climate change is projected to increase the frequency and intensity of cloudbursts worldwide. As the air gets warmer, it can hold more moisture and for a longer time. We call this the Clausius Clapeyron relationship. A 1-degree Celsius rise in temperature may correspond to a 7-10% increase in moisture and rainfall. This increase in rainfall amount does not get spread moderately throughout the season. As the moisture holding capacity of air increases, it results in prolonged dry periods intermittent with short spells of extreme rains. More deeper cumulonimbus clouds form and the chances of cloudbursts also increase.

#### Frequent occurrences

Cloudbursts are reported frequently from across the country. The climate change signal is conspicuous, but we do not have long-term (20 years or more) hourly data to attest it. With IMD enhancing its automatic weather stations, we may have hourly data that can help map cloudburst-prone regions.

The change in monsoon extremes and cloudbursts we see now are in response to the 1-degree Celsius rise in global surface temperature. As emissions continue to increase and global commitment to reduce emissions proves insufficient, these temperatures are set to hit 1.5°C during 2020-2040 and 2°C during 2040-2060. We will need urgent action and policies to protect lives and property from extreme events that will amplify as the global temperature change doubles.

WHAT IT TAKES TO SUCCESSFULLY MOVE BIG CATS LIKE CHEETAHS OUT OF THEIR NATURAL HABITATS

On a modified B-747 that took off from Windhoek, Namibia, for Gwalior on Friday, are eight Namibian wild cheetahs — five females, three males — would-be founders of a new population in Kuno National Park in Madhya Pradesh.

A plan to reintroduce cheetahs in India that was endorsed in 2009 by then Environment Minister Jairam Ramesh was shot down by the Supreme Court in 2013. The idea was revived in 2017 by the Narendra Modi government, and the SC cleared the move in 2020 "on an experimental basis".

The cheetahs will arrive before dawn, before being transferred by helicopter to Kuno, where they will be released in specially erected enclosures by Prime Minister Modi.





The cheetah facilities have been developed, staff has been trained, and leopards larking in the enclosures have been moved away. Yet, everyone involved will keep their fingers crossed for the success of the first ever transcontinental mission to introduce African cheetahs in the wild.

#### Wild cargo: from menageries to conservation

For centuries, royal menageries across the world collected wildlife, often shipping them from distant shores of Africa, Asia, and the New World. Emperor Charlemagne (747-814) built three menageries in the present-day Netherlands and Germany that housed lions, bears, and the first jumbos to land in Europe since the Roman war elephants.

Moving wild animals to new locations for conservation, however, began only in the 1960s. Unlike royal imports to be held in captivity, these animals require to settle down and survive in their new locations in the wild. That poses a host of different challenges.

#### **Translocation: Failures and successes**

In the 1960s, South Africa's last surviving white rhinos were transported across the country, primarily from KwaZulu-Natal province. Between 1991 and 1997, the country's Madikwe Game Reserve reintroduced more than 8,000 animals of 28 species including lions to rebuild stocks.

In the US, cougars were translocated from Texas in 1994 to increase the genetic diversity of the remaining Florida panther population. In 1997, wolves from northwestern Montana were relocated to Yellowstone National Park, where they went extinct by the 1970s.

Similar efforts have been made in India. In 1984, rhinos were shifted from Assam's Pobitora to Dudhwa in Uttar Pradesh. More recently, Kaziranga rhinos have been translocated to Manas within the state to build a new population. In 2011, bisons were shifted from Kanha to Bandhavgarh where they went locally extinct.

The success stories that made bigger headlines involved tigers. Two new populations were built through translocation in Sariska (Rajasthan) and Panna (Madhya Pradesh) where the big cat went locally extinct due to poaching.

Besides, the practice of capture-release to locally shift so-called problem animals, particularly leopards, from the sites where they happen to cause panic among people, continues in several states despite a central guideline against it

#### What translocation must watch out for

As translocation gained currency as a conservation tool (as well as for boosting hunting stock or tourism), the International Union for the Conservation of Nature (IUCN), a union of governments and civil society organisations, in 1995 came up with a guideline which has been updated since.

While the conservation goals — either reinforcement within a species' native range (like tigers moved from Ranthambhore to Sariska) or assisted colonisation outside its range (like African cheetahs coming to India) — of translocation are well defined, the associated risks present a complex matrix:

\* Genetic diversity: It is often difficult to find genetically suitable animals, particularly for building a new population, when the source population itself is closely related. This can lead to inbreeding depression in the new population.





- \* Habitat and prey base: The factors that caused a species to lose numbers or go extinct must be dealt with to secure the habitat, before restocking so that colonies of reintroduced animals become large enough as quickly as possible to withstand fluctuations in both the environment and population size, experts say. Physical security, enough space, and ample food are the priorities.
- \* Landscape viability: Simply releasing and moving animals between pocket forests can at best halt further habitat fragmentation in the name of a charismatic species. Even if such assisted exchanges succeed in ensuring genetic viability, animals will remain susceptible to demographic and environmental events in such a broken landscape.

### Curbing the cats' homing instincts

Another tricky challenge in translocating animals is to factor in their homing instinct. Most animals, from snails and frogs to birds and cats, have an uncanny ability to sense direction and, if displaced, find their way back.

In the case of big cats, this not only risks losing the released animal from the target site but also invariably conflict with people coming in the way of a homebound carnivore walking through unfamiliar territory.

One solution is to put the animal in an enclosure — a soft release — at the new location, and allow it time to settle down. The other remedy is to select sub-adult animals for translocation. Being at dispersal age and still looking to establish its own territory, young cats have a higher chance of accepting a new area.

Neither approach is foolproof, though. In November 2009, a young tiger was shifted from Pench tiger reserve to Panna. Upon arrival, it was kept in an enclosure for eight days. Once set free, the young male took time to survey the new location, and on the 11th day started walking southward.

With four elephants and 70 teams of government officials and volunteers behind him, the tiger walked 440 kilometres in 30 days towards Pench through Chhatarpur, Sagar, and Damoh districts before it was finally intercepted and brought back to Panna.

To minimise such possibilities, the government's Cheetah Action Plan says that radio-collared males will be released from the holding enclosure after 4-8 weeks and that the presence of females in the enclosure will keep them in the vicinity.

A senior forest official involved in the project, however, wondered if the African imports could indeed show homing tendencies "a continent and an ocean away" from home. That is just another curiosity — one of the many firsts of this transcontinental mission.

# WHAT THE NATIONAL HEALTH ACCOUNTS FIGURE REVEALS ABOUT THE HEALTHCARE SECTOR IN INDIA

The release of a new set of data on health expenditure, the National Health Accounts Expenditure (NHA) 2018-19, should rekindle the longstanding debate on government spending in this critical sector. One of its most important findings is that government spending as a proportion of the country's GDP went down to 1.28 per cent from 1.35 per cent in the previous year. Ipso facto, this shouldn't be a matter of concern. As some experts have pointed out, the fall owes to an accounting correction. But this shouldn't mitigate the concern that public spending on healthcare in India remains far from adequate. Last year's Economic Survey noted that India ranks amongst the





bottom 10 countries in terms of the prioritisation given to health in government budgets — both at the states and Centre. The government, moreover, has been consistently falling short of the National Health Policy's objective of spending 2.5 per cent of the GDP on health — it currently spends about 1.9 per cent.

In the past four years, especially since the launch of the Ayushman Bharat programme in 2018, the Centre has taken important steps in prioritising the healthcare sector. The NHA figures do seem to give early signs that the endeavour is succeeding. People paying for healthcare expenses out of pocket (OOPE), for instance, made up 48.2 per cent of the total health expenditure in 2018-19, down from 48.8 per cent the previous year. Even then, people spent more than the government on healthcare — Rs 2.87 lakh crore or 1.52 per cent of the GDP. The NHA data show that India has a long way to go to attain the WHO yardstick of keeping out-of-pocket health expenditure to 15-20 per cent of the country's GDP. The world's second most populous country with a high burden of non-communicable diseases cannot provide healthcare in an equitable manner if the government remains a secondary player in the sector. Ninety per cent of the country's hospitals, for instance, are privately run, and close to 70 per cent of them are in urban areas. This skew cannot be corrected without government intervention.

Last year, a Niti Aayog report revealed that about 30 per cent of the country's population does not have financial protection for health. The Ayushman Bharat programme covers 50 per cent and another 20 per cent opt for private insurance schemes. The "missing middle" is the segment that isn't eligible for government subsidies but also not rich enough to afford private schemes. It's data such as this that the NHA figures should be co-related with to arrive at meaningful policy interventions.

### PUBLIC HEALTH NEED NOT BE LED BY DOCTORS ALONE

It is common for heads of health services at national, state or district levels in India to be orthopaedic or cardiac surgeons or ophthalmologists who have no training in public health. There is also suboptimal representation of public health professionals in State and Central advisory bodies of health. During the pandemic, many doctors with no training in public health provided expert advice on public health issues. This is because it is felt that public health does not require specific competencies, and anyone can do this work.

# A poor understanding

Public health is essentially multi-disciplinary and means different things to different people. Many, even within public health, have a poor understanding of it. For example, recent Central government guidelines specify an MBBS degree to be a prerequisite for becoming a public health specialist. Some people have commented on the exclusion of grassroots public health workers — ASHA workers, auxiliary nurse midwives and multipurpose workers — from the cadre.

Part of this confusion comes from not being able to differentiate between public health as a discipline and the public health sector. All those who work for the State or Central government are public sector health workers, but they are not doing public health. Providing medical care at a primary health centre does not make the person a public health professional. Also, health workers have no training in public health; they are grassroots-level service providers. Asking them to be part of public health cadre trivialises the profession of public health. It is important to understand that public health is a separate profession with a specific set of competencies.





#### **EXAMINING THE DOLO SCANDAL**

Recently, a controversy bubbled up regarding the marketing strategies of Micro Labs, a Bengaluru-based pharmaceutical company. Micro Labs, the maker of Dolo-650, was charged of having bribed medical doctors with freebies worth ₹1,000 crore in one year to promote Dolo-650.

Dolo is an analgesic and antipyretic — a non-steroidal anti-inflammatory medication to help with fever and mild pain. It can be purchased from a chemist without a medical prescription. It is actually plain paracetamol, which is a particularly crowded market and fairly competitive too, in a manner of speaking. The Drugs (Prices Control) Order (DPCO) has established ceiling prices for over 850 medicines, including of brands of paracetamol. The ceiling price for a single 650 mg paracetamol tablet is \$1.83 and for a single 500 mg tablet, it is \$0.91. It is naturally more profitable for 650 mg to be sold. But how profitable, exactly? Do the incentives work out for the firm? In particular, does the economics work out in terms of giving away \$1,000 crore of freebies?

#### The likelihood of freebies

The paracetamol API is mostly imported from China. There has been significant upward pricing pressure, mostly because of the difficulty of ensuring regular supply from China. But given the price ceiling and the level of competition, investing in the level of 'freebies' reported is unlikely. We are not suggesting that the problem of 'freebies' doesn't exist. But the supply chain for freebies is much easier to manage for specialty drugs such as chemotherapy drugs, or when products such as stents and knee and hip implants are directly sold to hospitals. For paracetamol, given the price ceiling and the number of competitors, tracking prescriptions and rewarding doctors is challenging.

