# CURRENT AFFAIRS FOR UPSC

22 to 28 January 2023







# **INTERNATIONAL**

# NO CONTROL

Two mass shootings in 48 hours earlier this month in the U.S. State of California, claiming 18 lives, have been yet another grave reminder of the plague of gun violence confronting the world's most powerful country. On January 21, in California's Monterey Park, a gunman massacred 11 people in the country's deadliest mass shooting so far this year. Two days later, seven people were killed in Half Moon Bay, in northern California. A few hours later, a shooting in Oakland resulted in one person being killed and seven others injured. "Tragedy upon tragedy," was California Governor Gavin Newsom's lament about the shootings. U.S. President Joe Biden, once again, called for a ban on assault weapons. Besides these statements, it is doubtful whether the U.S. Congress would pass any meaningful gun control laws. In January alone, there have been 38 shooting incidents in 17 different U.S. States. In the U.S., where the Second Amendment assures citizens of the right to bear arms, there are about 120 firearms for every 100 residents. Yet, despite repeated mass shootings, the U.S. still does not have strong national-level gun control laws. Every time a mass shooting takes place, Presidents issue strong statements and calls for legislative action, which fall on deaf ears.

Last year, after an 18-year-old former student shot down 19 elementary schoolchildren in Uvalde, Texas, Congress passed the widest firearms legislation, the first in three decades, which expanded background checks for gun purchasers under 21 and imposed penalties on gun trafficking and straw purchases. Though widely welcomed, it was not enough to control gun violence in a country with the world's largest per capita guns. The Supreme Court's decision last year to strike down a New York State law that placed restrictions on carrying guns outside the home by reaffirming the Second Amendment was a setback for attempts to bring in strict State-wise legislation. House Democrats passed an assault weapons ban last year, but it never reached Mr. Biden's desk as the Bill was stalled in the Senate. Republicans have often invoked constitutional rights to stall legislation. The deep-pocketed and influential National Rifle Association and the powerful gun manufacturing industry have consistently opposed gun control measures, despite polls showing a vast desire for stricter controls. Everyone knows what needs to be done — tougher gun controls. But it is surprising and tragic that a democracy that takes pride in its values and a superpower that has gone to wars in the name of protecting its citizens, seems helpless when it comes to doing what has to be done even when hundreds of Americans get killed every year due to gun violence.

# MISPLACED SECRETS

When his predecessor Donald Trump's home in Mar-a-Lago, Florida, was raided last August and a trove of thousands of government documents was discovered there, including several hundreds of classified papers, little would U.S. President Joe Biden have imagined that he would find himself in a similar sticky situation. Yet, Mr. Biden and the White House have so far reacted calmly to the discovery of classified documents by his own attorneys at several sites including the Penn Biden Centre for Diplomacy and Global Engagement, a think tank in Washington, and in the garage and several other rooms of his home in Wilmington, Delaware. There are, of course, critical differences between the cases, which will probably be mirrored in varying legal consequences of each of the two classified leaks. First, the Trump stash is reported to be over 11,000, including about 300 marked classified or top secret, and includes photographs, whereas the papers associated with Mr. Biden are reportedly fewer than 12. Second, after Mr. Biden's lawyers first discovered classified files in a locked closet at the think tank, his team voluntarily notified the National Archives and the Justice Department and are 'cooperating with the investigation' fully. In Mr.





Trump's case, after the U.S. National Archives found classified records to be missing and requested that Mr. Trump return them, he failed to comply and hence the matter was handed over to the FBI. Third, while both leaks are being investigated separately, the Justice Department is conducting a criminal inquiry into Mr. Trump's handling of the documents, but in Mr. Biden's case there is no indication of wilful intent so far and he is protected by a rule that a sitting President cannot be indicted.

Notwithstanding these facts, it is clear that Mr. Biden's — or his team's — improper handling of classified material will cost him politically. Already, polls have found that his job approval rating, which enjoyed a bump towards the end of last year, has slumped back to around 40% — the all-time low of his presidency. The President is also facing difficult questions on why, after the initial discovery of the classified papers on November 2, his team suppressed that information until well after the November 8 midterm elections. Similarly, Republicans led by House of Representatives Speaker Kevin McCarthy have called for a Congressional investigation into the Biden classified leaks. The backlash could well be a setback for the case to prosecute Mr. Trump for violating the Espionage Act, even though he appears to have wilfully taken the classified documents from their proper place of holding and then possibly obstructed justice when asked to return them.

# U.S. DESIGNATES WAGNER GROUP AN INTERNATIONAL 'CRIMINAL ORGANISATION'

The U.S. on Friday designated Russia's Wagner group as a "transnational criminal organisation," piling pressure on the private Russian army fighting in Ukraine. White House national security spokesman John Kirby said Wagner, controlled by Yevgeny Prigozhin, a businessman close to President Vladimir Putin, has about 50,000 fighters in Ukraine, 80% of them drawn from prisons.

The designation will allow the wider application of sanctions on the group's sprawling global network, which includes mercenary operations as well as businesses in Africa and elsewhere.

# PROMISE, PRAGMATISM

Jacinda Ardern's time in office as New Zealand's Prime Minister was rattled by several successive challenges. At 37, the Labour leader came to power in 2017, promising a "transformational change". Nearly six years later when she leaves office, she would be better remembered for her handling of crises such as the coronavirus pandemic, the far-right terror attacks on mosques in Christchurch and volcanic eruptions. Ms. Ardern offered a leadership model rooted in empathy and moral values — the way she handled the Christchurch shootings is a case in point. Her approach towards the pandemic was initially popular, which helped Labour sweep the 2020 legislative elections. New Zealand's per capita death rate from COVID-19 is among the lowest in the developed world. The way she announced her resignation also won her praise — that there is "not enough in the tank" for her to continue in the top office — which made her stand out in a world where not many leaders relinquish power easily. Chris Hipkins, a former Minister for COVID response in Ms. Ardern's Cabinet and a troubleshooter for the Prime Minister, will succeed her and lead Labour in the 2023 election.

While her leadership style is widely praised, particularly among liberal sections across the world, there are also questions on whether Ms. Ardern made good on the promises she made to the electorate. New Zealand is one of the most expensive countries to live in. In 2017, Ms. Ardern vowed to tackle the country's housing crisis by constructing 1,00,000 homes, but only a fraction has been built in the past five years. Housing prices remain extensively high, while high inflation has left a hole in household budgets. Her promises to address child poverty (New Zealand has one





of the worst rates of child poverty in the developed world) and tackle inequality (the top 10% control nearly half of the country's household net worth) have fallen flat. Besides, continued lockdowns and COVID measures even when neighbouring Australia opened up turned a chunk of Ms. Ardern's early admirers away from her. The slide in her popularity hit Labour's election prospects which prompted many within the party to question her leadership. According to a December poll, Labour's support stood at 33%, while 38% backed the centre-right National Party, the main opposition. It was against this background that Ms. Ardern announced her resignation. Mr. Hipkins now has only eight months to steady the ship and reverse the public mood, a tall ask. He should blend Ms. Ardern's empathetic politics with a strong economic vision that would address New Zealand's structural economic problems while keeping its social harmony intact.

# WHY DID CHINA LIFT HOLD ON MAKKI TERROR LISTING?

On January 16, the United Nations Security Council announced it had placed Abdur Rehman Makki, the Pakistan-based deputy chief of the Lashkar-e-Taiba (LeT) and the brother-in-law of 26/11 mastermind Hafiz Saeed, on its 1267 List of Designated Terrorists. The move was welcomed by India, who along with the U.S. had jointly proposed Makki's name for UN sanctions in June last year, where China put a "hold" on it.

#### What did the joint proposal say?

According to the joint submission in June 2022, which has now been accepted (Makki is al-Qaida Designated Individuals QDi 433), 69-year-old Abdul (Abdur) Rehman Makki has been the "Deputy Amir" of the LeT and head of its Political Affairs Wing. India has specifically held Makki responsible for a number of terror attacks in the past including the Red Fort attack, 26/11 Mumbai attacks, a number of terror strikes in Jammu Kashmir and for radicalising youth to fight against Indian forces. India had placed Makki on its "most wanted terrorists" UAPA list, while the U.S. named him a specially designated global terrorist in 2010, announcing a two million dollar reward for information that would lead to his prosecution.

#### Why was the listing stalled and how did China relent?

In June 2022, China put what is called a technical hold on the designation of Makki, saying it needed more time to process the information in the proposal against him. This was not a one-off: China has consistently put blocks on the designation of Pakistan-based terror group leaders of the Lashkar-e-Taiba and Jaish-e-Mohammad (JeM) over the last few years. Although China had accepted these nominations from 2001-2010 with designations of a number of LeT, JeM organisations and individuals like Hafiz Saeed and Zaki Ur Rahman Lakhvi, it put obstacles for others like Masood Azhar (finally designated in 2019) and others including Makki. China placed holds on the designations of four other individuals whom India and the U.S. had proposed listing in 2022. While acknowledging the shift in its position, the Chinese Foreign Ministry said it had decided to lift the hold after ascertaining that [Makki] had been convicted and sentenced in Pakistan, and called it a "recognition" of Pakistan's counter-terror efforts.

While speculation abounds about the shift in policy, one reason may be that China wishes to make amends with India given nearly three years of tensions over the Line of Actual Control (LAC). Another is that it did not wish to be seen as the single country opposing a resolution on an important issue like terrorism. China's decision may also indicate some behind-the-scenes negotiations with India, which would become apparent if Beijing makes similiar U-turns on the decisions to hold the other four listings. The Ministry of External Affairs this week said regardless





of the reasons for the shift, it welcomed the decision to ban Makki, and will try its best to ensure the other four are listed too, including LeT recruiters and handlers Shahid Mehmood and Hafiz Saeed's son Talha Saeed as well as JeM deputy and Masood Azhar's brother Abdul Rauf Azhar (Asghar).

#### Where is Makki now?

In 2019, Pakistan federal agencies arrested Makki on terror financing charges, and he was convicted in 2020 and sentenced to six months to a year in prison. However, Pakistani officials have reportedly kept him in prison since then while he is being investigated on other terror charges. This is because Pakistan was asked to give commitments on prosecuting terrorists by the Financial Action Task Force (FATF) that had kept Pakistan on a grey-listing until last year. Now that Makki has been put on the UNSC list, it remains to be seen whether he will face more charges, and even whether he would be able to post bail given that the UNSC mandates Pakistan to ensure designated terrorists do not receive access to funds, travel or weapons.

Despite these restrictions, however, Makki was able to broadcast a video from Kot Lakhpat jail this week, denying any links with al-Qaeda, ISIS or other terror groups. For India, the Makki designation is only one initial step as ensuring the implementation of UNSC designations and stopping the terrorists from accessing any resources requires some level of cooperation or engagement with Pakistan, which at the moment is non-existent.

# A PROMISE OF DEVOLUTION

Sri Lanka's failure to fully implement the 13th Amendment is a reminder of the Sinhalese establishment's apparent insecurity over sharing power. If an Indian leader or top official makes a statement on Sri Lanka, it would invariably mention one piece of legislation in Sri Lanka's Constitution — the 13th Amendment. External Affairs Minister S. Jaishankar, who was in Colombo earlier this week, said he shared India's "considered view" with President Ranil Wickremesinghe that the full implementation of the 13th Amendment was "critical" for power devolution.

Sri Lanka's current Constitution, adopted in 1978, has had 21 amendments to date, but arguably, none as controversial as this. Passed in November 1987, months after Prime Minister Rajiv Gandhi and Sri Lankan President J.R. Jayewardene signed the Indo-Lanka Accord, the 13th Amendment is the only legislative guarantee of a measure of power devolution to the island's provinces. It provided for setting up provincial governments across the country — there are nine provincial councils — and made Tamil, too, an official language, and English, a link language.

It was, in some measure, an antidote to the 'Sinhala Only Act' of 1956, one of the most discriminatory laws passed targeting the island's Tamil minorities, after the Ceylon Citizenship Act of 1948 that rendered Sri Lanka's Malaiyaha Tamils of Indian origin stateless. It also sought to address the Tamils' right to self-determination which, by the 1980s, had become a raging political call. With the 1983 anti-Tamil pogrom laying bare violent Sinhala majoritarianism, it was hard for the world and India not to appreciate a legitimate demand.

However, for successive governments, devolving power was hardly on their 'must do' list. Despite public promises, leaders from the Sinhala-majority south failed to implement in letter and spirit what was already in the Constitution. Detractors construe the 13th Amendment as an "Indian imposition", despite it being an outcome of a bilateral Accord signed by J. R. Jayewardene.





The provincial councils function, but nominally. The rule book gave provinces legislative power over agriculture, education, health, housing, local government, planning, road transport and social services. But an ambiguous concurrent list and overriding clauses in the Constitution allow the Centre to remain all-powerful. The executive President still wields enormous power and the provincial Governors possess similar power at the regional level.

### Grip on power

Colombo is especially wary of sharing land and police powers, and resolutely controls the subjects. In the absence of a sound argument, legal or political, to justify this centralised grip on power, it can only imply that the island's southern leaders are reluctant to share power with the Tamil minorities, as well as their own people governing the provinces. For 36 years since its passage, the failure to fully implement the 13th Amendment is an enduring reminder of the Sinhalese establishment's apparent insecurity over sharing power, or as many Tamils would argue, intrinsic racism. To those opposed to Tamils holding any power, the 13th Amendment embodies "too much power" to part with.

For the Tamils, on the other hand, the 13th Amendment is too little. The LTTE rejected it. Among the current Tamil polity, almost all see it as inadequate. The problem, though, is not just to do with the Amendment, but Sri Lanka's unitary Constitution, Tamils argue. In a letter to Mr. Jaishankar, Jaffna legislator and leader of the Tamil National People's Front, Gajendrakumar Ponnambalam, said that ever since the 13th Amendment was introduced, the Tamils have rejected it on the grounds that for as long as the structure of the State remains Unitary, no meaningful autonomy and self-government can be achieved.

In its recent meeting with President Wickremesinghe, the Tamil National Alliance (TNA) has outlined five steps to immediately implement the Amendment in full, including by reversing certain laws that reduced provincial powers. They see it as a starting point for negotiating greater power sharing and a final political settlement. Belated, insufficient, but necessary, in their view.

# SCO MEET: INDIA MUST NOT MISS AN OPPORTUNITY TO IMPROVE RELATIONS WITH PAKISTAN

A meeting of the Shanghai Co-operation Organisation that India will host in May is expected to bring together foreign ministers of the regional grouping, which includes China, Russia, Pakistan, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan. Bilateral ties with Pakistan and China are at a new low. But multilateral settings are often viewed as opportunities for countries with problematic relations to find a way forward, as the famous Musharraf-Vajpayee handshake did for India and Pakistan at the Kathmandu SAARC summit 20 years ago. Equally, nothing may change, as seen from the "exchange of pleasantries" between Prime Minister Narendra Modi and Chinese President Xi Jinping at the G20 summit in Indonesia last November.

The history of India-Pakistan attempts to find common bilateral ground during multilateral meetings gives a veritable tour of exotic settings, from Male to Sharm El-Sheikh to Thimphu, from New York to Ufa to Dushanbe. Many of these attempts, however, were stillborn. Former PM Manmohan Singh never recovered politically after his own party opposed his joint statement with Pakistan at Sharm El-Sheikh. Former Pakistan PM Nawaz Sharif was excoriated at home for a joint statement with Modi at Ufa that made no mention of Kashmir. When the multilateral meeting is to be hosted by a country that is on one side of the rift, the first step is for the other side to accept the invitation. At times, the other side arrives hoping to be welcomed warmly but gets a chilly





reception, as the then Pakistan foreign minister, Sartaj Aziz, found at the Heart of Asia conference in Amritsar in December 2016, in a year that India had suffered Pathankot, Nagrota and Uri and hit back with the surgical strikes across the LoC. Whether or not Pakistan Foreign Minister Bilawal Bhutto attends the May meeting is likely to be a point of interest.

That question assumes greater significance in light of Pakistan PM Shehbaz Sharif's statement that his country had learnt its lessons from three wars with India and that he and PM Modi should meet and discuss all "burning issues", even though it was hemmed in by the caveat on Kashmir. Moreover, Pakistan's foreign minister has been intemperate in his rhetoric. And Deputy Foreign Minister Hina Rabbani Khar said in Davos that she does "not see a partner currently in the Prime Minister of India to take this project [of peace-building] forward". An election is upcoming in Pakistan, and having committed themselves to a position, both Bhutto and Khar would be mindful that their actions must match their words, while also considering how they might be received in Delhi. But despite this, if there is an opportunity for a thaw, India must not be the one to miss it.

# NEPAL'S DY PM RESIGNS AFTER SUPREME COURT NULLIFIES HIS CITIZENSHIP

Nepal's Deputy Prime Minister and Home Minister Rabi Lamichhane resigned from the posts on Friday following a Supreme Court verdict declaring his citizenship illegal. Lamichhane, 48, handed over his resignation to Prime Minister Pushpa Kamal Dahal 'Prachanda'. He told media persons at his office that he is "no more the Deputy Prime Minister". "I am not even the president of the Rastriya Swatantra Party," he said, adding, "I am not even the citizen of this country or 'anagarik' (non-citizen)."

The Supreme Court's decision automatically nullifies Lamichhane's position as a member of the House of Representatives, a Cabinet Minister and the chairman of his party, which was formed over six months ago. A constitutional bench of the Supreme Court headed by Acting Chief Justice Harikrishna Karki annulled Lamichhane's status as a lawmaker, citing that the citizenship certificate he produced to contest the parliamentary election was invalid. "As Rabi Lamichhane has not completed the process for reacquiring his Nepali citizenship after renouncing his American citizenship, he cannot be a candidate for the position of a member of the House of Representatives or be elected to that position," read the verdict.

Lamichhane returned to Nepal as a US citizen in 2014 after spending years in America and acquired a Nepali passport a year later. "He did never initiate the process of acquiring Nepali citizenship after losing it," the court verdict said. Lamichhane-led RSP won 20 seats in the 275-member House of Representatives in the November 2022 elections, with mostly youth as its candidates. This was seen as an emerging political phenomenon.

A team of advocates had filed a writ petition in the apex court, arguing that Lamichhane was not qualified to become a Member of Parliament as his citizenship was not valid at the time of contesting the election from Chitwan district. Lamichhane, a popular TV news anchor, chose to join the Nepal Cabinet as the Deputy Prime Minister and Home Minister, heading police and other agencies that were to investigate his case, ignoring warning that it involved "conflict of interest".

The Supreme Court, apparently aware of possible law- order problems following its decision, pronounced the verdict after normal business hours, amid tight security arrangements. Meanwhile, RSP is holding an emergency meeting to elect an acting party chief, but it has made it clear that Lamichhane will soon apply for citizenship renewal and contest by-election from his constituency.





#### **NATION**

# 'INDIA LOST ACCESS TO 26 OF 65 PATROL POINTS'

Indian Army's play-safe approach is creating 'informal' buffer zones and restricting the movement of graziers along the China border, says paper submitted at annual police meet; the recent disengagement agreements resulted in the loss of pasture lands at Gogra hills, and Kakjung areas. India has lost access to 26 out of 65 Patrolling Points (PP) in eastern Ladakh, according to one of the research papers submitted at last week's annual police meet in Delhi, accessed by The Hindu.

The "play-safe" approach of the Indian Army that restricts the movement of the district administration and local people in forward areas has turned areas that were once accessible into informal "buffer" zones, the paper said. It added that to avoid consternation with the Chinese People's Liberation Army (PLA) that has placed high-resolution cameras at vantage points, the Army restricts the movement of graziers by installing check-posts and deploying personnel in disguise. The recent disengagement agreements at PP 15 and 16 resulted in the loss of pasture lands in the Gogra hills, North Bank of Pangong Tso, and Kakjung areas.

The paper did not come up for discussion at the annual Director General of Police (DGP) Conference organised by the Intelligence Bureau (IB) that was held from January 20 to 22 and attended by Prime Minister Narendra Modi and Home Minister Amit Shah. It was among 15 research papers submitted by police officers across the country on the subject "Security issues pertaining to unfenced land border".

The Hindu reported on December 22, 2022 that there are at least 30 PPs in eastern Ladakh along the Line of Actual Control (LAC) that are not being patrolled any more by Indian troops.

These points were regularly patrolled before April-May 2020 when China started amassing troops close to the LAC in eastern Ladakh. Twenty Indian soldiers were killed in clashes with the PLA on June 15, 2020; at least four Chinese soldiers were also killed.

#### Salami Slicing

The paper stated: "Presently, there are 65 PPs starting from the Karakoram pass to Chumur which are to be patrolled regularly by the ISFs (Indian Security Forces). Out of 65 PPs, our presence is lost in 26 PPs (i.e. PP no. 5-17, 24-32, 37, 51,52,62) due to restrictive or no patrolling by the ISFs. Later on, China forces us to accept the fact that, as such areas have not seen the presence of ISFs or civilians for long, the Chinese were present in these areas. This leads to a shift in the border under the control of ISFs towards the Indian side and a buffer zone is created in all such pockets which ultimately leads to the loss of control over these areas by India. This tactic of PLA to grab land inch-by-inch is known as Salami Slicing."

A defence source told The Hindu that the LAC in eastern Ladakh is dominated by physical patrolling or technical means and "there is no loss of territory due to disengagement in friction areas".

## **Avoiding provocation**

"Some areas have been restricted for patrolling for both sides pending diplomatic resolution of disputes. No pasture lands have been lost. In disengaged areas, we have as many cameras and technical means as the PLA and hence dominate the area as much, if not more," the source said.





The source added that graziers are encouraged and all facilities are being provided in conjunction with the civil administration.

The paper added that the Army has placed significant restrictions on the movement of civilians and graziers near the forward areas on the Indian side, indicating with their play-safe strategy that they do not want to annoy the PLA by giving them the chance to raise objections on the areas being claimed as disputed.

The defence source added that PPs are benchmark locations mutually agreed upon by both India and China.

"Among the 65 PPs, some remain in contention and all efforts to resolve them are taken by stakeholders concerned [and] is under way....Recently, the PP 15 issue was mutually resolved. It must be understood that while PPs are sacrosanct, the perception of the LAC isn't. They are in vogue since 1996, based on the China Study Group guidelines. They have been patrolled earlier by the Indo-Tibetan Border Police (ITBP) and over the last few years by the Army. The delineation of the LAC is as such the role of Ministry of External Affairs and the Army has no role to play in this regard," the source said.

# **DELHI TO CAIRO**

Egyptian President Abdel Fattah El-Sisi's India visit is his third since he took over the reins of his country in 2013 in the chaotic aftermath of the Arab Spring revolution in his country. He participated in the India-Africa summit in Delhi in 2015, and the next year, came on a state visit during which, in keeping with the long and historic friendship between the two countries, there was a joint statement outlining the elements of a "new partnership for a new era". This time, Sisi, who was chief guest at the Republic Day parade, and Prime Minister Narendra Modi, elevated the pillars of the bilateral relationship to a "strategic partnership".

Delhi is eager to push up its engagement with Egypt in step with its diverse and evolving relationships in the Arab world. Cairo has remained a close ally of the US since the 1970s, and was the first Arab country to break ranks to recognise Israel, a consequential moment in the Arab-Israeli conflict. Five decades later, the geopolitical landscape in West Asia has been transformed, with 9/11, Arab Spring revolts, rise of ISIS and Abrahamic Accords following in quick succession over 20 years. India's own strategic, security and economic priorities in West Asia have changed, bringing it closer to Israel, the UAE and Saudi Arabia. India now partners the UAE, Israel and the US in a "quad of the Middle East". Sisi, a retired military officer who ousted his predecessor in a coup, and has been elected twice since then, winning with a huge majority both times, rules over his country with an iron fist. With Egypt a link state between West Asia and North Africa, he is seen by the West as a force for stability in a region buffeted by al Qaeda, IS and other Islamists. Delhi seeks common ground on this front with Egypt. In remarks after his arrival, Sisi and Modi spoke in one voice about the threat that terrorism posed — for India, add cross-border terrorism. The two countries will talk about this and other aspects of the relationship in a newly set up "joint commission". With defence manufacturing a new priority sector for India, and Egypt a big weapons consumer, the two sides discussed "co-manufacturing". In a region where China has been building up a presence with infrastructure and agriculture, India would also like to see trade with Egypt as an opening to the North African region.

Like India, Egypt has tried to remain neutral in Russia's war against Ukraine. But as with others across the world, it has been badly affected by the disruption in the food chain. Egypt is the world's





largest wheat importer. About three-fourths of its supplies used to come from Ukraine and Russia. Keeping food prices stable has been at the top of the agenda for every ruler since the food riots of 1977. India stepped in to fill the gap in June, agreeing to export 1,80,000 tons of wheat to Egypt, but prices are still skyrocketing. India has invited Egypt as a guest country at the G20 this year. Delhi's global southism, which will be a running thread through its G20 presidency, is bound to find resonance in Cairo, recalling the association of the two countries in the non-aligned movement.