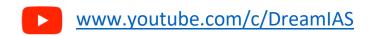
You might argue that Micro Labs may have been willing to take a hit on their margins in order to bump up sales. Perhaps the freebies could be justified if there are other benefits? Well, higher sales at lower margins to the selling company might make sense, but this is a strategy usually employed to beef up the financials, in order to make the valuation look better. The truth comes out eventually. Or you may argue that this was a brand-building exercise in anticipation of higher over-the-counter sales, to help push through a sale of the brand to a pharmaceutical major. Without these angles, the story stands on shaky legs.

#### **Legal provisions**

Yet, thinking about this scandal is still instructive, for it lays bare the extent of the problem, beyond the paracetamol segment, let alone the specific product (Dolo). The Uniform Code of Pharmaceuticals Marketing Practices explicitly prohibits gifts, payments and hospitality benefits to doctors on the part of medical representatives. Pharmaceutical firms have been declaring their compliance with, and adherence to, this code since 2015, if not earlier. The kicker? This code has been fully voluntary since 2015. There is also no enforcement mechanism. The Indian Pharmaceutical Alliance, which is meant to "enforce" the code, has promptly given Micro Labs a 'clean chit'.

That being said, there are provisions that detract pharmaceutical firms from offering incentives. And they come from a somewhat unexpected source: the Income Tax Act, 1961. The Act explicitly disallows deductions for payments to doctors. Moreover, tax deducted at source (TDS) is applicable for all payments made to doctors. Workarounds are possible, but this acts as a huge financial disincentive for pharmaceutical companies.





There's more. Para 1.5 of the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002 states that every physician should, as far as possible, prescribe drugs with generic names. It also states that there is both a rational prescription and use of pharmaceutical drugs. This is, of course, rarely done and there is no enforcement. This regulation also prohibits the disbursement of gifts. In this case, there is potential for enforcement — a reprimand, at the least — and even for cancellation of license, though this happens very rarely.

The solution is two-fold. First, a move to prescriptions without brand names should be the default practice. Doctors will then have no incentive to promote particular brands and pharmaceutical companies will have no incentive to give freebies to doctors. But even if doctors are not able to recommend a certain brand, pharmacists are. And their incentive is to recommend brands that give them the highest trade margins, which are based on the maximum retail price (MRP). We can remove this incentive by introducing a flat dispensing fee, regardless of MRP. This will restore agency to the patient.

#### THE LOWDOWN ON THE ESSENTIAL MEDICINES LIST

The story so far: On September 13, the National List of Essential Medicines (NLEM), 2022, was released, with 384 drugs in it across 27 categories. While 34 new drugs are on the list, 26 drugs from NLEM, 2015, including common gastrointestinal medicines Ranitidine and Sucralfate, have been dropped. In a tweet, Union Health Minister Mansukh Mandaviya said, "several antibiotics, vaccines, anti-cancer drugs and many other important drugs would become more affordable, and the 'out-of-pocket' expenditure on health care would come down." Prices of essential medicines are regulated by the National Pharmaceutical Pricing Authority.

#### What is in and what is out?

Four major anti-cancer drugs, hydrochloride, HCI trihydrate, lenalidomide and leuprolide acetate as well as psychotherapeutic drugs, nicotine replacement therapy and anti-parasitic drugs like ivermectin, mupirocin (topical antibiotic), and meropenem (antibiotic) are on the list. It also includes four drugs that are still under patent — bedaquiline and delamanid, used in the treatment of multiple drug-resistant tuberculosis, dolutegravir used to treat human immunodeficiency virus (HIV) infection, and daclatasavir used in treating viral infections such as Hepatitis C. Endocrine medicines and contraceptives like fludrocortisone, ormeloxifene, insulin glargine and teneligliptin (for diabetes control) have also been added to the list. Montelukast, acting on the respiratory tract, the ophthalmological drug latanoprost and cardiovascular medicines dabigatran and tenecteplase re on the list too.

Omissions include commonly used gastrointestinal drugs ranitidine, sucralfate, white petrolatum (for treating skin conditions), atenolol and methyldopa (for high blood pressure). Vivek Sehgal, director general, Organisation of Pharmaceutical Producers of India, said for the industry to be able to continue to make and supply the medicines from NLEM, the government should ensure that inflation is taken into account while fixing the ceiling price. "This will enable the pharmaceutical industry to continue on its growth trajectory. Further, this NLEM includes four patented medicines for which companies have had robust access mechanism in place for India. The Organisation of Pharmaceutical Producers of India (OPPI) is concerned with this inclusion of the four patented drugs and the implication it has on value for innovation," he said.

How are drugs eliminated and added to the list?





For inclusion in NLEM, the drugs have to be useful in treating diseases which are a public health problem in India. They have to be licensed/approved by the Drugs Controller General (DCGI), have proven efficacy, a safety profile based on scientific evidence, comparatively cost effective, and aligned with the current treatment guidelines. They have to be recommended under the National Health Programs of India (for instance, ivermectin is part of the Accelerated Plan for Elimination of Lymphatic Filariasis, 2018). When more than one medicine is available from the same therapeutic class, a prototype that is the best suited medicine of that class is included. Besides this, the price of the total treatment is considered and not the unit price of a medicine. Fixed dose combinations are usually not included.

A medicine is deleted from the list if it is banned in India; if there are reports of concerns on the safety profile and if a medicine with better efficacy and is cheaper is available. If the disease, for which a particular medicine is recommended, is no longer a national health concern, the drug is taken off the list. Additionally, in case of antimicrobials — if the resistance pattern has rendered an antimicrobial ineffective, it is removed from the NLEM.

#### What is the purpose of having a list?

The primary purpose of the NLEM is to promote rational use of medicines considering three important aspects which are cost, safety and efficacy. It also helps in optimum utilisation of healthcare resources and budget, drug procurement policies, health insurance, improving prescribing habits, medical education and training and drafting pharmaceutical policies. In NLEM, the medicines are categorised based on the level of the healthcare system as primary, secondary and tertiary.

The NLEM is a dynamic document and is revised on a regular basis considering the changing public health priorities as well as advancement in pharmaceutical knowledge.

The National List of Essential Medicines was first formulated in 1996 and was revised thrice in 2003, 2011 and 2015, before 2022. The NLEM independent Standing National Committee on Medicines (SNCM) was constituted by the Union Health Ministry in 2018. After detailed consultation with experts and stakeholders, the committee revised the NLEM, 2015 and submitted its report on NLEM, 2022 to the Health Ministry. The government accepted the recommendations of the committee and adopted the list.

#### 'ADOPT A TB PATIENT' DRIVE FINDS MITRAS

The Union Health Ministry's "adopt a TB-patient" (Ni-kshay Mitra) initiative — probably the only one-of-its-kind in the world — announced on Friday had 1,78,443 TB patients and 1,667 Ni-kshay Mitras (donors) enrolling till Sunday evening.

The programme was brought in to fill the critical "community" element into India's fight towards eliminating TB by 2025 under the Pradhan Mantri TB-Mukt Bharat Abhiyaan.

"Though the efforts of the government are yielding significant results, the community and the institutions in society could play a critical role in filling the gaps and addressing the social determinants, thereby contributing to the national goal," a Health Ministry official said.

The official said that for the effective engagement of the community for eradicating TB in India, the Ministry was implementing community support for TB patients — the Pradhan Mantri TB Mukt Bharat Abhiyaan.





The donors include cooperative societies, corporates, elected representatives, individuals, institutions, non-governmental organisations, political parties and partners willing to adopt the health facilities (for individual donor) and urban wards, blocks, districts and States for accelerating the response against TB to complement the government's efforts, as per the district-specific requirements in coordination with the district administration.

#### Additional support

According to the Ministry, the State and the district administration would support the donorsin prioritising the districts and in providing guidance on the critical gap analysis and district-specific needs.

The support provided to the patient under this initiative is in addition to the free diagnostics, free drugs and the Ni-kshay Poshan Yojana provided by the National TB Elimination Programme (NTEP) to all the patients notified from both the public and the private sector.

The Ministry said that donors would provide additional support to all the on-treatment TB patients who had given consent for support, in the selected health facilities, blocks, urban wards, districts and States. "Only individual donors can choose the patients from a given health facility.

Others have to choose the entire geographical unit (blocks, urban wards, districts and States)," noted a Health Ministry official.

He added that the type of additional assistance that may be provided by the donors to ontreatment TB patients who had given consent for support shall include nutritional support, additional investigations, vocational support and additional nutritional supplements.

The minimum period of commitment for providing the support to the TB patient will be one year. The Ministry said that the initiative would increase the active involvement of society in the fight against tuberculosis.

"This activity aims at increasing awareness among the public regarding tuberculosis and the involvement of the community in supporting the treatment cascade shall also help in the reduction of the stigma. Ultimately, improved nutrition for TB patient shall result in better treatment outcomes," the Ministry explained in its guidance document.

India has the world's highest tuberculosis (TB) burden, with 26 lakh people contracting the disease and approximately four lakh people dying from it every year. The economic burden of TB in terms of the loss of lives, income and workdays is also substantial. TB usually affects the most economically productive age group of society resulting in a significant loss of working days.

#### HOW DOES A COVID NASAL VACCINE WORK?

The story so far: On September 6, Union Health Minister Mansukh Mandaviya tweeted that the Central Drugs Standard Control Organisation had approved Bharat Biotech's nasal vaccine for primary immunisation against COVID-19 in the 18-plus age group for restricted use in an emergency situation. It is hoped that Bharat Biotech's ChAd36-SARS-CoV-S recombinant vaccine, to be administered nasally and developed in association with the University of Washington, will prove a powerful tool in the battle against the virus by preventing infections, something the other vaccines have not been able to do.

What does the vaccine do?





A nasal vaccine is delivered through the nose or mouth and it is expected to work on the mucosal lining, prompting an immune response at the entry points of the virus in the human body. It likely prevents the infection right there, thereby also blocking its spread. Scientists have called this sterilising immunity, where the virus is prevented from causing infection in the host effectively.

Early studies at Washington University, according to a report published on the varsity's website, "showed that nasal delivery of this vaccine creates a strong immune response throughout the body, especially in the nose and respiratory tract. In animal studies, the nasal vaccine prevented infection from taking hold in the body."

Emily Waltz explains in an article in Nature, that the COVID-19 vaccines currently in use do a good job of reducing disease severity and preventing hospitalisation, but don't block mild illness or transmission that well. The reason for that is that they are injected into the muscle. "Intramuscular shots prompt an immune response that includes T cells, which destroy infected cells, and B cells, which produce antibodies that 'neutralise' pathogens — binding to them to stop them entering healthy cells. These cells and antibodies circulate through the bloodstream. But they aren't present at high enough levels in the nose and lungs to provide rapid protection. In the time it takes for them to journey there from the bloodstream, the virus spreads, and the infected person gets ill."

#### Is a nasal vaccine the best defence against COVID-19 so far?

"Exactly how successful these vaccines will be is unclear. Expecting a vaccine to stop transmission of a virus or prevent even mild illness — achieving what is called sterilising immunity — is a high bar. Bharat [Biotech] and CanSino [Chinese vaccine maker that has secured a licence to use another nasal vaccine] won't know whether their vaccines can achieve this until they have conducted further efficacy studies," explains Ms. Waltz

Both Bharat Biotech and CanSino have announced that their trials have been successful but have not released data. She points to two other nasal vaccines that have reportedly been deployed in populations, one in Iran and the other, an intra-nasal version of Sputnik V in Russia, but says scant data is available from either of them.