# WHY WAS JANUARY 26 CHOSEN TO BE INDIA'S REPUBLIC DAY?

Since 1950, January 26 has marked the day India's Constitution came into effect. However, the Constitution was prepared way before the chosen date, adopted officially by the Constituent Assembly on November 26, 1949. Why do we celebrate our Republic Day on January 26, then? The answer lies in the history of the Indian freedom struggle during which the date held significance since 1930. On January 26,1930, the historic "Poorna Swaraj" declaration was officially promulgated, beginning the final phase of India's freedom struggle where the goal would be complete independence from British rule.

## Republic Day: The context of the 1920s

The Non Cooperation Movement ended unceremoniously in February 1922 after the Chauri Chaura incident. Mahatma Gandhi, at the time, felt that the country was "not yet ready" for his non-violent methods of protest. Thus, the 1920s did not see further mobilisation at the scale that was seen during the Non Cooperation Movement and the anti-Rowlatt Satyagraha.

The 1920s however were far from insignificant. From the rise of revolutionaries like Bhagat Singh and Chandrashekhar Azad to the coming of age of a new generation of Indian National Congress (INC) leaders such as Jawaharlal Nehru, Subhash Chandra Bose, Vallabhai Patel and C Rajagopalachari, the 1920s laid the ground for the future course of India's freedom struggle.

Notably, in 1927, British Authorities appointed the Simon Commission – a seven-man, all European team under Sir John Simon – to deliberate on political reforms in India. This sent a wave of outrage and discontentment across the country. For the first time since 1922, protests against the Simon Commission spread nationwide, with chants of "Simon Go Back" echoing across the country.

In response, the INC appointed its own commission under Motilal Nehru. The Nehru Report demanded that India be granted dominion status within the Empire. In the Balfour Declaration of 1926, dominions were defined as "autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations." In 1926, countries like Canada, Australia and New Zealand were granted dominion status.

# Internal disagreement with the Congress: Dominion or Republic?

Crucially, even within the Congress, the Nehru Report did not enjoy universal support. Young leaders such as Bose and Jawaharlal Nehru, Motilal's own son, wanted India to break all ties with the British Empire. They argued that under dominion status, while India would enjoy a certain level of autonomy, the British Parliament and Crown would still have the ability to meddle in Indian affairs.





Importantly, for both Bose and Nehru, attaining dominion status would make India party to colonial exploitation elsewhere in the British Empire, mainly Africa. With a far more radical worldview than their predecessors, Bose and Nehru looked at anti-colonialism not only as a local political issue for India but in a more global lens. However, Gandhi was still very much for dominion status, arguing that it would be a welcome step in India's anti-colonial struggle. His views would soon change.

### Viceroy Irwin goes back on his word

In 1929, Viceroy Irwin had vaguely announced that India would be granted dominion status in the future. Known as the Irwin Declaration, it was warmly welcomed by Indians but faced massive backlash back in Britain. The British population was still pro-Empire and India was seen as the Empire's Crown Jewel. Importantly, as the world economy went into a recession, India was arguably Britain's most valuable colony with its vast land, resources, and population crucial for its economy.

Thus, under pressure from back home, Irwin went back on his word. In a meeting with Gandhi, Muslim League's Muhhammad Ali Jinnah and a few other leaders, he said that he could not promise India dominion status any time soon.

This would be a turning point as the Congress grew increasingly united on the issue. With the British unable to follow through on even reasonable reforms, Indians supported increasingly "radical" goals – a fully independent republic being one of the first.

# **Declaration of Poorna Swaraj**

The Lahore Session of the INC convened in December 1929. On December 19, the historic "Poorna Swaraj" resolution was passed in the session. Literally meaning "total self-rule/sovereignty," the resolution read, "The British government in India has not only deprived the Indian people of their freedom but has based itself on the exploitation of the masses, and has ruined India economically, politically, culturally and spiritually.... Therefore...India must sever the British connection and attain Poorna Swaraj or complete independence."

This declaration of Independence was officially promulgated on January 26, 1930. The Congress urged Indians to come out and celebrate "independence" on that day. The Indian tricolour was hoisted across the country by Congress party workers and patriotic songs were sung as the country reconfigured its strategy for Independence. The resolution also contained in it an affirmation to the Gandhian methods of nonviolent protest, which would start almost immediately after Poorna Swaraj Day was celebrated.

Historian Mithi Mukherjee in India under the Shadows of Empire writes that the Poorna Swaraj declaration was a critical pivot point for India's freedom struggle. It is with this declaration that India's national movement "shifted from the language of charity to the language of justice."

#### Republic Day in post-Independence India

From 1930 till India finally won its independence in 1947, January 26 was celebrated as "Independence Day" or "Poorna Swaraj Day" with Indians reaffirming their commitment towards sovereignty on that day.

However, India won independence from the British on August 15, exactly two years after the Japanese surrendered to the Allies to end World War II. As historian Ramchandra Guha wrote,





"freedom finally came on a day that resonated with imperial pride rather than nationalist sentiment."

Thus, when leaders had to decide on a day to promulgate India's new constitution, January 26 was thought to be ideal. Not only did this date already hold nationalist significance, the Constitution in many ways reflected the "Poorna Swaraj" declaration of two decades back.

While today's Republic Day celebrations are very different from what Poorna Swaraj Day looked like under British Raj, January 26 remains a solemn reminder of the journey India took to attain self-rule.

#### THE BASIC STRUCTURE OF THE CONSTITUTION

At the heart of the current debate over the Supreme Court Collegium and the striking down of the National Judicial Appointments Commission, is a fundamental question — does Parliament have unlimited power to amend the Constitution or is it subject to inherent limitations?

The Chief Justice of India, D. Y. Chandrachud compared the 'basic structure' of the Constitution to the North Star, an unfailing guide which shows the way when the path appears convoluted. His observation marks the response of the Supreme Court to a recent statement made by Vice President Jagdeep Dhankar that the basic structure doctrine introduced by a 13-judge Bench 40 years ago, in the Kesavananda Bharati Sripadagalvaru versus State of Kerala through a 7:6 waferthin majority judgment, diluted parliamentary sovereignty. The opinion of the Vice President and the reply from the top judge have come amidst an ongoing verbal skirmish initiated by the government over the striking down of the 99th Constitutional Amendment and the National Judicial Appointments Commission (NJAC) Act in a 4:1 majority decision of the Supreme Court in October 2015. The government is now vying, after a gap of nearly eight years, for a stronger, if not dominant, spot in judicial appointments to constitutional courts. It remains bitter about the failure of the NJAC, a constitutional amendment, it said, was an exercise of the "will of the people" through Parliament.

At the heart of both the Kesavananda Bharati case, better known as the Fundamental Rights case, and the current debate over the Collegium, a powerful body of Supreme Court judges which recommends names for judicial appointments, is a fundamental question — does Parliament have unlimited power to amend the Constitution or is it subject to inherent limitations?

#### The basic structure doctrine

The Kesavananda Bharati judgment held that Parliament cannot use its constituent power to alter the basic structure or the essential features of the Constitution. The Parliament, as senior advocate Nani Palkhivala said (at whose memorial lecture Chief Justice Chandrachud gave his reply) cannot cease to be a creature of the Constitution and become its master.

The basic structure or framework of the Constitution is its living spirit, holding up the body of its text. Its existence cannot be pin-pointed to any particular provision of the text. It is the "soul" of the Constitution, inextricably linked to the values enshrined in the Preamble, without which the document and the ideas that make it sacred would collapse. "A Constitution is a living system. But just as in a living, organic system, such as the human body, [where] various organs develop and decay, yet the basic structure or pattern remains the same with each of the organs having its proper function, so also in a Constitutional system the basic institutional pattern remains even though the different component parts may undergo significant alterations. For it is the





characteristic of a system that it perishes when one of its essential component parts is destroyed," the Supreme Court explained in the 703-page Kesavananda Bharati verdict of April 24, 1973.

Granville Austin's Working of a Democratic Constitution said the basic structure doctrine "is fairly said to have become the bedrock of constitutional interpretation in India". The Constitution Bench in the NJAC judgment encapsulated the principle behind the basic structure theory when it said "a change in a thing does not involve its destruction".

Different judges on the Kesavananda Bharati Bench gave different examples of what constituted the 'basic structure' of the Constitution, including supremacy; the federal and secular character of the Constitution; separation of powers among the legislature, executive and judiciary; dignity of the individual; unity and integrity of the nation; sovereignty of India; democratic character of our policy; welfare state and egalitarian society; liberty of thought, expression, belief, faith and worship and equality of status and opportunity among other essential features.

# The Kesavananda Bharati case

Justice O. Chinnappa Reddy in his The Court and the Constitution of India: Summits and Shallows says Chief Justice S. M. Sikri, who led the Kesavananda Bharati Bench, never divulged from where he derived the basic structure formula. "Since there are no signposts signalling basic features of the Constitution, every attempt to discover a basic feature becomes a 'voyage of discovery'," Justice Reddy wrote.

The Kesavananda Bharati case came to the Supreme Court almost immediately after the Indira Gandhi government rode to victory in the 1971 elections on the popular slogan of 'garibi hatao' with almost 350 seats out of a total of 540. The government, smarting primarily under the Supreme Court's Golak Nath verdict which upheld the power of judicial review of constitutional amendments, introduced several Constitutional Amendments. The 24th Constitutional Amendment changed Article 13, a provision which mandated that no 'law' could take away or abridge fundamental rights. The Golak Nath judgment had interpreted the term 'law' in Article 13(2) to include 'constitutional amendments' too. The Parliament through the 24th Amendment said a constitutional amendment cannot be rendered void merely because it infringed fundamental rights. It also modified Article 368, a provision which dealt with constitutional amendments, to enable the Parliament to add, vary or repeal any Article of the Constitution. The 13-judge Bench upheld the Parliament's power to amend the Constitution as long as it adhered to its basic structure or essential features.

The 25th Constitutional Amendment introduced Article 31C into the Constitution to implement the Directive Principles of State Policy under Article 39 (b) and (c) for distribution of material resources of the community and to prevent concentration of wealth. The government's aim was to facilitate nationalisation of industries and socialist measures. The Amendment mandated that any law enacted with this objective cannot be "deemed" void on the ground that it was inconsistent with fundamental rights. The latter half of Article 31C added that such a law would be outside judicial review. In fact, even a petition cannot be filed in court challenging such a law. In short, the Amendment gave Directive Principles primacy over fundamental rights and judicial review of the apex court.

Senior advocates Soli Sorabjee and Arvind Datar in their Nani Palkhivala — The Courtroom Genius described the great lawyer arguing that Article 31C was the "forerunner of a totalitarian State'. The 13-judge Bench invalidated the part of Article 31C which took away the power of judicial review of the court.





However, the Kesavananda Bharati judgment gave no relief to the petitioner-seer when it upheld the 29th Constitutional Amendment which incorporated two land reform provisions made in the Kerala Land Reforms Act, 1963 in the Ninth Schedule, immunising them from litigation claiming violation of fundamental rights. A fourth constitutional amendment, the 26th, on abolition of privy purses, was not considered by the Court.

### The (counter) arguments

Mr. Sorabjee and Mr. Datar, in their book, condense the submissions of the Union and the States, represented by senior advocate H. M. Seervai and then Attorney General Niren De, that constitutional amendments should not be nullified by the court as they mirror the "democratic will of the people". An argument which has surfaced again through Mr. Dhankar after four decades. But Mr. Palkhivala had met this argument with a prescient one of his own, "people are not associated with the amending process at all. Parliament cannot be equated with the people, the Parliament's will is not the people's will".

#### The aftermath

The judgment was delivered on the last working day of Chief Justice Sikri. Justice A.N. Ray, the fourth in line of seniority and who was part of the minority which upheld the unlimited power of Parliament to amend the Constitution, superseded Justices J. M. Shelat, K.S. Hegde and A. N. Grover to become the 14th Chief Justice of India. All three of his colleagues resigned. A similar supersession followed when Justice H. R. Khanna, after his lone but historic dissent upholding the fundamental right to life and personal liberty in the Habeas Corpus case during the darkest days of Emergency, was overlooked for Chief Justiceship. These incidents could be directly linked to the Supreme Court evolving the Collegium system to protect judicial independence, which is also part of the basic structure doctrine.

The basic structure doctrine had survived an aborted attempt to overrule the Kesavananda Bharati judgment by another 13-member Bench led by Chief Justice Ray. It came in handy when the court, in the Indira Gandhi versus Raj Narain case, removed the 39th Constitutional Amendment passed during the Emergency period which put the elections of the President, Vice President, Prime Minister and Lok Sabha Speaker beyond judicial review.

In 1980, the court once again used the basic structure formula, in the Minerva Mills challenge to the 42nd Amendment, to uphold judicial review of constitutional amendments and to protect fundamental rights.

Over the years, the courts have clarified the basic structure, including that of the "primacy to the opinion of the Chief Justice of India in judicial appointments and transfers in the context of the independence of the judiciary as a part of the basic structure of the Constitution to secure the rule of law essential for preservation of the democratic system".

# REPUBLIC DAY 2023: HOLY BOOK, NORTH STAR

Every Republic Day brings an important reminder for "we the people". Of the rules for both the government and the governed, and of the shared commitment to follow them. Today, R-day, is a commemoration of the quiet framework that holds a noisy, sprawling and diverse democracy up, and together. That framework, this Constitution — which Prime Minister Narendra Modi called the "holy book", and whose "basic structure", Chief Justice of India D Y Chandrachud more recently described as the "north star" that guides — embodies, most of all, the need and necessity for power





to be humble. In a constitutional democracy, it dare not be unbridled, or act in arbitrary ways. It must be accountable and circumscribed by the checks applied by countervailing institutions. It must not transgress individual freedoms. It should not be an end unto itself, but constantly in service of a shared purpose and larger goals. As the nation celebrates this Republic Day, then, it must take a step back from the unpleasantries currently being exchanged between the government and the court over the "basic structure" and the Collegium. This is a moment, instead, to recall the founding pact and to acknowledge the marvellous balance of its intricate mosaic.

In the run-up to this Republic Day, the Constitution has increasingly looked like the bone of contention between a domineering Executive and a Judiciary that appears compelled to re-stake out its ground in changing political terrain. But the Constitution itself is resilient and capacious enough to take showdowns like these in its stride. In fact, the ongoing pull and push over whether or not Parliament has the power to amend its "basic structure" has only brought home that the key to its endurance is its essential openness to change. That its basic features are identified so broadly is design, no coincidence. In CJI Chandrachud's list, they are: Supremacy of the constitution, rule of law, separation of powers, judicial review, secularism, federalism, freedom and the dignity of the individual and the unity and integrity of the nation. With deliberateness and care, the founding fathers and mothers wrote an open-ended document with ample room to adapt and evolve.

What cannot be touched, what must be protected, is that without which the republic will fail those who are powerless, those in the minority and those who count on its promise of freedom and equality and justice the most. The woman who wants the freedom to step out into public spaces that are enabling and safe. The student who has a right to watch a documentary on the university campus. The right to eat and dress the way you want. The liberty to choose the one you love. When we the people recognise that the rights of a few are interconnected with the freedoms of all, it is the Constitution that triumphs in letter and spirit. Happy Republic Day.

# **NECESSARY PUSHBACK**

The Supreme Court collegium has done well to push back against the Union government's attempts to block the appointment of some advocates as High Court judges. The three-member collegium, which makes recommendations for High Court appointments, has reiterated its decision to elevate lawyers Saurabh Kirpal to the Delhi High Court, R. John Sathyan to the Madras High Court and Somasekhar Sundaresan to the Bombay High Court. As it dealt in detail with the objections raised by the Centre in each individual case, the motives behind the government's ongoing contestation with the judiciary over appointments to constitutional courts stand exposed. Communications between the collegium and the Centre offer a glimpse into the untenable nature of the government's objections to proposed appointees, making it abundantly clear how badly the current regime wants to control judicial appointments. If the objection based on a candidate's sexual orientation smacks of a medieval-minded ideological bias, the effort to stall the elevation of a couple of advocates based on their social media activity exposes a mindset that sees appointments to the higher judiciary as a system of spoils meant for political loyalists. As the collegium has pointed out, neither the sexual orientation of Mr. Kirpal nor the airing of political views by the other two advocates will impinge on their suitability or integrity.

The government appears to think that potential candidates for judicial appointments should not have political views of their own, or that a tendency to make their views or opinion known will amount to a possible bias in their functioning as judges. Nothing can disprove this more than the fact that there are other names — to which the government seems to have no objections — that





are closely associated with political parties. Indeed, one can say that the history of judicial appointments is replete with instances of government law officers, who invariably enjoy the confidence of the political leadership at the Centre or the States, and lawyers who represent political leaders being offered positions on both the Supreme Court and High Court Benches. The objection based on sexual orientation is particularly appalling, as it is contrary to the constitutional position against discrimination based on sex or sexual preferences. The viewpoint that the collegium system of appointments is flawed as it is opaque and tends to reduce the zone of consideration is valid. However, the manner in which the current regime is seeking to filter out candidates who, it suspects, may not further its political agenda will surely give the impression that allowing any sort of government interference will pose a threat to judicial independence.

# **NECESSARY DISCLOSURE**

There is nothing wrong, or that warrants grave concern, as claimed by Union Law Minister, Kiren Rijiju, in the Supreme Court Collegium disclosing portions of reports by intelligence agencies on prospective candidates for judicial appointments. If anything, the Collegium's disclosure of the nature of the objections raised by the government has only helped make the discussion transparent. It is difficult to agree with the assumption that reports by the Intelligence Bureau (IB) and the Research and Analysis Wing (RAW) on names recommended or considered by the Collegium are inherently sensitive in nature. RAW is cited in the Collegium's disclosure as raising the issue of the suitability of an advocate for appointment because his partner is a foreign national. The IB reports appear to have highlighted social media posts by two other lawyers to raise doubts about their impartiality. While reiterating the earlier recommendations, the Collegium had to address the government's objections on a point-by-point basis. There was nothing improper about the disclosure of the details, which were incidental to the purpose of rebutting the claims. In the three recent instances, there is no startling revelation in the intelligence reports concerning lawyers whose names have been recommended for appointment in different High Courts; nor is there any sensitive information that could compromise the identity of officers or their undercover work.

It is not clear on what basis Mr. Rijiju has claimed that intelligence officers will "think twice" in future if their reports are made public, when only a summation of their reports is out in the public domain. In fact, it is questionable whether the government should quote intelligence reports in its communications with the Collegium. Objections based on political views or social media posts could have been raised by the government on its own, without citing any agency by name. It is part of the appointment process that names are vetted by intelligence agencies to look for possible criminal antecedents or misdemeanours, and raising such issues need not be specifically attributed to any agency. It is also quite rich that the government, which has been assailing the collegium system of appointments for its opaqueness, should be worried about excessive disclosure by the Collegium. It cannot be forgotten that the government is also contributing to the opaqueness by its silence and inaction regarding some recommendations, and demonstrating urgency in approving other names. It raises the question of suitability of some candidates based on some posts critical of government policy, but ignores the fact that lawyers with strong political affiliation to the ruling party also make it to the Bench without any impediment.

### 'CHARGESHEETS ARE NOT PUBLIC DOCUMENTS': BREAKING DOWN THE SC RULING

The Supreme Court on Friday held that chargesheets are not 'public documents' and enabling their free public access violates the provisions of the Criminal Code of Procedure as it compromises the





rights of the accused, victim, and the investigation agencies. Before dismissing the PIL seeking directions to the police or investigating agencies like the ED or the CBI, a two-judge bench of Justice MR Shah and Justice CT Ravikumar also cautioned against the possibility of 'misuse'.

#### What is a chargesheet?

A chargesheet, as defined under Section 173 CrPC, is the final report prepared by a police officer or investigative agencies after completing their investigation of a case.

After preparing the chargesheet, the officer-in-charge of the police station forwards it to a Magistrate, who is empowered to take notice of the offences mentioned in it.

The chargesheet should contain details of names, the nature of the information, and offences. Whether the accused is under arrest, in custody, or has been released, whether any action was taken against him, are all important questions that the chargesheet answers.

Further, when the chargesheet relates to offences for which there is sufficient evidence against the accused, the officer forwards it to the Magistrate, complete with all documents. This forms the basis for the prosecution's case and the charges to be framed.

"The charge-sheet is nothing but a final report of the police officer under s. 173(2) of the CrPC," the apex court held in its 1991 ruling in K Veeraswami vs UOI & Ors.

A chargesheet must be filed against the accused within a prescribed period of 60-90 days, otherwise the arrest is illegal and the accused is entitled to bail.

# How is a chargesheet different from an FIR?

The term 'chargesheet' has been expressly defined under Section 173 of the CrPC but 'First Information Report' or FIR, has not been defined in either the Indian Penal Code (IPC) or the CrPC. Instead, it finds a place under the police regulations/ rules under Section 154 of CrPC, which deals with 'Information in Cognizable Cases'.

While the chargesheet is the final report filed towards the end of an investigation, an FIR is filed at the 'first' instance' that the police is informed of a cognizable offense or offence for which one can be arrested without a warrant; such as rape, murder, kidnapping.

Further, an FIR does not decide a person's guilt but a chargesheet is complete with evidence and is often used during the trial to prove the offenses the accused is charged with.

After filing an FIR, the investigation takes place. Only if the police have sufficient evidence can the case be forwarded to the Magistrate, otherwise, the accused is released from custody under Section 169 of the CrPC. The law laid down by the Supreme Court in 1967 in Abhinandan Jha & Ors vs Dinesh Mishra reiterates this.

Finally, the FIR should be filed at the first instance of receiving knowledge of the occurrence of a cognizable offense. According to Section 154 (3) of the CrPC, if any person is aggrieved by the refusal of authorities to file FIR, they can send the complaint to the Superintendent of Police, who will either investigate himself or direct it to their subordinate.

A chargesheet is filed by the police or law-enforcement/ investigative agency only after they have gathered sufficient evidence against the accused in respect of the offenses mentioned in the FIR, otherwise, a 'cancellation report' or 'untraced report' can be filed when due to lack of evidence.



#### Why is a chargesheet not a 'public document'?

Dismissing the plea, the Court held that a chargesheet cannot be made publicly available as it's not a 'public document' under Sections 74 and 76 of the Evidence Act, as argued by the petitioners'.

Section 74 of the Evidence Act defines 'public documents' as those which form the acts or records of sovereign authority, official bodies, tribunals, and of public offices either legislative, judicial or executive in any part of India, Commonwealth or a foreign country. It also includes public records "kept in any State of private documents".

Meanwhile, Section 76 of the Evidence Act mandates every public officer having custody over such documents to provide its copy pursuant to a demand and payment of legal fee, accompanied by a certificate of attestation along with the date, seal, name and designation of the officer.

While dictating its order, the Court said that reliance on Sections 74 and 76 was 'misconceived' and added, "Documents mentioned in Section 74 of the Evidence Act can only be said to be public documents, certified copies of which are to be given by the concerned public authority having the custody of such a public document. Copy of chargesheets along with necessary public documents cannot be said to be 'public documents' under Section 74 of the Evidence Act."

The Court also clarified that as per Section 75 of the Evidence Act, all documents other than those listed under Section 74' are private documents.

The Court rejected the petitioner's reliance on a 2016 ruling of the Supreme Court in 'Youth Bar Association of India vs UOI', where it directed all police stations in the country to publish copies of FIRs online within 24 hours of registration, except in cases where offenses were of sensitive nature.

The Court rejected the reliance on its judgment by saying that the directions given by it in the 2016 ruling only applied to FIRs and could not extend to chargesheets.

"This was done so that if the innocent accused are harassed, they are able to get relief from the competent court and are not taken by surprise," the Court said in reference to its 2016 judgment. The direction was issued in favour of the accused in that case and could not be stretched to the public at large, the Bench added.

# WHAT IS A LIVING WILL, AND THE NEW SUPREME COURT ORDER FOR SIMPLIFYING PASSIVE EUTHANASIA PROCEDURE?

On Tuesday, a five-judge Bench of the Supreme Court headed by Justice K M Joseph agreed to significantly ease the procedure for passive euthanasia in the country by altering the existing guidelines for 'living wills', as laid down in its 2018 judgment in Common Cause vs. Union of India & Anr, which allowed passive euthanasia.

What is the legal history of this matter, and the issues involved?

# First, what is euthanasia, and what is a living will?

Euthanasia refers to the practice of an individual deliberately ending their life, oftentimes to get relief from an incurable condition, or intolerable pain and suffering. Euthanasia, which can be administered only by a physician, can be either 'active' or 'passive'.





Active euthanasia involves an active intervention to end a person's life with substances or external force, such as administering a lethal injection. Passive euthanasia refers to withdrawing life support or treatment that is essential to keep a terminally ill person alive.