In a release, Bharat Biotech said: "The product — iNCOVACC — is stable at 2-8°C for easy storage and distribution. The reactogenic events and adverse events that were documented during the trial were highly comparable to the published data from other COVID-19 vaccines. Product development data will be submitted to peer-reviewed journals and will be made available in the public domain."

The University of Washington article indicated that two clinical trials of the nasal vaccine were conducted in India. "A phase 3 trial involving about 3,100 previously unvaccinated people who received two doses of the nasal vaccine, and a booster trial with about 875 people who received a single dose of the nasal vaccine after two doses of another COVID-19 vaccine. These trials, which concluded in August, indicated that the vaccine is safe and effective at eliciting a strong immune response in people when used either as a primary vaccine or as a booster."

#### What next?

Early publication of trial data and a speedy rollout of a nasal vaccine would be ideal. By avoiding the jab, the nasal vaccine might be more appealing to people not yet vaccinated. It can be an option for children too, for whom it has not been authorised for use yet.





Also, though two vaccines were authorised for use in the 5-12 and 6-12 age groups in April, there is no sign of a rollout for these candidates.

#### A SHADOW LIBRARY BAN PITS PUBLISHERS AGAINST FREE INFORMATION ACTIVISTS

In early August, Indian users who accessed a website that once let them download books and scholarly journals for free found themselves locked out of the site. The landing page to Z-Library refused to load, and for some flashed a warning banner stating the site had been blocked by a court order. The block follows Delhi Tis Hazari Court's (West) order to India's Ministry of Communications and IT to direct Internet Service Providers (ISP) to block Z-Library's website "within a period of one week from today (on August 1)". The Ministry of Communications and IT was also one of the 12 defendants in the case against the shadow library, filed by Taxmann Publications Pvt. Ltd.

Z-Library is a mirror of Library Genesis (LibGen), one of the most popular shadow libraries, that lets visitors access copyrighted books and scholarly journals for free, much to the chagrin of e-book and academic journal publishers. Shadow or mirror libraries are online databases that duplicate digital records like e-books or academic articles. They are structured in a way to minimise space for backup data while enabling the continuation of critical processing in the event of the loss of a disk containing related databases. This has enabled several users to quickly compile a list of unblocked links that could take them to the banned website via another digital route. Publishers have censured these 'rogue websites' for stealing copyrighted content. In one instance, these sites were compared to the mythological nine-headed serpent called Hydra. It was believed that if one of its heads was cut off, two more would appear to take its place.

But several academicians and authors support the existence of such online repositories for advancing science and knowledge.

This massive network came to be called Library Genesis (LibGen) in 2008, and due to its complex history, it is unclear who the actual owner of the site is. Between then and April 2014, according to an analysis by Bodó Balázs, a researcher at the Budapest University of Technology and Economics, the size of the LibGen catalog grew from nearly 34,000 to nearly 1.2 million records. This has nearly tripled in the last seven years to roughly 3.2 million records.

Another shadow library that grew in prominence during this time is Sci-Hub, which offers scientific journals and papers for free to users. Both SciHub and LibGen share copyrighted books and articles for free, and the duo are known to operate around the Russian-speaking milieu. Balázs notes that both these shadow libraries exist and thrive in Russia due to lax copyright law, weak IP protection rules, and early access to modern computers in the country. He points out that this part of the world had early access to desktops and databases, which helped them develop large-scale digital text archives.

#### Information for all

Shadow libraries like LibGen and SciHub have become a thorn in the flesh for large publishers who wield control over nearly half of all scientific literature and make a hefty profit from selling journals to university libraries. In 2021, Netherlands-based Elsevier's publishing arm, the owner of journals like Cell and Lancet, reported profits of around \$1.1 billion on \$3 billion revenue.

While investors are happy, scientists submitting their articles to large publishers know they are getting a bad deal. This is one of the major reasons why digital piracy is an ever-raging controversy





in academic circles as people confront questions relating to the ethics of piracy while wrangling with legal publishing models which underpay contributors and depend heavily on unpaid volunteers.

#### **Indian users**

Elbakyan — and some users in India — remain undeterred. A chart on the Sci-Hub site showed that India was one of the top five countries in terms of downloaded articles per month, with over two million downloads to its name at the last count — though this may not be accurate due to VPN and robot use. Users in China have downloaded over 30 million copies a month at the last count.

"We can also say, that knowledge belongs to people. Academic publishers have stolen that knowledge from people and locked behind expensive paywalls. Hence the task is to return knowledge back to the people," Elbakyan told The Hindu. Elsevier countered by stating it was helping the research community in its own way. The publisher said that since the start of the pandemic, ACS, Elsevier, and Wiley made their COVID-19 articles available for free. It also said it that it offered free virtual workshops attended by over 40,000 people in India.

The Netherlands-based publisher is firm on taking the legal route to regulate shadow libraries, pointing out that India does the same for its pirated movies. "The American Chemical Society (ACS), Elsevier and Wiley have applied to the High Court of Delhi in New Delhi requesting that Indian internet service providers block access to the pirate websites Sci-Hub and LibGen within the country," said Elsevier in its statement.

#### An author's perspective

Some published authors don't agree with banning shadow libraries. Indian constitutional law scholar and science fiction author Gautam Bhatia even cited a shadow library in the acknowledgements section of his book, The Transformative Constitution: A Radical Biography in Nine Acts (HarperCollins India, 2019). He admitted that writing his book wouldn't have been possible without LibGen, as they were many books he couldn't afford. He further added in his note that, "doing scholarly work outside the gated precincts of a university is like trying to swim with one arm and one leg."

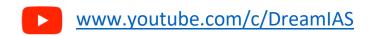
Incidentally, Mr. Bhatia's own science fiction novel, The Wall (HarperCollins India, 2020), was available for download on Z-Library. He pointed out that fiction writers need to show rising sales numbers for more publishing opportunities, but scientists and researchers rely on factors such as citations and peer reviews. "I mean, readers should be aware of that. They should be aware that if on an individual level, everyone downloads from Z-Library, then yeah, the author that you like enough to download [their] books — they're not able to write more. But that's it: that's an individual call for individual people to make. I have no judgment on anyone who does download books to read because you know, they still cost money," Mr. Bhatia told The Hindu.

From a legal perspective, he noted that jurisdictions and internet service providers treated movie and television piracy with more seriousness than book piracy, depending on the location. For now, only website access through one of the main URLs to Z-Library is blocked, rather than a total shut down of the shadow library. According to a court filing from September 7, Taxmann Publications has also asked the court to block an alternate link allegedly created by Z-Library.

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

Telegram: http://t.me/DreamIAS Jamshedpur





#### TREE PLANTED BY ELIZABETH II IN THE SPOTLIGHT

The Lalbagh Botanical Garden is home to thousands of trees and plants and many have, hidden in their foliage, nuggets of history. One such has suddenly found itself in the spotlight following the death of Elizabeth II, the United Kingdom's longest-ruling monarch.

The Christmas tree planted by her during her visit to Bengaluru in February 1961 has now grown beyond 70 feet, according to Horticulture Department officials.

The tree is located behind the Bandstand, near the Glass House. "In Lalbagh, we have over 75 trees which were planted by VVIPs. One of them was by Elizabeth II. Just 20 feet away from the tree planted by her is another Christmas tree planted by Abdul Ghaffar Khan (well-known as Frontier Gandhi). Almost 50 feet away from those trees is an Ashoka (Saraca asoca) tree planted by the former Prime Minister late Indira Gandhi," explained M. Jagadeesh, Joint Director (Parks), Horticulture Department.

#### Video surfaces

A video dating back to the queen's visit to the city in 1961 has surfaced on the internet after her demise. In the video, it can be seen that as soon as she landed in Bengaluru with her husband, Prince Philip, she was welcomed by the then Governor of the State and the erstwhile ruler of the Mysuru, Jayachamarajendra Wadiyar. It also shows huge crowds which had gathered on the streets to greet and catch a glimpse of the royal couple and the queen planting a sapling at Lalbagh.

Thanks to this video, for the last two days, department officials have received many enquiries regarding this hitherto little-known tree.

"There is a lot of curiosity among people about the tree. In a few days, we will put up an information board and a picture of the queen near the tree," Mr. Jagadeesh said.

#### THE OPPRESSOR'S WRONG

"Who breaks a butterfly upon a wheel?" asked Alexander Pope, wondering if strong means were needed to beat a petty adversary. The Madurai Bench of the Madras High Court has taken a sledgehammer to deal with YouTuber and blogger 'Savukku' A. Shankar, and sentenced him to a six-month jail term for some Tweets targeting the judiciary. As political commentary goes, his style of presenting his views is indeed quite trenchant. With a know-it-all air, he goes about giving purported background material, insinuating deals and designs behind developments, often without substantiation. It is no surprise then that he got into trouble. In his defence in the suo motu contempt proceedings, Mr. Shankar said his comments were aimed at questioning the under-representation of Dalits in the judiciary, and the excess representation to Brahmins, and that taken as a whole, his comments were aimed at improving the system. The court would have none of it, and deemed his comments contumacious. It noted that he expressed no regret or repentance, but affirmed that he would continue to speak about the judiciary after his release even if sent to prison. Even though Mr. Shankar made a personal insinuation against Justice Swaminathan, what really counted was his sweeping charge against the entire judiciary. This could have been dealt with by the Principal Bench in Chennai as the allegation was general in nature, but, unfortunately, it was posted before a Bench headed by Justice Swaminathan, who was the judge aggrieved by the earlier Tweet.





The purported logic behind courts retaining the power to punish for contempt is to save the institution from scurrilous attack so that the public does not lose its faith and trust in the judiciary. However, recent experience, as well as public criticism by former judges and legal luminaries, shows that the principal source of public disenchantment with the judiciary is the conduct of courts and judges. In 2018, four judges of the Supreme Court publicly accused the Chief Justice of India of misusing his power as Master of the Roster to influence the outcome of cases. Can there be anything more scandalising to the judiciary? Former judges and lawyers routinely pen articles questioning the commitment of the apex court to issues of personal liberty and even hint at complicity and cravenness before the executive. Is there any point in going after laymen voicing their disenchantment with judicial wrongdoing? Criminal contempt is usually closed either by the court's tolerance or the contemnor's remorse, but, regrettably, neither happened in this case. If the court viewing any display of magnanimity as a sign of weakness is the 'oppressor's wrong', the defendant refusing to express regret is the 'proud man's contumely'. In truth, any conviction for criminal contempt is unwarranted, for nothing can really scandalise a court peopled by judges of integrity or save the image of a compromised institution comprising tainted individuals.



# DreamIAS





#### **BUSINESS & ECONOMICS**

# ON INDIA OPTING OUT OF IPEF: INDIA MUST ACTIVELY PURSUE TRADE AGREEMENTS, NOT ONLY BILATERAL ONES BUT ALSO PLURILATERAL PACTS

In 2019, after much deliberation, the Indian government chose to opt out of the Regional Comprehensive Economic Partnership (RCEP). Thereafter, the country has been exploring new bilateral trade partnerships: Since then, it has signed two trade agreements with Australia and the UAE, and is hopeful of concluding negotiations on others, including with the UK, Canada and the EU. Considering that, it is unfortunate that the government has, for now, chosen to opt out of the trade pillar of the US led Indo-Pacific Economic Framework (IPEF). From the government's point of view there remains ambiguity on the final contours of the agreement, and the benefits that will accrue to the member countries. While the government should certainly seek to protect the country's interest, and negotiate the best terms possible, it would perhaps have been more prudent to engage with the process.