Passive euthanasia was legalised in India by the Supreme Court in 2018, contingent upon the person having a 'living will' or a written document that specifies what actions should be taken if the person is unable to make their own medical decisions in the future.

In case a person does not have a living will, members of their family can make a plea before the High Court to seek permission for passive euthanasia.

#### What did the SC rule in 2018?

The Supreme Court allowed passive euthanasia while recognising the living wills of terminally-ill patients who could go into a permanent vegetative state, and issued guidelines regulating this procedure.

A five-judge Constitution Bench headed by then Chief Justice of India (CJI) Dipak Misra said that the guidelines would be in force until Parliament passed legislation on this. However, this has not happened, and the absence of a law on this subject has rendered the 2018 judgment the last conclusive set of directions on euthanasia.

The guidelines pertained to questions such as who would execute the living will, and the process by which approval could be granted by the medical board. "We declare that an adult human being having mental capacity to take an informed decision has right to refuse medical treatment including withdrawal from life-saving devices," the court said in the 2018 ruling.

### And what was the situation before 2018?

In 1994, in a case challenging the constitutional validity of Section 309 of the IPC — which mandates up to one year in prison for attempt to suicide — the Supreme Court deemed the section to be a "cruel and irrational provision" that deserved to be removed from the statute book to "humanise our penal laws". An act of suicide "cannot be said to be against religion, morality, or public policy, and an act of attempted suicide has no baneful effect on society", the court said. (P Rathinam vs Union Of India)

However, two years later, a five-judge Bench of the court overturned the decision in P Rathinam, saying that the right to life under Article 21 did not include the right to die, and only legislation could permit euthanasia. (Smt. Gian Kaur vs The State Of Punjab, 1996)

In 2011, the SC allowed passive euthanasia for Aruna Shanbaug, a nurse who had been sexually assaulted in Mumbai in 1973, and had been in a vegetative state since then. The court made a distinction between 'active' and 'passive', and allowed the latter in "certain situations". (Aruna Ramchandra Shanbaug vs Union Of India & Ors)

Earlier, in 2006, the Law Commission of India in its 196th Report titled 'Medical Treatment to Terminally Ill Patients (Protection of Patients and Medical Practitioners)' had said that "a doctor who obeys the instructions of a competent patient to withhold or withdraw medical treatment does not commit a breach of professional duty and the omission to treat will not be an offence." It had also recognised the patient's decision to not receive medical treatment, and said it did not constitute an attempt to commit suicide under Section 309 IPC.



Again, in 2008, the Law Commission's '241st Report On Passive Euthanasia: A Relook' proposed legislation on 'passive euthanasia', and also prepared a draft Bill.

#### What changes after the SC's order this week?

The petition was filed by a nonprofit association that submitted that the 2018 guidelines on living wills were "unworkable". Though the detailed judgement is yet to be released, the Court dictated a part of their order in open court.

As per 2018 guidelines, a living will was required to be signed by an executor (the individual seeking euthanasia) in the presence of two attesting witnesses, preferably independent, and to be further countersigned by a Judicial Magistrate of First Class (JMFC).

Also, the treating physician was required to constitute a board comprising three expert medical practitioners from specific but varied fields of medicine, with at least 20 years of experience, who would decide whether to carry out the living will or not. If the medical board granted permission, the will had to be forwarded to the District Collector for his approval.

The Collector was to then form another medical board of three expert doctors, including the Chief District Medical Officer. Only if this second board agreed with the hospital board's findings would the decision be forwarded to the JMFC, who would then visit the patient and examine whether to accord approval.

## This cumbersome process will now become easier.

Instead of the hospital and Collector forming the two medical boards, both boards will now be formed by the hospital. The requirement of 20 years of experience for the doctors has been relaxed to five years. The requirement for the Magistrate's approval has been replaced by an intimation to the Magistrate. The medical board must communicate its decision within 48 hours; the earlier guidelines specified no time limit.

The 2018 guidelines required two witnesses and a signature by the Magistrate; now a notary or gazetted officer can sign the living will in the presence of two witnesses instead of the Magistrate's countersign. In case the medical boards set up by the hospital refuses permission, it will now be open to the kin to approach the High Court which will form a fresh medical team.

# Different countries, different laws

NETHERLANDS, LUXEMBOURG, BELGIUM allow both euthanasia and assisted suicide for anyone who faces "unbearable suffering" that has no chance of improvement.

SWITZERLAND bans euthanasia but allows assisted dying in the presence of a doctor or physician.

CANADA had announced that euthanasia and assisted dying would be allowed for mentally ill patients by March 2023; however, the decision has been widely criticised, and the move may be delayed.

UNITED STATES has different laws in different states. Euthanasia is allowed in some states like Washington, Oregon, and Montana.





# COURT SAYS JOURNALISTS NOT EXEMPT FROM DISCLOSING SOURCES: WHAT IS THE LAW ON THIS?

While rejecting a closure report filed by the Central Bureau of Investigation, a Delhi court on January 19 said there is "no statutory exemption in India to journalists from disclosing their sources to investigating agencies".

#### What is the law on protection of journalistic sources in India?

# What did the court say?

The CBI had sought to close its investigation on how certain news channels and a newspaper had aired and published reports related to a disproportionate assets case against late Samajwadi Party leader Mulayam Singh Yadav and his family members on February 9, 2009, a day prior to the scheduled date of hearing in the Supreme Court.

The CBI had argued that the "documents used by the news channel were forged" but it could not be established who forged the documents since the "users of the forged documents did not disclose their source, therefore there is no sufficient material/evidence to prove the criminal conspiracy".

However, Chief Metropolitan Magistrate Anjani Mahajan of the Rouse Avenue Court rejected the closure report and directed the CBI to investigate further "on the modus operandi adopted by the culprits for gaining access to/obtaining the official documents including probing involvement of any insider in the acts alleged and preparing the alleged forged 17 pages review note."

# What is the legal protection for disclosure of journalistic sources?

In India, there is no spec<mark>ific legislation that protects journalists from</mark> being asked to disclose their sources. Article 19 of the Constitution guarantees the right to freedom of speech and expression to all citizens.

Investigative agencies can issue notice to anyone, including journalists, to provide information. Like any citizen, a journalist can be compelled to give evidence in Court. If she does not comply, the journalist can face charges of Contempt of Court.

# What have courts said on this issue?

While the Supreme Court broadly recognises the freedom of the press, including the right of journalists to ensure protection of their sources, various courts have ruled differently on this issue.

While constituting a committee to investigate the Pegasus spyware, the Supreme Court in October 2021 said that one of the fundamental conditions for the media to exercise its right to freedom of speech and expression under Article 19 is the protection of 'journalistic sources.'

"Having regard to the importance of protection of journalistic sources for press freedom in a democratic society and the potential chilling effect that snooping techniques may have, this Court's task in the present matter, where certain grave allegations of infringement of the rights of the citizens of the country have been raised, assumes great significance," the Court had said.





"Protection of journalistic sources is one of the basic conditions for the freedom of the press. Without such protection, sources may be deterred from assisting the press in informing the public on matters of public interest," the SC added.

In 2019, the Supreme Court in a review petition in the Rafale case overruled the Centre's objections on the petitioner's claims since they relied on purportedly "stolen" confidential documents. The Centre had asked the chairman of The Hindu Publishing Group, who wrote the reports, to disclose his sources. N Ram told the Court that the publication was "perfectly justified (and) in public interest".

"In fact, the publication of the said documents in 'The Hindu' newspaper reminds the Court of the consistent views of this Court upholding the freedom of the press in a long line of decisions commencing from Romesh Thappar vs. State of Madras and Brij Bhushan vs. The State of Delhi," the Supreme Court had said.

However, the absence of a specific law, it is often the discretion of a Court. Courts have in "public interest asked journalists to disclose their sources.

Under the Press Council of India (PCI) Act, of 1978, the Press Council has powers of a civil court to deal with complaints when a newspaper has "offended against the standards of journalistic ethics or public taste or that an editor or working journalist has committed any professional misconduct." However, the Council cannot force a newspaper, news agency, journalist, or editor to reveal their sources during the proceedings.

#### Recommendations for a change in law

The Law Commission of India in its 93rd Report in 1983 recommended recognising journalistic privilege by amending the Indian Evidence Act. The short 38-page report suggested insertion of a new provision which would read: "No court shall require a person to disclose the sources of information contained in a publication for which he is responsible, where such information has been obtained by him on the express agreement or implied understanding that the source will be kept confidential".

In its 185<sup>th</sup> report on the amendments to the Evidence Act, the Law Commission again suggested this amendment.

# Position in other countries

United Kingdom: The Contempt of Courts Act 1981 creates a presumption in favour of journalists who want to protect the identity of their sources. However, that right is subject to certain conditions in the "interest of justice". The European Court of Human Rights in a landmark 1996 ruling held that an attempt to force a journalist to reveal his source for a news story violated his freedom of speech and expression guaranteed under the European Convention on Human Rights.

United States: Although the First Amendment guaranteeing free speech in the United States specifically mentions the press, the Supreme Court has held that journalists do not have the right to refuse to testify in a federal grand jury proceeding and disclose sources. This was in a 1972 ruling Branzburg v. Hayes. Several journalists have been imprisoned for refusing to disclose their sources.

However, several states in the US have "shield laws" that protect the rights of journalists to varying degrees.





Sweden: The Freedom of the Press Act in Sweden is a broad protection of rights of journalists and even extends to state and municipal employees who might share information with journalists freely. In fact, a journalist who reveals his or her source without consent may be prosecuted at the behest of the source.

In France and Germany too, journalists can refuse to disclose sources in an investigation.

#### PORTENTOUS OVERKILL

The aftermath of the release of a BBC documentary on the Gujarat pogrom of 2002, which questions the actions taken by the then Gujarat government led by Prime Minister Narendra Modi, can only be termed as yet another rendition of the 'Streisand effect'. After issuing directions to disable access to the first episode on websites using emergency powers under the IT Rules, 2021 and Section 69A of the IT Act, 2000, the Ministry of Information and Broadcasting (MIB) also blocked over 50 tweets with a link to the documentary. But this only resulted in citizens gaining access through screenings and shares over smartphones — akin to how the suppression of information has the unintended consequences of raising more awareness, or the 'Streisand effect'. Other actions such as the police detention of 13 students at Jamia Millia Islamia University, Delhi, on the pretext that they were about to have a screening were an overkill and amounted to an abuse of power. It goes without saying that the government should not arbitrarily block the dissemination of media content just because it is critical of the regime. Its justification to use emergency powers to block access to the documentary, as being propagandist and of a colonial mindset, does not hold water if it is seen in the continuum of coverage of the pogrom and the aftermath. In any case, propaganda should be countered by propaganda, and not censorship.

The events that led to the pogrom, the horrific crimes, the callousness of the then regime and the lack of sufficient recourse to law and order steps, have all been well recorded and commented upon in the Indian press. The BBC documentary is just another media investigation into a portion of India's history that changed the course of the polity not just in Gujarat but also elsewhere. The online blocking of the first episode using emergency powers cannot be justified on the basis provided by the MIB that it is "propagandist", and only reflects a recent tendency to utilise IT rules to assert executive power rather than address this as a free speech issue. The IT rules were amended in February 2021 to allow for increased government control over online news publications — actions that are now being heard in courts. Recent High Court orders have also weighed in on the need to protect free speech and have stayed the government's moves to control freedom of expression on digital platforms. In its actions, a clear case can be made that the central government is more keen on blocking critical content than using the IT rules to regulate hate speech and misinformation — the true bane of the digital media ecosystem today.

# FOR OVER 3 HOURS, JNU GOES DARK, STUDENTS SAY BID TO BLOCK BBC DOCUMENTARY

AT 8.30 pm, barely half an hour before the Jawaharlal Nehru University Students' Union planned to screen the first episode of the two-part BBC documentary, 'India: The Modi Question,' which was pulled down by YouTube and Twitter on orders from the Centre, the campus was plunged into darkness.

It was only after midnight that power was restored after a group of students, as a mark of protest against what they said was a deliberate blackout, watched parts of the documentary on their phones and laptops.





JNU V-C Santishree Pandit and university Rector 1 Satish Chnadra Garkoti were not available for comment. Deputy Registrar Ravi Kant Sinha said he was not authorised to comment.

"We have been told by the JNU V-C and the university Registrar that it's a massive power failure which has affected one-third of the campus. There is no deliberate attempt to cut power," said an official in the Union Education Ministry.

However, sources said such a prolonged power cut on campus was unusual. BSES, which supplies power to the campus, had no mention of the outage on its website — its last entry for the day for "maintenance outage" in the neighbourhood was for one between 11 am and 3 pm.

The power cut affected faculty housing, too, many professors told The Indian Express. In a video from campus, JNUSU president Aishe Ghosh was seen waving a sheet of paper with a QR code. "If they shut down one screen, we shall switch on hundreds," she is heard saying.

Speaking later, she said: "JNU held screenings of movies like The Kashmir Files but we never got an advisory from the administration. This is happening for the first time." She added that whenever there was a power cut, the campus community was "notified" by the administration "but this time we got no notice."

Around 10.30 pm, some stones were thrown at the crowd of students that had gathered to watch the documentary, but in the dark, it was not clear where these had come from. A PhD student from the Centre for Political Studies alleged he had been hit in the shoulder and others had received injuries, too. Following this, the students marched to the main gate and raised slogans until past 11.30 pm.

When asked about the power cut and stone-pelting, DCP (Southwest) Manoj C said, "If we receive a complaint from any section of JNU, necessary legal action as deemed appropriate will be taken." A little past 11 pm, there were two PCR vans stationed outside the campus gate.

On Monday, the university administration had dissuaded students from going ahead with the screening. In a statement, it had said: "No prior permission for this event has been taken from the JNU administration. This is to emphasise that such an unauthorised activity may disturb peace and harmony of the university campus. The concerned students/individuals are firmly advised to cancel the proposed programme immediately failing which strict disciplinary action may be initiated as per university rules."

In response, the students' union said: "The screening is a voluntary action by the students... Can you please specify the provision of the JNU Act/Statute/ Ordinances/ Rules and Regulations governing the University which mandates that prior permission is required from the administration for screening of any film/documentary on the university premises?"

They added: "By screening the documentary/movie, we do not seek to create any form of disharmony. The purpose of the screening is only to watch the documentary on campus. Only the students with voluntary interest would take part in the screening."

Government officials claimed the documentary had "the potential to adversely impact" the country's "friendly relations with foreign states" and "public order within the country". The BBC documentary focuses on PM Narendra Modi's and his then state government's response to the 2002 Gujarat riots.





# DRAFT AMENDMENTS TO IT RULES: A LOOMING CENSOR

Should the Press Information Bureau (PIB) or "any other agency authorised by the government" be allowed to order the removal of posts from online platforms, if it deems them to be fake? The draft amendments to Information Technology rules announced last week by the Ministry of Electronics and IT (MeitY) insist that they should be although, as per the Constitution and the Supreme Court, they cannot. Misinformation and disinformation are serious threats in modern democratic societies, of course. In fact, the PIB already flags content as fake news. The draft amendment, however, goes beyond this. If passed, it will allow the government to order digital intermediaries — in essence, any application or platform that is used to host or share content – to take down posts it deems fake, without any forum for appeal or redressal. This goes against the letter and spirit of the freedom of speech and expression enshrined in Article 19 of the Constitution.

The draft rules fail the smell test on several counts. First, the PIB is a government agency, and it is not the government's role to play editor. Given that almost all media now has a significant digital aspect to its distribution, the proposed rules in effect grant the government blanket powers of censorship. Second, following from the Supreme Court's verdict in Shreya Singhal v Union of India (2015) — in which the two-judge bench struck down Section 66A of the IT Act as being unconstitutional — errors of fact are not grounds for "reasonable restrictions". In that verdict, the SC had laid down that take-down orders can only be issued on the grounds laid out in Article 19(2) of the Constitution, which does not refer to the truth or falsity of statements. Further, the Court had gone on to say how that controversial section of the IT Act had a "chilling effect" on free speech. The proposed amendments to IT rules threaten to bring back that draconian spirit into digital governance. Third, the PIB's record thus far in "flagging" misinformation has been far from perfect. As a report in this newspaper showed, there have been several instances — including reports concerning notices issued by state governments, police forces and the Intelligence Bureau — that the PIB flagged as "fake news" where it later turned out to be mistaken. When the government is merely flagging and labelling content, such a mistake is reversible. If it issues takedown orders under a legal architecture that provides no room for appeal, the same errors become constitutionally untenable.

In the aftermath of the objections to the proposed changes in rules, MeiTY minister Rajeev Chandrashekhar has said "these amendments will also be put through open consultations – to reflect, discuss and deliberate on these amendments or any other such effective means through which we can prevent misinformation/ patently wrong information". The government must stand by this assurance. It must not use fake news as an excuse to arrogate to itself powers it doesn't have under the Constitution — to be a censor.

#### ON THE MAT

In an unprecedented move generating much heat, India's leading wrestlers cutting across the gender-divide took to the streets last week. Vinesh Phogat, Sakshi Malik and Bajrang Punia led the sit-in protest at Jantar Mantar and their ire was directed at the Wrestling Federation of India (WFI) president Brij Bhushan Sharan Singh. Vinesh levelled sexual harassment allegations against Brij Bhushan and stated that she had even contemplated suicide. Sakshi and Punia too stressed that not all was well with the functioning of the WFI. The federation meanwhile denied all allegations and hinted at a 'Haryana lobby' trying to discredit the president in the run-up to the association elections. Brij Bhushan, who is also a Bharatiya Janata Party Member of Parliament from Uttar





Pradesh, stuck to his denial while the aggrieved athletes dug their heels in, repeated their sit-in protest for another day besides having multiple meetings with Sports Minister Anurag Thakur. Though for now this is a case of furious allegations and flat denials, the incident highlights the inherent flaws in India's sporting underbelly. In a largely patriarchal country, the rural woman athlete's first exposure to a male outside the immediate family environment is often the coach or a sports administration official. If this trust is violated, the athlete is scarred for life.

There are the rare ideal coach-athlete equations based on mutual respect, but there are also exploitative tales simmering under the surface. The deafening silence had to end and the medal-winning and much-feted wrestlers have taken the first step. Now, the five-member oversight committee set up by the Sports Minister has to follow up on the allegations and arrive at the truth. That the responsibility has been given to Olympian Mary Kom, who heads the committee, should put both sides at ease. Mary Kom and her fellow-members have to both reveal empathy and a firm quest for the truth. That Brij Bhushan hails from the ruling party should not become a burden and the Sports Ministry did well in forcing the WFI president to step aside from the day-to-day functioning of the association. That politicians cutting across party lines are part of India's sports administrative ecosystem is a known fact. Drawn by the soft power of sport and the goodwill it generates, most sporting bodies have politicians in vital positions. The power that they wield within these federations and the phone calls that they could place back to New Delhi, do create a stifling environment. The wrestlers need to back their allegations with proof and the latest episode offers an opportunity to clean up the administration.

# INS VAGIR, FIFTH SCORPENE SUBMARINE, COMMISSIONED

Navy chief says it is the third submarine inducted into the Navy in a short span of 24 months; the sixth submarine, Vagsheer, is expected to be delivered to the Navy by the end of this year

The fifth Scorpene class conventional submarine was commissioned into the Indian Navy as INS Vagir in the presence of the Chief of the Naval Staff, Admiral R. Hari Kumar, at the Naval Dockyard in Mumbai on Monday.

The sixth and the last of the French-origin Scorpene-class submarines, Vagsheer, being built in India under technology transfer is currently undergoing sea trials and will be delivered to the Navy in 2024, the original manufacturer Naval Group said.

With this, the Navy now has 16 conventional and one nuclear submarine in service. It includes seven Russian Kilo class submarines, four German HDW submarines, five Scorpene class submarines, and the indigenous nuclear ballistic missile submarine, INS Arihant.

"Vagir will be the third submarine inducted into the Navy in a short span of 24 months. This is no small achievement, and underscores the coming of age of India's shipbuilding industry and the maturing of our defence ecosystem. It is also a shining testimony to the expertise and experience of our shipyards to construct complex and complicated platforms," Admiral Kumar said at the commissioning ceremony.

"These aspects also serve to reinforce the Indian Navy's unequivocal commitment and steadfast resolve to be a fully Aatma Nirbhar force by 2047," he added.

The Navy chief further complimented the submarine's Commanding Officer and his team for pushing through "all major trials, including those of weapons and sensors, within a short span of just 11 months".





# 'INDIA'S FIRST MISSION TO STUDY THE SUN TO BEGIN BY JUNE-JULY'

The Indian Space Research Organisation (ISRO) is planning to launch the Aditya-L1 mission by June or July this year. Aditya-L1 is the first Indian space mission to observe the Sun and the solar corona.

ISRO chairman S. Somanath, speaking at the handover ceremony of the Visible Line Emission Coronagraph (VELC) payload on Thursday, said that the Aditya-L1 mission will be launched by June or July as the launch window for the mission would close by August. The Aditya-L1 mission will be launched by ISRO to the L1 orbit (which is the first Lagrangian point of the Sun-Earth system). L1 orbit allows Aditya-L1 to look at the Sun continuously. Aditya-L1 has seven payloads in total, of which the primary payload is the Visible Emission Line Coronagraph (VELC), designed and fabricated by the Indian Institute of Astrophysics, Bengaluru. The other six payloads are being developed by the ISRO and other scientific institutions.

#### 15 years of work

"Understanding the effect of the Sun on the Earth and its surroundings has become very important now and Aditya-L1 aims to shed light on this topic. It has taken 15 years for VELC from concept to completion, and this period was needed for a complex system like this. The VELC has been the finest collaboration between the Indian Institute of Astrophysics and the ISRO," said Mr. Somanath. Following the handover of the VELC payload, the ISRO will now conduct further testing of VELC and its eventual integration with the Aditya-L1 spacecraft.

"This is the main instrument (VELC payload) on board the Aditya-L1 satellite. There are also other instruments which are developed by the ISRO and other institutions. Currently, we are getting ready with the satellite. The payload will be taken to the U.R. Rao Satellite Centre in Bengaluru, where we will integrate it with the Aditya-L1 satellite which will undergo a lot of testing, evaluation, and finally, it will be launched using the PSLV (Polar Satellite Launch Vehicle)," Mr. Somanath added. Raghavendra Prasad, Principal Investigator, VELC payload, said that the payload will be able to observe the corona continuously and the data provided by it is expected to answer many outstanding problems in the field of solar astronomy.

# **Unique ability**

"No other solar coronagraph in space has the ability to image the solar corona as close to the solar disk as Visible Line Emission Coronagraph can. It can image it as close as 1.05 times the solar radius. It can also do imaging, spectroscopy, and polarimetry at the same time, and can take observations at a very high resolution, or level of detail, and many times a second," Prof. Prasad said.

# THE DARK SKY IS A NATURAL RESOURCE, AND TOO MUCH LIGHT IS POLLUTING IT

A 2016 study reported that a fifth of India's people experience a high level of skyglow, non-natural light that increases the brightness of the night sky. The effects and consequences of this phenomenon makes the absence of a global treaty to reduce light pollution more conspicuous

On December 14, 2022, the district administration of Ladakh designated six hamlets within the Changthang Wildlife Sanctuary as a "dark-sky reserve" — an area whose sky is free of light pollution. The designation meant that the reserve had a responsibility to keep the skies dark, particularly for the astronomical observatories located in the area.





When private space venture company SpaceX's Starlink constellation of small satellites began to obscure the view of ground-based telescopes around the Earth, the idea of the sky as a natural resource capable of being polluted became popular. These incidents also rendered the absence of a global treaty to reduce light pollution more conspicuous. But while authorities safeguard telescopes' access to dark skies by actively lowering light pollution around their sites, the night-sky elsewhere is actually becoming brighter thanks to 'skyglow', which has significant ecological, health and cultural consequences.

# The prevalence of skyglow

In a new study titled 'Citizen scientists report global rapid reductions in the visibility of stars from 2011 to 2022', researchers from Germany and the U.S. analysed a global database of what the dimmest star visible from a particular location is; the database had more than 51,000 entries submitted by citizen scientists. They found that non-natural light had increased the brightness of the artificial glow of the night sky, or skyglow, by 9.2-10% every year between 2011 and 2022. Specifically, they reported that the skyglow had brightened around 6.5% over Europe, 10.4% over North America, and 7.7% over the rest of the world.

The finding is significant because it disagrees with satellite-based data, which has indicated that the rate of increase has been around 2% per year. According to the new study, the discrepancy is probably because satellites are unable to 'sense' blue light emitted by LEDs and to study light that is emitted parallel to the ground.

Visible light emitted by many sources is divergent, so light emitted insufficiently downward could find its way into the sky. Almost all surfaces in cities reflect light, meaning a portion of entirely down-cast light will be reflected upwards, contributing to night-time light pollution. The researchers recommend light sources that cast light at an angle below the plane of the horizon, capping the emissions of these sources and calibrating their output according to the total brightness at the spot being lit.