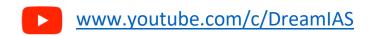
Launched at the Quad summit in Tokyo, the IPEF involves 12 countries in the Indo-Pacific in addition to India and the US. The member countries, which include Australia, Japan, Indonesia, Malaysia, among others, account for around 40 per cent of the global economy. The framework, which seeks to address new challenges and "promote fair and resilient trade", offers member countries the option to not participate in all pillars. While the government has joined the other three pillars (supply chains, tax and anti-corruption and clean energy), under the broad rubric of trade, it has reportedly flagged several areas of concerns which range from labour to environment standards, digital trade, and public procurement. While these are indeed contentious issues, apprehensions over the conditions sought should not prevent the country from joining the trade pillar. After all, the terms being demanded under IPEF may also be sought in the bilateral trade agreements the government has been pursuing.

The decision to opt out of the trade pillar comes at a time when the global economic environment has turned sour. In its recent update of the world economic outlook, the International Monetary Fund has lowered its forecast for global growth this year from 3.6 per cent to 3.2 per cent. Alongside, it has also brought down its forecast for world trade in goods and services to 4.1 per cent, as demand, especially in advanced economies, weakens with central banks tightening policy to tackle surging inflation. This slowdown in trade has already become visible in India's trade statistics. After growing at 22 per cent in the first quarter of this year, export growth slowed down to 2.1 per cent in July, contracting by 1.2 per cent in August. This comes after the country's exports witnessed staggering growth in 2021-22. Thus, considering that exports can provide the much needed fillip to growth, India must actively seek to be part of global value chains. It must shun protectionism, and venture into trade agreements, not only bilateral ones but also plurilateral pacts.

# THE EASTERN ECONOMIC FORUM AND INDIA'S BALANCING ACT

The story so far: Russia hosted the seventh Eastern Economic Forum (EEF) Vladivostok from September 5 to 8. The four-day forum is a platform for entrepreneurs to expand their businesses into Russia's Far East (RFE).





#### What is the Eastern Economic Forum?

The EEF was established in 2015 to encourage foreign investments in the RFE. The EEF displays the economic potential, suitable business conditions and investment opportunities in the region. Agreements signed at the EEF increased from 217 in 2017 to 380 agreements in 2021, worth 3.6 trillion roubles. As of 2022, almost 2,729 investment projects are being planned in the region. The agreements focus on infrastructure, transportation projects, mineral excavations, construction, industry and agriculture.

#### Who are the major actors in the Forum? What are their interests?

This year, the Forum aimed at connecting the Far East with the Asia Pacific region. China is the biggest investor in the region as it sees potential in promoting the Chinese Belt and Road Initiative and the Polar Sea Route in the RFE. China's investments in the region account for 90% of the total investments. Russia has been welcoming Chinese investments since 2015; more now than ever due to the economic pressures caused by the war in Ukraine. The Trans-Siberian Railway has further helped Russia and China in advancing trade ties. The countries share a 4000-kilometerlong border, which enables them to tap into each other's resources with some infrastructural assistance. China is also looking to develop its Heilongjiang province which connects with the RFE. China and Russia have invested in a fund to develop northeastern China and the RFE, through collaborations on connecting the cities of Blagoveshchensk and Heihe via a 1,080 metre bridge, supplying natural gas, and a rail bridge connecting the cities of Nizhneleninskoye and Tongjiang.

Besides China, South Korea has also been gradually increasing its investments in the region. South Korea has invested in shipbuilding projects, manufacturing of electrical equipment, gas-liquefying plants, agricultural production and fisheries. In 2017, the Export-Import Bank of Korea and the Far East Development Fund announced their intention to inject \$2 billion in the RFE in a span of three years.

Japan is another key trading partner in the Far East. In 2017, Japanese investments through 21 projects amounted to \$16 billion. Under Shinzo Abe's leadership, Japan identified eight areas of economic cooperation and pushed private businesses to invest in the development of the RFE. Japan seeks to depend on Russian oil and gas resources after the 2011 meltdown in Fukushima which led the government to pull out of nuclear energy. Japan also sees a market for its agrotechnologies which have the potential to flourish in the RFE, given similar climatic conditions. However, the momentum of trade that existed with Shinzo Abe was lost with the leadership of Yoshihide Suga and Fumio Kishida. The trade ties between Japan and Russia are hindered by the Kuril Islands dispute as they are claimed by both countries.

India seeks to expand its influence in the RFE. During the forum, Prime Minister Narendra Modi expressed the country's readiness in expanding trade, connectivity and investments in Russia. India is keen to deepen its cooperation in energy, pharmaceuticals, maritime connectivity, healthcare, tourism, the diamond industry and the Arctic.

In 2019, India also offered a \$1 billion line of credit to develop infrastructure in the region. Through the EEF, India aims to establish a strong inter-state interaction with Russia. Business representatives of Gujarat and the Republic of Sakha have launched agreements in the diamond and pharmaceuticals industry.





#### What does the EEF aim for?

The primary objective of the EEF is to increase the Foreign Direct Investments in the RFE. The region encompasses one-third of Russia's territory and is rich with natural resources such as fish, oil, natural gas, wood, diamonds and other minerals. The sparse population living in the region is another factor for encouraging people to move and work in the Far East. The region's riches and resources contribute to five per cent of Russia's GDP. But despite the abundance and availability of materials, procuring and supplying them is an issue due to the unavailability of personnel.

The RFE is geographically placed at a strategic location; acting as a gateway into Asia. The Russian government has strategically developed the region with the aim of connecting Russia to the Asian trading routes. With the fast modernisation of cities like Vladivostok, Khabarovsk, Ulan-Ude, Chita and more, the government aims to attract more investments in the region. Russia is trying to attract the Asian economies in investing and developing the far east. The Ukraine war is a worrying issue as it affects the economic growth of the country. However, Russia believes that it can survive the economic crisis and the sanctions with the help of China and other Asian powers.

Although, the EEF is an annual gathering, the forum comes at an opportune time for Russia who is dealing with the impact of the sanctions. Moreover, the coming together of countries like Myanmar, Armenia, Russia, and China seems like the forming of an anti-sanctions group in the international order.

Will India be able to achieve a balance between the EEF and the Indo-Pacific Economic Framework for Prosperity (IPEF)?

The U.S.-led Indo-Pacific Economic Framework for Prosperity (IPEF) and the EEF are incomparable based on its geographic coverage and the partnership with the host-countries. India has vested interests in both the forums and has worked towards balancing its involvement. India has not shied away from investing in the Russia-initiated EEF despite the current international conditions.

At the same time, India has given its confirmation and acceptance to three of the four pillars in the IPEF. The country understands the benefits of being involved in the development in the RFE but it also perceives the IPEF as a vital platform to strengthen its presence in the Indo-Pacific region. The IPEF also presents an ideal opportunity for India to act in the region, without being part of the China-led Regional Comprehensive Economic Partnership or other regional grouping like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership.

The IPEF will also play a key role in building resilient supply chains. India's participation in the forum will help in disengaging from supply chains that are dependent on China and will also make it a part of the global supply chain network. Additionally, the IPEF partners will act as new sources of raw material and other essential products, further reducing India's reliance on China for raw materials. Although, Mr. Modi has refrained from full participation in the trade pillar of the IPEF, it does not signify an end to India's role in the forum.

#### STATES MAY HAVE NITI AAYOG-LIKE BODIES SOON

The NITI Aayog — the think-tank at the Central level — will handhold each state to set up similar bodies, replacing their planning boards for faster and inclusive economic growth, in tandem with the vision of becoming a developed nation by 2047.





The move is in recognition of the fact that except for sectors like defence, railways and highways, the national gross domestic product (GDP) growth is an aggregation of states' rates of growth. Health, education and skilling are primarily with the state government. The NITI Aayog notes that state governments' role is critical to improving ease of doing business, land reforms, infrastructure development, credit flows and urbanisation, all of which are vital for sustained economic growth.

In his Independence Day speech last month, Prime Minister Narendra Modi set an ambitious target of making India a developed nation by 2047. The NITI Aayog has already initiated the "state support mission" by holding a meeting of state planning secretaries on September 6. The thinktank, which will likely extend support to states including experts from IIMs and IITs, has received positive responses from states, according to sources.

Initially, it aims for 8-10 states to set up such bodies, before reaching out to all by March 2023. Four states — Karnataka, Uttar Pradesh, Madhya Pradesh and Assam — have already begun work in this regard while Maharashtra, Odisha, Andhra Pradesh and Gujarat will likely begin work soon, sources said.

It has been seven years since the 65-year-old Planning Commission was replaced with the NITI Aayog by the Modi government in January 2015, mainly as a think-tank for forging a national vision on development. The Centre has since given the plan fund allocation powers to the Finance Ministry.

However, most states so far have done little to rejuvenate their planning departments/ boards, which earlier dealt with the Planning Commission and prepared parallel state five year-plans with the Centre. "Most states' planning departments, with huge manpower, are almost defunct and have no clarity what work they will do," said a senior official said. "A plan has been chalked out by NITI Aayog to help in the creation of teams that will examine the existing structure of state planning boards, and in the next 4-6 months conceptualise the State Institution for Transformation (SIT)."

Lateral entry of professionals will be encouraged in SITs to undertake high-quality analytical work and policy recommendations. Besides reorienting state planning boards as SITs, a blueprint will be made on how it will guide states in policy formulation, take up monitoring and evaluation of government policies and programmes, and suggest better technology or models for delivery of schemes.

## TAX ON THE POOR

The latest retail inflation data from the National Statistical Office is a sobering reminder that accelerating price gains still remain the single biggest challenge to policymakers as they try to steer Asia's third-largest economy to a more durable recovery from the pandemic-induced slump. Inflation based on the Consumer Price Index (CPI) quickened in August to a provisional 7%, from 6.7% in July, as the pace of gains in food prices as measured by the Consumer Food Price Index accelerated by a sizeable 93 basis points to 7.62%, from July's 6.69%. And rural consumers bore a disproportionately higher burden: with month-on-month changes in both food prices and overall inflation appreciably greater at 0.88% and 0.57% respectively, compared with the 0.50% and 0.46% rates of urban inflation. Of particular concern is that inflation in the prices of cereals — staple grains in every household — surged to 9.57% from the preceding month's 6.9% rate. Month-on-month the pace was a disconcerting 2.4%. With kharif sowing of rice this year





undershooting last year's acreage and uneven distribution of rainfall further roiling the crop's production picture, the outlook for inflation in this 'heavyweight' food category remains far from reassuring, the Centre's recent imposition of tariff and other curbs on export of non-Basmati rice notwithstanding. In fact, eight of the 12 food items that combine to constitute the food and beverages category of the CPI saw sequential price upticks, with vegetables (13.2% year-on-year and 2.5% month-on-month) and dairy (6.39% and 0.9%, respectively) being two other vital foods that contributed to the faster inflation.

The Finance Ministry was quick to assert that the increase in headline inflation was "moderate", even as it sought to downplay the significance of food price pressures by terming food and fuel prices as "transient components". It also pointed to the steps by the Government to cool prices, that could help tame inflation in the 'coming weeks'. And it cited oils and fats and pulses as two items where prices had begun to ease in response to the Centre's steps. However, the prices of pulses and products quickened by 1.7% month-on-month, with the pace trailing only that of sequential inflation in spices, cereals and vegetables. Services categories including housing, health, education, recreation and personal care too witnessed sequential increases in price gains as these services saw demand gradually revive. The challenge going forward would be for providers to tread carefully so as not to yet again depress consumption by raising prices too quickly. Policymakers would do well to heed the dictum of a former RBI Governor, who never tired of reiterating that 'containing the build up of price pressures is the best anti-poverty programme' as the poor 'have no hedge against inflation'.

#### UNDERSTANDING WINDFALL TAX

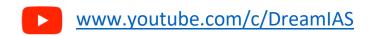
The story so far: Finance Minister Nirmala Sitharaman on September 2, defended the windfall tax imposed by the Centre on domestic crude oil producers, saying that it was not an ad hoc move but was done after full consultation with the industry.

## What is a windfall tax?

Windfall taxes are designed to tax the profits a company derives from an external, sometimes unprecedented event — for instance, the energy price-rise as a result of the Russia-Ukraine conflict. These are profits that cannot be attributed to something the firm actively did, like an investment strategy or an expansion of business. The U.S. Congressional Research Service (CRS) defines a windfall as an "unearned, unanticipated gain in income through no additional effort or expense".

Governments typically levy this as a one-off tax retrospectively over and above the normal rates of tax. One area where such taxes have routinely been discussed is oil markets, where price fluctuation leads to volatile or erratic profits for the industry. There have been varying rationales for governments worldwide to introduce windfall taxes, from redistribution of unexpected gains when high prices benefit producers at the expense of consumers, to funding social welfare schemes, and as a supplementary revenue stream for the government.





#### Why are countries levying windfall taxes now?

Prices of oil, gas, and coal have seen sharp increases since last year and in the first two quarters of the current year, although they have reduced recently. Pandemic recovery and supply issues resulting from the Russia-Ukraine conflict shored up energy demands, which in turn have driven up global prices. The rising prices meant huge and record profits for energy companies while resulting in hefty gas and electricity bills for households in major and smaller economies. Since the gains stemmed partly from external change, multiple analysts have called them windfall profits.

In early August, Antonio Guterres, the United Nations Secretary-General, sharply criticised the "grotesque greed" of big oil and gas companies for making record profits from the global energy crisis on the back of the world's poorest people. He said it was "immoral" that the largest energy companies in the first quarter of the year made combined profits of close to \$100 billion. The UN chief urged all governments to tax these excessive profits "and use the funds to support the most vulnerable people through these difficult times."

In July, India announced a windfall tax on domestic crude oil producers who it believed were reaping the benefits of the high oil prices. It also imposed an additional excise levy on diesel, petrol and air turbine fuel (ATF) exports. Also, India's case was different from other countries, as it was still importing discounted Russian oil. Sources told The Hindu Business Line that the windfall tax was targeted mainly at Reliance Industries Ltd and Russian oil major Rosneft-backed Nayara Energy, who the government believed were making a killing on exporting large volumes of fuel made from discounted Russian oil at the cost of the domestic market. Analysts also saw the windfall tax as a way for the Centre to narrow the country's widened trade deficit.

#### What are the issues with imposing such taxes?

Analysts say that companies are confident in investing in a sector if there is certainty and stability in a tax regime. Since windfall taxes are imposed retrospectively and are often influenced by unexpected events, they can brew uncertainty in the market about future taxes. Stuart Adam, a senior economist at the Institute for Fiscal Studies in London, told Deutsche Welle (DW) that he isn't keen on such taxes. "It's better to say in advance how much tax you are going to levy in different circumstances and then do it rather than creating sudden one-off surprises in the tax system." German economist Andreas Peichl told Reuters that such taxes are populist and politically opportune in the short term.

The International Monetary Fund (IMF), which released an advice note on how windfall taxes need to be levied also said that taxes in response to price surges may suffer from design problems—given their expedient and political nature. It added that "introducing a temporary windfall profit tax reduces future investment because prospective investors will internalise the likelihood of potential taxes when making investment decisions".

There is another argument about what exactly constitutes true windfall profits; how can it be determined and what level of profit is normal or excessive. A CRS report, for instance, argues that if rapid increases in prices lead to higher profits, in one sense it can be called true windfalls as they are unforeseeable but on the other hand, companies may argue that it is the profit they earned as a reward for the industry's risk-taking to provide the end user with the petroleum product. Another issue is who should be taxed — only the big companies responsible for the bulk of high-priced sales or smaller companies as well— raising the question of whether producers with revenues or profits below a certain threshold should be exempt.





#### THE SUBSIDY DEBATE NEEDS TO RECKON WITH POWER

On July 16, Prime Minister Narendra Modi said, "There are some governments which are indulging in revri culture to secure votes." Later that month, the Supreme Court admitted a petition which contended that the offer and distribution of "irrational freebies" amounted to "bribery and was unduly influencing voters". During the hearing, Chief Justice N.V. Ramana said, "We are not just looking at this as just another problem during election time... We are looking at the national economic well-being."

Mr. Modi's statement drew criticism from the Opposition. Seeking to be made a party in the ongoing 'freebies' case, the DMK argued that the term 'freebies' could not be interpreted to restrict States' competence in providing welfare. Delhi Chief Minister Arvind Kejriwal retorted to the Prime Minister saying that "waiving off friends' loans worth thousands of crores... were nothing but freebies."

These exchanges were mostly focused on election-related freebies, which form a minuscule share of the subsidy expenditure. What was missing from the freebie debate was power subsidies, which constitute a significant share of the subsidy expenditure of many States. This is especially the case with States which are relatively more burdened by debt and also spend the most on subsidies. For instance, three States — Rajasthan, Punjab, and Bihar — spend over 80% of their subsidy expenditure on power.

Various types of power subsidies are offered by the States targeting farmers, consumers, and industries. For the purpose of this analysis, all of them have been clubbed under one umbrella term called 'power subsidies'. For example, Andhra Pradesh offers power subsidies under several heads including 'free power to SC (Scheduled Caste) households', 'reimbursement of electricity charges,' and 'Y.S.R Nine Hours Free Power Supply.'

Rajasthan, Punjab, and Bihar are also the States that spend more than 25% of their own tax revenue on subsidies along with Chhattisgarh and Madhya Pradesh. Barring Bihar, all four spend close to 2% of the State Domestic Product on subsidies. The above figures are an average for the five-year period from FY17 to FY21.

All these States are also burdened with high levels of debt. Punjab, specifically, has the highest debt-to-GSDP ratio among the major States in FY22, crossing the 50% mark. The State's debt has grown by more than 10% points since FY17.

In these five States, in FY22, the debt-to-GSDP ratio was close to or above 30%. Like Punjab, Chhattisgarh too had touched double-digit growth in the debt-to-GSDP ratio.

States which are high subsidy spenders and those which are gradually increasing their spending, power constitutes a dominant chunk of subsidy expenses. It is evident that meaningful intervention on this issue is possible only by addressing the power component of subsidies. Reducing other 'freebies' will not bring down the debt levels of the States significantly.

SWITCHING LANES IN EV RACE: AMID LITHIUM HEADWINDS, INDIA SETS SIGHT ON H-FUEL CELLS

India's first indigenously-developed hydrogen fuel cell (HFC) technology bus was unveiled late August, with the fuel cell — which uses hydrogen and air to generate electricity onboard to power





the bus — being developed jointly by the Council of Scientific and Industrial Research (CSIR) and Pune-based automotive software company KPIT Ltd. This is being seen as a milestone of sorts, especially given the government's strong electric vehicle (EV) policy push that comes amid a struggle to make inroads into the global lithium (Li) value chain, which has prompted a rethink on the need to diversify the country's dependency on Li-ion batteries in the overall EV mix.

New Delhi's electric mobility is largely focussed on battery electric vehicles (BEV) as the key platform to replace the internal combustion engine (ICE) vehicles, with Li-ion seen as the most viable battery option for now.

The problem: demand for Li-ion batteries from India is projected to grow at CAGR of over 30 per cent by volume up to 2030, translating into over 50,000 tonnes of lithium requirement for the country to manufacture only EV batteries.

With over 90 per cent of global Li production concentrated in Chile, Argentina and Bolivia, alongside Australia and China, and other key inputs such as cobalt and nickel mined in the Congo and Indonesia, India would need to be almost entirely dependent on imports from a small pool of countries to cater to its demand. While other options to Li-ion are being explored, viability remains a key factor. A renewed focus on hydrogen as a mobility option comes against this backdrop.

Traditionally a slow mover in EV technologies, India has made an uncharacteristically early push in the race to tap the energy potential of the most abundant element in the universe: hydrogen. This includes a National Hydrogen Mission and a roadmap for using hydrogen as an energy source. And while proposed end-use sectors include steel and chemicals, the major industry that hydrogen has the potential of transforming is transportation — which contributes a third of all greenhouse gas emissions, and where hydrogen is being viewed as a direct replacement of fossil fuels, with specific advantages over traditional EVs. As a supporting regulatory framework, the Ministry of Road Transport and Highways had, in late 2020, issued a notification proposing amendments to the Central Motor Vehicles Rules, 1989, to include safety evaluation standards for HFC-based vehicles.

#### Hydrogen as a fuel source

While hydrogen's potential as a clean fuel source has a history spanning nearly 150 years, it was only after the oil price shocks of the 1970s that the possibility of the element replacing fossil fuels came to be considered seriously. Three carmakers — Japan's Honda and Toyota, and South Korea's Hyundai — have since moved decisively in the direction of commercialising the technology, albeit on a limited scale. The most common element in nature, however, is not found freely. Hydrogen exists only when combined with other elements, and has to be extracted from naturally occurring compounds like water (which is a combination of two hydrogen atoms and one oxygen atom).

Although hydrogen is a clean molecule, the process of extracting it is energy intensive. The two most common methods for producing hydrogen are natural gas reforming and electrolysis.

The thermal processes for hydrogen production typically involve steam reforming, a process in which steam reacts with a hydrocarbon fuel to produce hydrogen and accounts for about 95 per cent of all hydrogen produced. In electrolysis, water is split into oxygen and hydrogen through a process called electrolysis. Electrolytic processes take place in an electrolyser, which functions





more like a fuel cell in reverse — instead of using the energy of a hydrogen molecule as a fuel cell does, an electrolyser creates hydrogen by splitting water molecules.

#### How hydrogen fuel cells work

Hydrogen is an energy carrier, not a source of energy. Hydrogen fuel must therefore be transformed into electricity by a device called a fuel cell stack before it can be used to power a car or truck. A fuel cell converts chemical energy into electrical energy using oxidising agents through an oxidation-reduction reaction. Fuel cell-based vehicles most commonly combine hydrogen and oxygen to produce electricity to power the electric motor on board. Since fuel cell vehicles use electricity to run, they are considered EVs.

Inside each individual fuel cell, hydrogen is drawn from an onboard pressurised tank and made to react with a catalyst, usually made from platinum. As the hydrogen passes through the catalyst, it is stripped of its electrons, which are forced to move along an external circuit, producing an electrical current. This current is used by the electric motor to power the vehicle, with the only byproduct being water vapour. Hydrogen fuel cell cars have a near-zero carbon footprint. Hydrogen is about 2-3 times as efficient as burning petrol, because an electric chemical reaction is much more efficient than combustion.