Numerous studies have also found that artificial light at night affects both people and wildlife in significant ways. According to a 2003 report, lit beaches deter sea turtles from coming ashore to nest. A 2006 review found that skyglow keeps trees from sensing seasonal variations. A 2017 study found that young burrow-nesting seabirds don't take flight unless the nesting site becomes dark. A 2019 study reported that clownfish eggs don't hatch when exposed to artificial light at night, killing the offspring. A 2020 study noted that skyglow interferes with multiple aspects of insect life and allows insect predators to hunt for longer.

Parties to the Convention on Migratory Species adopted guidelines to address the problem at their meeting in Gandhinagar in 2020. By disrupting the circadian rhythm, artificial light at night can hamper the production of melatonin, an influential hormone in the human body which affects sleep, moods and cognition.

A small 2009 review concluded that circadian disruption increased the risk of breast cancer among night-shift workers by 40%. Starry skies have also inspired countless works of science and poetry. When Los Angeles had a big power cut in 1994, many people phoned local authorities to report a "silvery cloud" at night. It became evident later that they were really seeing the Milky Way.

In 2020, Australian researchers wrote in a paper, "The erasure of the night sky acts to erase Indigenous connection to the stars, acting as a form of ongoing cultural and ecological genocide."





# WHAT AILS THE KEN-BETWA RIVER LINK PROJECT?

#### The story so far:

On January 18, the Steering Committee of the Ken-Betwa Link Project (KBLP) held its third meeting in New Delhi. It was chaired by the Secretary of the Department of Water Resources, in the Ministry of Jal Shakti, who reiterated that the KBLP was a "flagship" project of the national government and that it "is critical for the water security and socio-economic development of Bundelkhand region". In December 2021, the Union Cabinet approved KBLP at a total cost of ₹44,605 crore. In this project, the national and the Madhya Pradesh governments will link the Ken river with the Betwa river so that the latter can water the Bundelkhand region in Uttar Pradesh.

#### What is the Ken-Betwa link?

The link will be in the form of a canal that will be fed by the new Daudhan Dam on the Ken, to be built within the Panna Tiger Reserve. The national government has said that the dam will generate 103MW of hydroelectric power. The linking canal will flow through Chhatarpur, Tikamgarh and Jhansi districts, with the project expected to irrigate 6.3 lakh hectares of land every year.

However, hydrological and ecological experts aren't convinced, mainly because the government's plan is based on a 'surplus and deficit' model that they have said has little basis in science. They are also concerned that the project will endanger the water security of Panna. In 2018, environmentalist Ravi Chopra called the idea "nonsense"; in 2021, conservation biologist Raghu Chundawat said that thanks to KBLP, "Bundelkhand will suffer for decades to come".

#### What clearances has the KBLP received?

India enacted the Wildlife (Protection) Act 1972 at a critical juncture, when its wildlife was in peril. The key provisions of the Act (Sections 18 and 35) relate to setting aside areas of significance to wildlife as 'sanctuaries' and 'national parks'. Sections 29 and 35(6) restrict human activities within them without prior approval.

Diversion or stopping or enhancement of the flow of water into or outside wildlife sanctuaries/parks is taboo unless doing so is deemed to be necessary to improve and better manage wildlife within a sanctuary or a national park. And in the case of the Panna Tiger Reserve, the Central Empowered Committee (CEC) of the Supreme Court has found such diversion to not be necessary to improve and better manage wildlife in the park. Additionally, downstream of the national park lies the Ken Gharial Sanctuary, created to protect the critically endangered Gangetic gharial (Gavialis gangeticus). The destructive impact of the proposed dam on the flow of water into and outside of this sanctuary should be immediately clear. The CEC is quite firm in its report that "the Standing Committee of the NBWL has not considered the impact of the project on the downstream gharial sanctuary".

The CEC submitted this report to the Supreme Court on August 30, 2019, and the matter remains sub judice. The project is also reportedly still to receive full forest clearance. A challenge to its environment approval is also pending before the National Green Tribunal, presumably because the tribunal believes the project must first secure forest clearance. Due diligence and expert scrutiny during the project-approval stage are cornerstones of sound environmental governance. Therefore, it was a big shock when, following Cabinet approval, the national government announced the implementation of the KBLP in the 2022-2023 Union budget. It further stated that ₹1,400 crore would be allocated for the project in that financial year.





#### What about its legality?

There are significant legal problems with the approval granted to the KBLP. The CEC has stated that the, "approval by the Standing Committee of the National Board for Wildlife to the Ken-Betwa link Project has not been proved to be necessary for the improvement and better management of the wildlife therein as provided in Section 35(6) of the Wildlife (Protection) Act, 1972...".

This categorical observation was made vis-à-vis plans to create a high reservoir-dam on the Ken river in the Panna National Park and Tiger Reserve for the KBLP. It concurred with the applicants' prayer at the apex Court; that the wildlife approval given by the Standing Committee of the National Board for Wildlife (NBWL) at its meeting on August 23, 2016, was ultra vires. The Indian government catalysed this approval despite an expert body created by the Standing Committee of the NBWL itself saying that "an independent hydrological study of river Ken is necessary" and that "no developmental project should destroy the ecology of remnant fragile ecosystems and an important tiger habitat in the country".

# How will Panna's tigers be affected?

The Panna tiger reserve lost all of its tigers by 2009, requiring a remarkable effort spanning almost a decade to reintroduce them. Panna is an exceptional tiger habitat because of its deep gorges, which will be drowned if a new dam is built. An illegal approval granted by a national board will bring to naught all the good, hard work of the past. The government is also developing a larger 'Panna Tiger Landscape', but this is not the concession many believe it to be. This landscape should be created in any case for Panna's tigers. Such landscape-level action is also required around most wildlife areas in light of a new global target to protect 30% of global terrestrial and marine areas by 2030, finalised at the COP15 biodiversity conference in December 2022. The question therefore is — why should such plans be designed and deployed only because the heart of a tiger reserve is to be drowned and the park irreversibly fragmented?

In fact, there may not even be enough water in the Ken, a non-perennial river, to meet the projected needs of the Betwa — forget the needs of the Bundelkhand region. This is why the NBWL expert body mandated an "independent" hydrological investigation of the Ken. Older reports by State agencies had thrown up different, and hence unreliable, projections. Such an independent investigation remains pending. Independent experts have also said that it will be more economical and faster if the governments restored Bunderlkhand's erstwhile Chandel-period lakes and ponds and if they replicated the successful field-pond schemes on priority. The region is already blessed with adequate annual rainfall.

Against this background, rushing the KBLP sans due diligence—both technical and legal—will intensify water conflicts between Madhya Pradesh and Uttar Pradesh; dash locals' longstanding expectations of irrigation and drinking water; and cost a decade's labour and funds. Ahead of the forthcoming 2023-2024 Union budget, one hopes that we won't be saddled with a textbook lossloss project.

# MASS MORTALITY OF OLIVE RIDLEY TURTLES IN A.P. RAISES CONCERNS

Hundreds of vulnerable Olive Ridley turtles (Lepidochelys olivacea) have washed ashore along the coastline between Kakinada and Antarvedi in the Godavari region of Andhra Pradesh during the ongoing annual breeding season on the east coast.





The breeding grounds — Sakhinetipalli, Malikipuram, Mamidikuduru and Allavaram — have been witnessing the mass mortality of the turtles over the past few weeks.

The effluents being released from the aqua ponds along the coastline and the discharges from the pipelines of the onshore oil exploration facilities are blamed for the mass mortality of the turtles.

Since early January, a group of locals have photographed as many as 70 Olive Ridley turtles that have been found dead in their breeding grounds between Kakinada and Antarvedi.

Environmental activist Venkatipathiraja Yenumala, in a complaint to the Ministry of Environment, Forest and Climate Change, the AP Forest Department and the Pollution Control Board, said, "There is mass mortality of Olive Ridley turtles in the Mandals of Sakhinetipalli, Malikipuram, Mamidikuduru and Allavaram in the Konaseema region, where treated water is being discharged into the sea through pipelines by the oil exploration units, including ONGC facilities."

In 2021, Mr. Venkatipathiraja waged a legal battle against the marine and groundwater pollution in the Konaseema region in the National Green Tribunal. "The waste water from the aqua ponds is also being released into the sea and it is suspected to be one of the reasons for the mortality of turtles," Mr. Venkatipathiraja told The Hindu.

Responding on the issue, Dr. B.R. Ambedkar Konaseema District Forest Officer M.V. Prasada Rao said, "We have launched a probe into the mortality of Olive Ridley turtles in our district. A report is expected to be prepared on the reasons for the mortality."

On the other hand, the Forest Department has set up rookeries at Vakalatippa, S. Yanam, Gacchakayalapora and Sacremento Island. By January 24, as many as 2,352 eggs have been collected for conservation and safe breeding at the four rookeries.

# RISE IN WATERBIRD COUNT RECORDED IN KERALA'S CAPITAL

The Asian Waterbird Census (AWC) 2023 has recorded a 65% increase in waterbirds in Kerala's Thiruvananthapuram district, albeit with a slight dip in the count of species. Instilling hope among nature lovers despite concerns posed by anthropogenic activities, the annual census that was jointly conducted by WWF-India and the social forestry wing of the Forest Department recently enumerated 5,396 birds belonging to 70 species from 11 sites spread across the district.

This was a considerable increase from the count of 3,270 birds belonging to 72 species recorded last year. Barring a slight decline that was observed in Poovar estuary and the Punchakkari-Vellayani wetland complex, all the other locations reported a trend of increasing population. However, the birders raised concerns on the quality of habitats across all the wetlands. Except Pazhanchira wetlands near Attingal, all the other wetlands have been facing multiple and severe threats from anthropogenic activities.

The Punchakkari-Vellayani wetland complex, regarded the birding hub of the capital city, has been experiencing threats in the form of solid waste dumping, shift from paddy cultivation to fertilizer-intensive vegetable cultivation, and noise pollution from crackers that are used by farmers to scare away birds. A growing trend of wedding and other photo shoots has also driven away birds from the area.

Nonetheless, the wetland is home to many bird species including migratory ones like Pacific Golden Plover, Western Yellow Wagtail, White Wagtail, Painted Stork, Eurasian Spoonbill, Wood





Sandpiper and Grey-headed Lapwing. The team counted 1,419 birds belonging to 51 species on this location.

Shore birds such as Great Crested Terns, Greater and Lesser Sand Plovers, Kentish Plovers and Western Reef Herons were sighted in the Poovar estuary. The paddy field maintained by the Agriculture Department at Mosque Lane, Kesavadasapuram, reflected a disappointing picture with only few Wood and Green Sandpipers reported. The team visited the comparatively less disturbed Pazhanchira wetlands, near Attingal, and counted 1,298 birds belonging to 34 species.

The census found that the museum and zoo compound still remained a safe haven for the endangered Oriental Dater. A crowd of 22 Black-Crowned Night Herons and other waterbirds were also seen around the two large ponds there.

The Akkulam wetlands reported an increase in bird count. Species including the Bronze-winged Jacanas and Oriental Darters were seen there. Whimbrels, Common Greenshank, Common Redshank, and Asian Openbills were the highlights from Kadinamkulam wetlands.

# PEOPLE DON'T WANT ANY SYSTEM LIKE BHAROS TO SUCCEED: ASHWINI VAISHNAW

BharOS an indigenous mobile operating system developed by IIT Madras seems to have caught a lot of attention across the globe. Ashwini Vaishnaw, Electronics and IT Minister Govt of India tested the same and has shared his feedback on BharOS.

According to the Minister of Electronics and IT, the challenge starts from here and we have to be confident in developing an indigenous mobile operating system and difficulties will come from across the world. He even said that "people don't want any system like this to succeed", possibly hinting at the big players like Apple and Google, which control the major share of the mobile operating system.

He says that India has to be "very careful, very conscious, and very persistent," and we should continuously work to make it successful and we should prepare ourselves for the same. He also suggests that adding "a" to the name will make it Bharosa which means trust in Hindi. As per the photo shared by AINS, IT Minister seems to be testing the BharOS on a Pixel 6a or the Pixel 7, powered by the Tensor processor.

For those who are unaware, BharOS is a mobile operating system built on top of Linux Kernel and is said to be more secure and private when compared to Google's Android and iOS. BharOS does not include any first-party apps and will support private app stores, allowing users to install and use apps of their choice.

BharOS is said to benefit over 100 million smartphone users in India, and IIT Madras is also in talks with OEMs to launch phones with BharOS in the future. Right now, the BharOS is still in the early testing phase, and the team behind BharOS will further test and develop it to make it a more stable and secure mobile operating system.