The new HFC technology bus prototype unveiled in Pune is seen as a major breakthrough, with the indigenously developed fuel cell stack at the CSIR-National Chemical Laboratory, Pune. The fuel cell used here is what is called a "low temperature proton exchange membrane type fuel cell" that operates at 65-75°C, which is suitable for vehicular applications. The polymer electrolyte membrane fuel cells, also called proton exchange membrane fuel cells, use a proton-conducting polymer membrane as the electrolyte while hydrogen is used as the fuel. These cells operate at relatively low temperatures and are the best candidates for powering automobiles.

#### The problem with hydrogen

Globally, there were under 25,000 HFC vehicles on the road at the end of 2020; by comparison, the number of electric cars was 8 million. A big hurdle to the adoption of HFC vehicles has been a lack of fuelling station infrastructure — even though fuel cell cars refuel in a similar way to conventional cars, they cannot use the same station. There were fewer than 500 operational hydrogen stations in the world in 2021, mostly in Europe, followed by Japan, South Korea, and some in North America.

Safety is flagged as a concern. Hydrogen is pressurised and stored in a cryogenic tank, from where it is fed to a lower-pressure cell and put through an electro-chemical reaction to generate electricity. Hyundai and Toyota say the safety and reliability of hydrogen fuel tanks is of a level similar to that of standard CNG engines. Scaling up the technology and achieving critical mass remains the big challenge. More vehicles on the road and more supporting infrastructure can reduce costs. India's proposed mission is seen as a step in that direction.

# AN IMPROVED BILL, BUT STILL CONTENTIOUS

The Indian Ports Act of 1908 is obsolete in many respects and needs a complete overhaul. Prelegislative consultation of a draft Bill with stakeholders is good practice, and the Union Ministry of Ports, Shipping and Waterways needs to be commended for holding four rounds of consultations on the draft Indian Ports Bill that will replace the 1908 Act. The 2022 draft of the





Bill is an improvement over the 2021 draft, but it has only tinkered at the margins without resolving the main issue of disagreement between the Centre and the maritime States.

India has 12 major ports and 212 non-major ports. Most of the non-major ports are small fishing harbours and only a few of them cater to international shipping. Major ports figure in the Union List and come under the jurisdiction of the Central government. Non-major ports are in the Concurrent List and come under the respective State governments, but the Centre has overriding legislative and executive powers.

#### THE FALL IN NATURAL RUBBER PRICES IN INDIA

The story so far: After a moderate post-pandemic revival, the price of natural rubber (NR) has crashed to a 16-month low of ₹150 per kg (RSS grade 4) in the Indian market. The price of latex, which soared during the pandemic due to huge demand from glove makers, took a more severe drubbing with its prices rolling down below ₹120. With the impact of the falling prices beginning to reflect in their daily lives as well as the local economy, the growers are up in arms against the authorities for their perceived delay in checking the slide. Under the aegis of the National Consortium of Regional Federations of Rubber Producer Societies India, an umbrella organisation for rubber growers, a day-long sit-in protest was staged in front of the Rubber Board headquarters in Kottayam, Kerala, last week.

#### What has caused the sharp fall in prices?

The current fall in prices is attributed primarily to a weak Chinese demand and the European energy crisis, along with high inflation and an import glut, among other things. While the unremitting zero COVID strategy in China, which consumes about 42% of the global volume, has cost the industry dearly, analysts have also flagged the acceleration of imports.

The domestic tyre industry, according to them, is sitting pretty on an ample inventory, especially in the form of block rubber from the Ivory Coast and compounded rubber from the Far East.

#### Where does India stand in terms of the production and consumption of natural rubber?

India is currently the world's fifth largest producer of natural rubber while it also remains the second biggest consumer of the material globally. (About 40% of India's total natural rubber consumption is currently met through imports)

A latest report by the Rubber Board has projected the natural rubber production and consumption in India during 2022-23 as 8,50,000 tonnes and 12,90,000 tonnes respectively. The production of the material improved by 8.4%, to 7,75,000 tonnes, during 2021-22 compared to 7,15,000 tonnes in the previous year. An increase in yield, tappable area and area tapped during the year contributed to the rise in production.

On the demand side, the domestic consumption rose by 12.9%, to 12,38,000 tonnes in 2021-22 from 10,96,410 tonnes in the previous year. The auto-tyre manufacturing sector accounted for 73.1% of the total quantity of natural rubber consumption. Import of the material, meanwhile, increased to 5,46,369 tonnes from 4,10,478 tonnes.

#### How does the falling price affect the growers?

The turnaround has exposed the growers — mostly small and medium scale — to a painful reckoning, contributing to wide-spread panic in Kerala, which accounts for nearly 75% of the total

 $3^{RD}$  FLOOR AND  $4^{TH}$  FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR





production. The precipitous plunge in prices coupled with high costs have also left them staring at an uncertain future, forcing some to stop production for the time being.

The impact of the price fall is felt more in the rural areas, where most people are solely dependent on rubber cultivation and have no other option but to cut expenses. This has caused a sluggishness in the respective local economies, which also coincided with the festive season in Kerala.

If a reversal in prices seem distant, the trend may also trigger a crop switch or even a fragmentation of the rubber holdings in the long run.

#### What do the farmers demand?

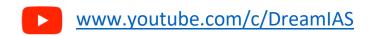
The key demands they have raised to the Union government include raising the import duties on latex products and compound rubber to make it on par with natural rubber, by either 25% or ₹30 per kg, whichever is lower.

Its demands to the state government are to raise the replanting subsidy in Kerala, which remains at ₹25,000 per ha, and the support price of the crop under the price stabilisation scheme to ₹200 from ₹170.



# DreamIAS





#### **LIFE & SCIENCE**

#### **COGNITIVE DISSONANCE**

The cognitive dissonance theory was one of the most influential theories in social psychology first proposed by Leon Festinger in his book A Theory of Cognitive Dissonance in 1957. Festinger's theory was the product of an experiment conducted by him and his colleagues to understand the conflicts between thoughts and behaviour. The theory proposes that inconsistency between one's thoughts and behaviours would lead to an uncomfortable psychological or emotional tension (cognitive dissonance) among individuals/groups which results in them either changing the inconsistent elements to reduce the dissonance or adding consonant elements to restore harmony.

#### The experiment

The study of a cult by Festinger resulted in the theory of cognitive dissonance. A woman started a cult claiming that she received messages from extraterrestrial aliens that the world would end due to a flood on a specific date and that a flying saucer would arrive to rescue people who believed in the prophecy. Many people joined the cult leaving their families, jobs, money and possessions. Festinger and his colleagues joined the cult to observe how believers would react if and when the prophecy failed.

It was observed that while believers shunned publicity when they were waiting for the flood, immediately after the prophecy failed, most of the group members contacted media and attempted to proselytise many (attempts to lure others into their cult) so as to enlist new believers to obtain social support (consonant elements). Festinger suggested that the disproval of the prophecy created cognitive tension among the believers and to maintain consistency between their thoughts and behaviour, they sought social support. More members were added to the cult to reduce the dissonance created by the disconfirmation of their prophecy.

#### Forced compliance paradigm

Through a series of experiments, Festinger postulated the forced compliance paradigm, extending the cognitive dissonance theory. In an experiment where the subjects had to perform a series of menial tasks and lie to another person about the tasks being interesting and enjoyable, it was found that the subjects who received \$1 to lie did a better job than the ones who received \$20. Festinger explained that this was because the subjects who were paid more did not experience dissonance, as they were rewarded well and had ample justification for lying. Whereas the subjects who were paid a mere dollar experienced dissonance and to justify their experience, they re-evaluated the menial tasks as enjoyable, making their lie more believable to others (as the subject believed in it themselves).

The experiment shows that in an attempt to reduce dissonance, the attitude towards it changes, more likely in the direction of less incentive. Cognitive dissonance theory, in this regard, contradicts most behavioural theories that attribute positive changes to higher incentives.

#### **Resolving dissonance**

Festinger explained that there were different ways in which individuals or groups resolved cognitive dissonance to best suit their situations. One could change one's thoughts, change one's





behaviour to match one's thoughts, add a thought to justify the behaviour or trivialise the inconsistency between thoughts and behaviour.

Let's take the example of X- a 25-year old-graduate (unemployed) who has newly started supporting a political party. He follows the political party as he believes in their promises of providing better job opportunities and development for youngsters in the country if they came to power. His party wins the elections. Despite five years of governance by his party, no significant changes occur in the employment sector and X is still unemployed. As the next elections approach, the political party members request his support. In such a situation, what would X do?

X can change his thought about the situation- He looks at his neighbours B and C, who are also graduates. They have started a chai shop and samosa shop respectively, in their street. X concludes that though not in a conventional sense, jobs were created after his party came into power, changing his opinion about the situation, and reducing the inconsistency in his belief. He will still vote for the same political party with a change in his perspective.

X can change his behaviour towards the situation- He understands and accepts that the promises made by the political party he supported were false and decides not to trust them anymore. Thus, he changes his behaviour and attitude towards the situation and does not vote for the political party already in power, which had deceived him with promises of better job opportunities and development.

X can add a thought- He analyses the activities of his government. Though the party failed to provide job opportunities to youngsters, it successfully built 200-metre tall statues, a new Supreme Court (building), monuments and bridges in the last five years. He concludes that though the government failed to provide jobs, in the past five years under his party's leadership, there was infrastructural development.

He resolves the cognitive inconsistency between his thoughts and behaviour by adding a thought that rationalises his support of the political party. He will still vote for the same party with the hope that the party will fulfil its promise and provide employment for its citizens in the next term.

X can trivialise the inconsistency- He compares the state of his country after his party came into power with economically poorer neighbouring countries. He observes that while only 40% of the educated youth in his country are employed, the share is less than 30% in his neighbouring countries. In trivialising the faults in his political party's governance, the tension created due to the inconsistency between his thoughts and behaviour is negated. He will thus continue voting for the same political party as he has now justified the reason behind supporting the party.

Cognitive dissonance theory explains how individuals or groups rationalise their support and belief toward different religions, cults or political parties, partially blinding themselves to reduce the contradictions between their thoughts and behaviour.

While there are various ways to resolve cognitive dissonance, in most cases, people tend to justify their behaviour by either adding consonant elements or negating contradictory or inconsistent thoughts. This is because it is easier to change one's thoughts than to introspect and question one's belief system.





#### THE DANGERS OF TEACHING ROBOTS TO LAUGH

There's a new chapter in the saga of over-enthusiastic researchers trying to make the Matrix a reality. Scientists at Kyoto University are training an AI-powered robot to laugh. This is, of course, a difficult project — one that could take decades to become a true success. Yet, if a machine can mimic the myriad ways in which human beings laugh, it may finally be able to cross the Uncanny Valley — that eerie feeling of uneasiness when an AI-enabled creature can copy human behaviour, but somehow feels unnatural and alien in interactions. Two questions arise from this desire to play God's understudy. First, can the changing, contextual nuances of what makes people chuckle, giggle and guffaw be programmed? And is it worth the effort?

#### THE CONSEQUENCES OF DECLINING FERTILITY ARE MANY

Though the global population, in terms of numbers, has been steadily increasing — some reports suggest that it could grow to around 8.5 billion in 2030 — there is an interesting aspect to this: average global fertility has been consistently declining over the past 70 years. The average number of children per woman in the reproductive age group has declined by 50%, from an average of five children per woman in 1951 to 2.4 children in 2020, according to the World Population Prospects 2022 by the United Nations population estimates and projections, and prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat.

This is the result of speeding up the social phenomenon of demographic transition. Poorer countries seem to be speeding up the transition ladder a lot faster than the richer ones. Britain took 130 years to transition from a fertility rate of five per woman in 1800 to two in 1930, whereas South Korea took 20 years from 1965 to 1985 to achieve the same. The newly released World Population Prospectus notes that the global fertility rate fell from three in 1990 to 2.3 in 2021. Sub-Saharan African countries are expected to contribute more than half the population growth after 2050 and grow through 2100. Most advanced economies have their fertility rate below the replacement rate of 2.1, with South Korea reporting the lowest at 1.05 children per woman.

The Indian setting is no different, with its fertility rate falling below the replacement level for the first time to 2.0 in 2021, according to the latest National Family Health Survey (NFHS). The rate has dipped 10% in just five years.

At the time of Independence, India's fertility rate was six per woman, and it had taken 25 years to reach five, with the government launching the first ever family planning programme in the world in 1952. India's fertility further declined to four in the 1990s when Kerala became the first State in India to have a fertility rate below replacement level; slowly, other States followed suit. As reported by the NFHS 2021, only five States have a fertility rate above the replacement rate: Bihar (3), Meghalaya (2.9), Uttar Pradesh (2.4), Jharkhand (2.3), and Manipur (2.2). The steady dip in fertility rates has been explained as an effect of increased use of contraception, more years of average schooling, better health care, and an increase in the mean marriage age of women.

#### Many economic implications

Countries in the earlier stages of demographic transition find positive effects of lower fertility on income as a major portion of the workforce moves to modern sectors of the economy with fertility dipping. Lower fertility rates can be viewed as both a cause and consequence of economic development. Lower fertility impacts women's education positively, which in turn lowers the





fertility of the next generations. With better infrastructure development, better health care, and education, fertility drops and income rises. The spiral of lower fertility leads to a window of time when the ratio of the working-age population is higher than that of the dependent age groups. This high proportion of people in the workforce boosts income and investment, given the higher level of saving due to lower dependence.

The falling fertility rate will also lead to lower pressure on land, water and other resources and would also contribute to achieving environmental goals. After the window where a country reaps the benefits of the demographic dividend, the huge working age population moves to old age, supported by fewer workers.

Japan was the first country to experience the implications of falling fertility rates. The increasing dependency ratio has led to near zero GDP growth since the 1990s, and the country is facing fiscal challenges to meet rising social security costs. Other Asian countries such as South Korea are now reporting lower fertility than Japan which is now optimistic about having managed the lower fertility without moving to an utter demographic collapse.

A fall in fertility rate beyond replacement level would have a negative effect on the proportion of the working population, which in turn will affect output in an economy. A rise in education and independence among women would enhance their labour participation, which could arrest the fall in labour participation up to a limit. An influx of immigrants from countries with higher population growth could also play a positive part.

The impact of fertility drop on productivity is also highly debated. While a higher level of education and technological advancement in areas including artificial intelligence could increase the productivity of the lower working age population, a paper, "The End of Economic Growth? Unintended Consequences of a Declining Population", by Stanford economist Charles Jones argues that falling fertility could diminish the creative capacity of humankind. He points to the need for ideas in technological advancement and productivity boost, which even artificial intelligence is still not capable of.

An ageing population will also affect global interest rates negatively as the share of people over 50 years will form almost 40% of the population by 2100. In their book The Great Demographic Reversal: Ageing Societies, Waning Inequality and an Inflation Revival, economists Charles Goodhart and Manoj Pradhan explain how falling fertility will have a positive effect on inflation through higher wages due to lower labour supply and a change in the nature of unemployment inflation trade-off, as now low inflation can be maintained even with low unemployment.

The book also takes a different view on the impact of lower fertility on public finance. Popular theory suggests increased pressure on governments due to a high dependency ratio. The book puts up an alternate narrative of the fall in government debt due to lower savings of households and corporates due to higher dependency and the government thus running on surplus than deficit banking on the logic of accounting and higher inflation.

# Dealing with fertility decline

The fall in fertility around the globe has been a result of decades of demographic process, and hence needs scientific and sustainable policies for mitigation. Even though there is looming pessimism about a lower fertility rate, there are ways to get the most out of it and diminish its negative effects. The advancement in health care and better nutrition around the world have increased the life expectancy and productivity of older citizens. Reforms in the labour market to





induce more flexibility in the labour market would encourage working women to have more children and non-working mothers to enter the labour market.

Countries across the globe are experimenting with policies to boost fertility. Germany found success in boosting births through liberal labour laws, allowing more parental leave and benefits. Denmark offers state-funded IVF for women below 40 years, and Hungary recently nationalised IVF clinics. Poland gives out monthly cash payments to parents having more than two children, whereas Russia makes a one-time payment to parents when their second child is born. Russia also reinstituted the Soviet-era 'Mother Heroine' title, who bore and raised more than 10 children amounting to almost a one-time payment of ₹13 lakh.

#### In perspective

Though the benefits of demographic dividend are being reaped, the below replacement level fertility rate would mean a smaller dividend window than expected. Although India's working-age population will continue to grow for many more decades, it would need to keep an eye on fertility dips. Liberal labour reforms, encouraging higher female labour force participation rate, and a higher focus on nutrition and health would ensure sustained labour supply and output despite lower fertility. India, like other countries in the globe, would need to be equipped to aid the patter of more tiny feet sooner or later.

# INDIA'S GROWING WATER CRISIS, THE SEEN AND THE UNSEEN

The UNESCO United Nations World Water Development Report of 2022 has encapsulated global concern over the sharp rise in freshwater withdrawal from streams, lakes, aquifers and human-made reservoirs, impending water stress and also water scarcity being experienced in different parts of the world. In 2007, 'Coping with water scarcity' was the theme of World Water Day (observed on March 22). The new Water Report of the Food and Agriculture Organization of the United Nations (FAO) sounded a note of caution about this silent crisis of a global dimension, with millions of people being deprived of water to live and to sustain their livelihood.

#### **Growing water stress**

Further, the Water Scarcity Clock, an interactive webtool, shows that over two billion people live in countries now experiencing high water stress; the numbers will continue to increase. The Global Drought Risk and Water Stress map (2019) shows that major parts of India, particularly west, central and parts of peninsular India are highly water stressed and experience water scarcity. A NITI Aayog report, 'Composite Water Management Index' (2018) has sounded a note of caution about the worst water crisis in the country, with more than 600 million people facing acute water shortages. The typical response of the areas where water shortage or scarcity is high includes transfer of water from the hinterlands/upper catchments or drawing it from stored surface water bodies or aquifers. This triggers sectoral and regional competition; rural-urban transfer of water is one such issue of global concern.

# **RISK FROM RABIES**

The story so far: The death of a 12-year-old girl in Kerala from rabies, despite having multiple inoculations of the vaccine, has raised questions on the efficacy of rabies vaccines in India and their availability.





#### How does a rabies vaccine work?

Rabies is a disease that is caused by a family of viruses called the lyssaviruses and found in a range of mammals. The virus targets the central nervous system and is nearly 100% fatal to the host animal if it succeeds in infecting it. Though many animals from cats to crocodiles can be transmitters of the virus, it is most likely to spread to people from the bite of an infected dog or a cat as they are the most common pets. Despite being potentially lethal, the virus is slow-moving and it can be several weeks before the disease manifests into a fatal encephalitis which is why administering a vaccine, even after being bitten by a rabid animal, is effective. A shot of rabies immunoglobulin (rabies-antibodies against the virus derived either from people or horses) followed by a four-week course of anti-rabies vaccine, is nearly guaranteed to prevent rabies. This translates to the first dose being given on the same day as the immunoglobulin followed by vaccinations on the 3rd, 7th and 14th day. There are other regimens, such as five shots which include one on the 28th day approved by the World Health Organization (WHO) which clinics may consider, depending on the availability of the vaccine.

#### How is the vaccine made?

The vaccine is made up of an inactivated virus that is expected to induce the body into producing antibodies that can neutralise the live virus in case of infection. There are also test vaccines that involve genetically modified viruses. There is no single-shot rabies vaccine or one that offers permanent immunity. There are mainly two ways of administering the rabies vaccine. One, called post-exposure prophylaxis (PEP), is given to persons who have been exposed via a bite to an animal suspected to be infected. The vaccines are administered either into the muscles, or into the skin. It can also be given ahead of time to persons who have a high risk of being infected, such as veterinarians, animal handlers, areas with a high number of rabies infection, by what is called Pre Exposure Prophylaxis (PrEP). The advantage of a PrEP is that if bitten, one doesn't need a immunoglobulin injection, and two subsequent shots of the vaccine will suffice for full protection, unlike the four-course prescription in the case of PEP. However, the WHO doesn't recommend PrEP as a general preventive.

#### Are rabies vaccines easily available in India?

According to the Health Ministry, there are at least six rabies vaccines approved for India. They all contain inactivated virus made of duck, chicken or human cell cultures and are marked as safe, efficacious and with long immunity. Rabies vaccines are available for free in government dispensaries though vaccines administered in a private clinic can cost up to ₹500 per dose. However, reports of hospitals running out of vaccines continue to surface and knowledge about vaccines and treatment is still inadequate in India. The Health Ministry has said that no centralised database of vaccine availability is maintained, being a State-procured product, but that shortage had been reported in Punjab, Haryana, West Bengal and Karnataka. The Centre says that from 2016-18, around 300 laboratory-confirmed rabies deaths were reported in India. The WHO says India is endemic for rabies and accounts for 36% of the world's deaths. The true burden of rabies in India is not fully known; although as per available information, it causes 18,000-20,000 deaths every year. About 30-60% of reported rabies cases and deaths in India occur in children under the age of 15 years, as bites that occur in children often go unrecognised and unreported, it notes.

#### What about vaccines for animals?

Given that rabies treatment requires multiple shots of vaccine as well as immunoglobin, sticking to the schedule is challenging. Governments of countries where rabies is endemic have frequently





set targets to eliminate the disease — India has committed to do so by 2030. Yet it is widely acknowledged that this elimination requires vaccination of dogs. Like in people, vaccinating animals too doesn't guarantee lifelong immunity from the disease. Because dogs are deemed responsible for 99% of all rabies infections in people, the government in its 2021 plan, called the 'National Action for Plan — Rabies Elimination', aims to vaccinate at least 70% of all dogs in a defined geographical area annually for three consecutive years. With this, a degree of herd immunity is expected leading to eventual elimination within eight years. Rather than inoculate all dogs, the plan is to identify 'rabies hotspots' in the country and target them.

# IS THE KETO DIET SAFE FOR DIABETICS? IS IT ONLY GOOD FOR SHORT-TERM WEIGHT LOSS? DOES IT INCREASE CHOLESTEROL?

I recently saw a 23-year-old obese (weight 92 kg, BMI 33 kg/m2) girl. She was smiling but looked unsettled. She told me, "Doc, I have been on a Keto diet for the last two months and have lost 4 kg of weight. Yet I feel feverish, fatigued, dizzy, have plenty of cramps, insomnia, my breath smells so bad. And I have trouble eating all that high fat-oil laced diet daily." So, she did lose weight but suffered from some long-lasting side effects in the bargain.

#### What is a ketogenic diet?

The story of Keto diets started with Atkins diets, which rapidly gained popularity. "Dr Atkins New Diet Revolution: The High Calorie Way to Stay Thin Forever" has sold 12 million copies and remains a bestseller till this day. Predominantly non-vegetarian Western populations loved this diet (Breakfast: Greasy ham, bacon and eggs; lunch, steak with plenty of cheese; and dinner, fish, crab, and chicken cooked in a whole lot of butter). This diet leads to rapid weight loss in many individuals. Low carbs (less than 30 gm per day, equivalent to about one-and-a-half rotis) lead the body to find alternate routes to energy generation from acidic ketone bodies (hence the name ketogenic diet). These ketone bodies provide energy in an efficient manner and suppress appetite. Since then, several similar diets have emerged due to two reasons. First, to consistently consume very low carb, high fat and protein daily is difficult, hence the quantity of carbs per day has been increased in the modified diets. Second, it is not possible for vegetarians to eat a diet designed by Atkins, hence, ghee, coconut oil etc have been added in surplus.

## What are pluses and minuses?

There are several plus points for this diet. Rapid weight loss can be achieved, sometimes more than that seen in usual calorie restrictive diets. In patients with diabetes, blood sugar levels and sensitivity to insulin improve and the need for anti-diabetic medications decreases. The diet may help patients with polycystic ovaries as well by improving their metabolic environment. Interestingly, robust evidence indicates that these diets have been known to decrease seizures in children resistant to high dose medications. Further, there is persuasive evidence for effects of these diets on acne. Although tried, there are no clear benefits in cancers, Parkinson's disease and Alzheimer's disease.

But many scientists are not ready to accept this diet because of uncertainty regarding benefits and harms. There are several known adverse effects and some not known or proven. While short term weight loss is slightly superior to conventional weight loss diets, long-term results are not yet known. In animals, this diet is known to increase density of fat in the liver (worsen fatty liver), which remains a concern in humans, short of good data. Recent reports show an increase in bad LDL cholesterol with these diets, which could adversely impact heart health. Finally, no good





studies are available concerning Indians, who have bad liver (plenty of fatty livers) and LDL cholesterol (blood is full of fats, which could lead to dense deposition in the arteries that may cause blockages).

#### Who should not follow ketogenic diets?

First, these diets are a no-no for patients with heart failure and heart rhythm irregularities. Second, avoid such diets in patients with disturbed functions of kidney and liver, and history of pancreatic inflammation (pancreatitis). For patients with diabetes, extra precautions are needed when using these diets. Those who have Type 1 diabetes or have pregnancy with diabetes should not try this out at all. Many diabetic patients, who are on SGLT2 Inhibitors (Empagliflozin, Dapagliflozin and Canagliflozin) should be careful since Keto diets and these drugs would have additive effects on ketogenesis, which could reach dangerous levels. Finally, those who are on blood thinner (Vit K-dependent anticoagulation) should avoid Keto diets.

#### Is it worth short-term gains?

It looks like Keto diets are not a panacea for weight loss, only somewhat better than conventional weight loss diets in the short-term. So low carbohydrate Ketogenic diets are a reasonable option for rapid weight loss among young obese individuals with no organ dysfunction. This should be tried for three to six months under supervision of nutritionists and physicians. Cholesterol and liver profile should be done to check for any extreme responses. Similarly, in obese young and recently detected patient with diabetes (not on SGLT2i), this diet is a reasonable option to check surge of sugars or even for reversal of diabetes. Finally, the effect of very low carb Ketogenic diets on longevity is unknown, and one study suggests these are not favourable.

# FROM PROMISE TO REALITY: 10 YEARS AFTER BREAKTHROUGH, A CRISPR SOLUTION TO PROBLEMS OF HEALTH BEGINS TO TAKE SHAPE

Over the last two and a half years, as the coronavirus pandemic ravaged the world and exposed the vulnerabilities of humans to new diseases, scientists continued to push ahead with significant progress in utilising an exciting recent technology for permanent cures to some of the most intractable health disorders.

In the 10 years since it was developed, the genome-editing technology called CRISPR has begun to deliver on the near unlimited potential that scientists say it has to improve the quality of human life.

The technology enables a simple but remarkably efficient way to 'edit' the genetic codes of living organisms, thus opening up the possibility of 'correcting' genetic information to cure diseases, prevent physical deformities, or to even produce cosmetic enhancements.

Over the last three years especially, several therapeutic interventions using CRISPR for diseases like thalassaemia or sickle cell anaemia have gone into clinical trials, mainly in the United States, and the initial results have been flawless.

Last year, the Indian government approved a five-year project to develop this technology to cure sickle cell anaemia that mainly afflicts the tribal populations of the country.

And this is just the beginning. Hundreds of research groups and companies around the world are working to develop a range of specific solutions using CRISPR. The developers of the technology,





Jennifer Doudna and Emmanuelle Charpentier, won the Nobel Prize for Chemistry in 2020, one of the fastest recognitions accorded by the Nobel committee following after a breakthrough.

#### The CRISPR technology

CRISPR is short for Clustered Regularly Interspaced Short Palindromic Repeats, which is a reference to the clustered and repetitive sequences of DNA found in bacteria, whose natural mechanism to fight some viral diseases is replicated in this gene-editing tool.

Editing, or modification, of gene sequences to eliminate — or introduce — specific properties in an organism is not a new development. It has been happening for several decades now, particularly in the field of agriculture, where genetically modified variants, with specific desirable traits, are regularly developed. It usually involves the introduction of a new gene, or suppression of an existing gene, through a process described as genetic engineering.

CRISPR technology is different. It is simple, and still far more accurate — and it does not involve the introduction of any new gene from the outside. Its mechanism is often compared to the 'cut-copy-paste', or 'find-replace' functionalities in common computer programmes. A bad stretch in the DNA sequence, which is the cause of disease or disorder, is located, cut, and removed — and then replaced with a 'correct' sequence. And the tools used to achieve this are not mechanical, but biochemical — specific protein and RNA molecules.

The technology replicates a natural defence mechanism in some bacteria that uses a similar method to protect itself from virus attacks.

#### **Technology in action**

The first task is to identify the particular sequence of genes that is the cause of the trouble. Once that is done, an RNA molecule is programmed to locate this sequence on the DNA strand, just like the 'find' or 'search' function on a computer. After this, a special protein called Cas9, which is often described as 'genetic scissors', is used to break the DNA strand at specific points, and remove the bad sequence.

A DNA strand, when broken, has a natural tendency to re-attach and heal itself. But if the autorepair mechanism is allowed to continue, the bad sequence can regrow. So, scientists intervene during the auto-repair process by supplying the correct sequence of genetic codes, which attaches to the broken DNA strand. It is like cutting out the damaged part of a long zipper, and replacing it with a normally functioning part.

The entire process is programmable, and has remarkable efficiency, though chances of error are not entirely ruled out.

#### Possibilities it presents

A vast number of diseases and disorders are genetic in nature — that is, they are caused by unwanted changes or mutations in genes. These include common blood disorders like sickle cell anaemia, eye diseases including colour blindness, several types of cancer, diabetes, HIV, and liver and heart diseases. Many of these are hereditary as well. This technology opens up the possibility of finding a permanent cure to many of these diseases.

This is also true for the deformities arising out of abnormalities in gene sequences, like stunted or slow growth, speech disorders, or inability to stand or walk.





Also, CRISPR is just a platform; a tool to edit gene sequences. What is to be edited, and where, is different in different cases. Therefore, a specific solution needs to be devised for every disease or disorder that is to be corrected. The solutions could be specific to particular population or racial groups, since these are also dependent on genes.

CRISPR-based therapeutic solutions are not in the form of a pill or drug. Instead, some cells of every patient are extracted, the genes are edited in the laboratory, and the corrected genes are then re-injected into the patients.

Over the last three years, several such solutions have been undergoing clinical trials. These mainly pertain to blood disorders, diabetes, inherited eye diseases, and some kinds of cancers. The case of Victoria Gray, suffering from sickle cell anaemia, who was in the first batch of patients who were treated using CRISPR-based solutions, has been widely tracked. Gray is now considered cured of the disease. Several others who volunteered with her for the trials too have responded positively to the treatment.

In India, Debojyoti Chakraborty and Souvik Maiti at CSIR's Institute of Genomics and Integrative Biology have indigenously developed a CRISPR-based therapeutic solution for sickle cell anaemia, which is now being readied for clinical trials.

"We are just starting the pre-clinical phase (trials on animal subjects). It would take about two to three years to reach clinical trial stage. This is the first disease that is being targeted for CRISPR-based therapy in India," Chakraborty said.

Japan has already approved the commercial cultivation of a tomato variety that has been improved using CRISPR-based intervention. In India, several research groups are working on CRISPR-based enhancements for various crops including rice and banana.

#### The ethical dilemma

Because of CRISPR's power to induce dramatic changes in an individual, scientists, including the main developer Doudna, have been warning of the potential for misuse of the technology.

In 2018, a Chinese researcher disclosed that he had altered the genes of a human embryo to prevent the infection of HIV. This was the first documented case of creating a 'designer baby', and it caused widespread concern in the scientific community.

Preventive interventions to obtain special traits is not something that scientists currently want the technology to be used for. Also, because the changes were made in the embryo itself, the new acquired traits were likely to be passed to future generations. Though the technology is fairly accurate, it is not 100 per cent precise, and could induce a few errors as well, making changes in other genes. This has the possibility of being inherited by successive generations.

In case of therapeutic interventions, the changes in genetic sequences remain with the individual and are not passed on to the offspring.

#### NEW RESEARCH: COVID-19 INCREASES ALZHEIMER'S RISK IN OLDER ADULTS

Older adults who were once infected with Covid-19 are at a much higher risk of developing Alzheimer's disease within a year, with women above the age of 85 occupying the highest risk group, a new study of more than 6 million patients has found.





The researchers, who published their findings in the Journal of Alzheimer's Disease on Tuesday (September 13), found that people aged 65 and above who developed Covid-19 were at a 50-80% higher risk of developing Alzheimer's, expanding upon the little we currently know about the longterm consequences of the pandemic.

However, the researchers have maintained that it is unclear "whether Covid-19 might trigger new onset of Alzheimer's disease or accelerate its emergence."

The research team analysed the anonymous electronic health records of 6.2 million people who were 65 and older in the US, and who had visited healthcare organisations between February 2020 and May 2021. Those studied had not been previously diagnosed with Alzhiemer's.

They were then divided into two groups: one composed of people who had contracted Covid-19 during the period of study, and another group which had no documented cases of the infectious disease. There were more than 400,000 people enrolled in the Covid-19 study group, while the non-infected group contained 5.8 million people.

The findings indicated that over the one-year period following the infection, older adults in the Covid-19 cohort faced a risk of 0.68%, nearly double that of the non-Covid-19 cohort, which faced a risk of 0.35%.

"The factors that play into the development of Alzheimer's disease have been poorly understood, but two pieces considered important are prior infections, especially viral infections, and inflammation," said Pamela Davis, Distinguished University Professor at the Case Western Reserve School of Medicine and the study's co-author.