# LESSONS FROM JHARKHAND: MIGRANTS' DATABASE FOR TARGETED WELFARE DELIVERY

The migrant labour crisis during the Covid-induced lockdown in 2020 exposed the shortcomings of the country's social security architecture. The absence of credible information on people who migrate in search of livelihoods meant that support extended to these workers during the period of economic distress was patchy at best. The crisis forced the Centre to undertake two data-related





exercises. An all-India migrants survey is underway. A portal has also been developed to register unorganised sector employees — it has a provision to determine if a worker has migrated in search of better opportunities. But for effective delivery of welfare schemes, policymakers require granular data — information on migration routes, social security needs of the workers and their health-related vulnerabilities. The Jharkhand government's initiative, launched this month, to collate such information and build a database of migrant workers from the state, is an important step in this direction.

The enumeration is part of the state's Safe and Responsible Migration Initiative that was launched in 2021. One of the early findings was that women migrant labourers are amongst the most vulnerable. There is also anecdotal evidence that people from tribal communities, about 27 per cent of Jharkhand's population, constitute a significant part of the migrant outflow. Their difficult economic condition places these workers at the mercy of their employers. For instance, it's been almost two years that the Jharkhand government has been embroiled in a dispute with the Border Roads Organisation (BRO). It has accused the defence agency of failing to comply with mutually agreed terms for employing labour from the state during the pandemic period. But the state's efforts have been hobbled by the lack of information — it has been forced to rely on figures provided by the BRO. A database will place it on a surer footing in such standoffs.

The survey will reportedly be a bottom-up affair. The enumerators will speak to community leaders to understand the reasons that push people to migrate. Information on health, education, remittances and the uses they are put to can help policymakers devise targeted interventions — these are increasingly seen as more effective methods of welfare delivery compared to subsidies meant for a larger population. In the long-run, such information can help frame policies to check distress migration. That's why Jharkhand's survey has lessons for other states. The exercise should, however, not be a one-off affair. Linking the database with policy could throw up the need for more in-depth information. Updating it regularly will help the state to frame a robust social security architecture.

### SUSPECT PM AWAAS LISTS IN WEST BENGAL: STATE OF GRAFT

The Centre's flagship housing project, Pradhan Mantri Awas Yojana-Gramin (PMAY-G), aims to provide pucca houses to people in rural areas who are homeless or living in dilapidated houses. But in West Bengal, the scheme's primary purpose has become a casualty as the ruling Trinamool Congress cadres seem to be using PMAY-G for personal benefits. For more than a month, protests have been raging in several districts against ineligible people finding their way into the list of potential beneficiaries. Now an investigation by this newspaper has revealed that the impropriety began at the first tier of the process — at the block level. At Purba Bardhaman, North 24 Parganas and South 24 Parganas, among the districts affected by the protests, the name of a deputy pradhan of a TMC-ruled panchayat, a party core committee member, another party worker, who is also a panchayat member, figure in the list of beneficiaries, even though they own pucca houses.

Implementation of the PMAY scheme in West Bengal has been dogged by controversies since April last year when the Centre froze funds because the state government had rechristened the scheme as Banglar Awas Yojana. In November, it softened its stance and approved its share of Rs 8,200 crore — the funding for the scheme is split between the Centre and state in a 60:40 ratio. The resumption of funding came with a stern reminder to West Bengal to not deviate from due procedures. It asked the state government to ensure that districts form teams of special officers to investigate allegations of corruption. These warnings seemed to have been ignored. Protests erupted after the lists of beneficiaries were made public. In Murshidabad, 17 TMC panchayat

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





members resigned fearing local resentment over the alleged irregularities. Unfortunately, instead of probing the matter, the party rejected these resignations.

The TMC has been dogged by allegations of graft and corruption, ever since it replaced the Left Front as the party holding office in West Bengal. After the 2019 Lok Sabha polls, the party supremo had admonished TMC members who were accused of taking bribes – cut money in the state's parlance — from people wanting to avail social welfare schemes. The Opposition took this as a tacit admission of the corrupt ways of TMC members. Protests broke out in several parts of the state with people demanding that TMC leaders return the cut money. A year later, after Cyclone Amphan ripped through West Bengal, an investigation by this newspaper revealed nepotism and political favouritism in the disbursal of relief funds. The party had issued show cause notices to at least 200 of its members. State government officials have assured that they will weed out the names of the ineligible from the PMAY-G lists. They must give the task the utmost urgency. More importantly, the TMC government must ensure that delivery of welfare is as per due process and not as patronage.

# KERALA ANNOUNCES MENSTRUAL LEAVE: TIME TO TALK PERIOD

On January 19, Kerala Chief Minister Pinarayi Vijayan announced on social media that the state government will grant menstrual leave for female students in all state universities under the Department of Higher Education. The announcement came shortly after the Cochin University of Science and Technology (CUSAT) decided to provide menstrual leave to all its female students after a representation made by the students' union. Vijayan has described the government's decision as part of its "commitment to realising a gender-just society". The government's claim should inaugurate a wider conversation.

Making period leave available to students — and, going forward, to women in the workforce, perhaps — would be an important step towards acknowledging and addressing the often debilitating pain and discomfort that so many are often forced to work through. Instituting period leave would help create workplaces and classrooms that are more inclusive and more accommodating. Yet, the context within which such policy decisions are taken matters. In a traditional society like India, where menstruation remains a taboo topic, it is possible that a special period leave could become another excuse for discrimination. The examples of similarly traditional societies like South Korea and Japan are not encouraging: Both countries have laws granting period leave, but recent surveys showed a decline in the number of women availing of it, citing the social stigma against menstruation. There is also the risk of medicalising a normal biological process, which could further entrench existing biases against women, as well as the possibility that the perceived financial and productivity cost of mandatory period leaves could make employers even more reluctant to hire women.

What is not in doubt is the necessity for a sustained conversation around menstrual leave — and menstrual health in general. There are some encouraging signs that governments have recognised this. In 1992, Bihar introduced period leave for working women, while the Ministry of Health and Family Welfare's Menstrual Hygiene Scheme, first implemented in 2011, seeks to increase access to sanitary napkins for adolescent girls in rural areas. The stigma around menstruation remains a challenge — the Menstruation Benefits Bill, first introduced in Parliament in 2017 and then in the Arunachal Pradesh Assembly in 2022, was withdrawn from the latter because the subject was deemed unsuitable for discussion in the "holy" institution. The task for governments would be to negotiate such obstacles while ensuring that the goals of gender justice and equality are met.





# EGGS, NOT BANANAS OR CHIKKI: WHAT 80% KIDS IN KARNATAKA CHOSE FOR MIDDAY MEAL

In Karnataka, a state where distribution of eggs as part of the midday meal scheme was hotly contested by political and religious leaders, children have made their choice overwhelmingly clear. According to data accessed by The Indian Express, around 80 per cent of the midday meal beneficiaries have chosen eggs over the alternatives — bananas and chikki.

The data provided by the Department of Public Instruction reveal that as of December 14, of the 47.97 lakh students in government schools between Classes 1 and 8, 38.37 lakh students preferred eggs, 3.37 lakh chose bananas and 2.27 lakh preferred chikkis. The remaining children were absent during this period.

In July 2022, following a pilot study that saw encouraging results after eggs were included as part of the children's diet, the state Department of School Education announced that besides hot cooked meals, children in Classes 1 to 8 could choose from eggs, bananas and chikkis under a supplementary nutrition programme. The order stated that the supplementary nutrition — as part of the Flexibility for Innovative Intervention activity under the PM Poshan Shakti Nirman (midday meal scheme) — would be provided for 46 days a year in all districts of the state for the current academic year 2022-23. Of the 38.37 lakh students who chose eggs across the state, the majority, 15.67 lakh students, were from Belagavi division, followed by Bengaluru division (8.65 lakh), Kalaburgi division (8.33 lakh), and Mysuru division (5.70 lakh).

School Education minister BC Nagesh said, "We have extended eggs in midday meals across all districts to ensure that malnutrition should not impede education. Food is a debatable matter and everyone has their own views on it. However, on receiving positive feedback from the Kalyan-Karnataka region after the pilot was implemented, we decided to include eggs to fight malnutrition in other districts as well."

Between December 2021 and March 2022, the Karnataka government had conducted a pilot study as part of which eggs were given under the midday-meal scheme in the socially and educationally backward Kalyan-Karnataka region that includes the districts of Bidar, Kalburgi, Ballari, Vijayanagara, Koppala, Raichur and Yadgiri. However, the pilot study was met with stiff opposition from religious leaders and mutts who said that introducing eggs would end up in "discrimination" against students who are vegetarians. Lingayat seer Channabasavananda Swamiji was in December 2021 quoted as saying, "If eggs are given, schools will turn into military hotels. Instead, grains and pulses should be given. If the rule isn't withdrawn, there will be severe protests."

Others, including from Swami Vachananand Guru, pontiff of the Harihara Panchamasali Mutt, said introducing eggs would "lead to problems as far as our religious rituals are concerned and children will go astray". Even the state's position paper on the National Education Policy (NEP) 2020 had claimed that eggs and meat in midday meals in schools would cause "lifestyle disorders" and that 4 per cent of students are "unwilling" to consume eggs. The position paper was widely criticised by the scientific community. Despite the Opposition, the government went ahead with the pilot study and, in July 22, decided to extend the scheme across the state.

A senior official from the Department of School Education said, "Students have responded positively to the distribution of eggs. However, factors such as budget and religious sensibilities become a challenge in expanding the programme. We haven't been able to distribute eggs in government-aided schools supported by religious institutions. However, we have proposed to the





state government to earmark funds for expanding the special nutrition food even to high school students (Classes 9 and 10) in order to address the malnutrition problem among older children."

# THREE YEARS ON, AYUSHMAN BHARAT SCHOOL HEALTH AND WELLNESS PROGRAMME HAS LESS THAN 50% UPTAKE

It has been nearly three years since the School Health and Wellness Programme was launched under the Ayushman Bharat scheme, and so far only 15 States have started the weekly 40-minute classroom sessions with students, official sources from the Union Health Ministry told The Hindu.

A crucial cog in implementing the programme for middle, secondary, and senior secondary grades across government and government-aided schools are health and wellness ambassadors (HWAs).

Two teachers, preferably one male and one female, in every school are to be designated as the HWAs, says the National Health Mission website. They are meant to be trained at the State level, to impart health promotion and disease prevention information in a joyful and interesting manner, according to the operational guidelines of the Ministry.

# Far from target

As of December 2022, only 71 of 766 districts have achieved 100% HWA training targets, according to Ministry data. Only four States and Union Territories — Andhra Pradesh, Sikkim, Chandigarh and Dadra and Nagar Haveli — have achieved 100% coverage. Some States are on the road to achieving targets, such as Rajasthan (99%), Uttarakhand (97%), and Haryana (92%). "In 2022-23, over 300 districts are targeted to be covered across 36 States and Union Territories," a senior Health Ministry official said.

In Chhattisgarh and West Bengal, the number of HWAs trained is at 8% and 9%, respectively. The States such as Uttar Pradesh (29%), Karnataka (31%), Andaman and Nicobar Islands (32%) and Madhya Pradesh (34%) have also not met targets.

The Health Ministry has been facing various challenges in implementing the programme. One major hindrance is that teachers at government schools are overworked. In Delhi, for instance, the programme syllabus is in addition to the Happiness Curriculum, Desh Bhakti Curriculum, and Entrepreneurship Mindset Curriculum that schools are implementing.

"Moreover, not all States have set aside the weekly time slot in the classroom schedule to conduct these programmes. There is no formal reporting structure or accountability to ensure that the syllabus is implemented," said a State Programme Officer working with the Department of Health in Delhi. The challenge is conducting adequate teacher training programmes while maintaining quality. "In most schools, it is viewed as an additional activity and teachers who are on the verge of retirement are allocated the HWA responsibility," the officer added.

The syllabus, designed by the National Council of Educational Research and Training (NCERT) in conjunction with the Ministries of Health and Education, covers 11 core themes including managing emotional and mental health, navigating interpersonal relationships, and promoting the safe use of the Internet and social media. While the Health Ministry wishes to impart education about biological and emotional wellbeing, it is reluctant to use the word sex. "In multiple iterations of the syllabus, drafts of which went to and from the Health Ministry to the Education Ministry and NCERT, the word 'sex' was removed as it was considered a taboo. Instead, we have called it life skill-based education," the official added.





# A 'HOLOCAUST EDUCATION' FOR INDIA TO CREATE A JUST PRESENT

Six million Jews were murdered in cold blood — a consequence of the worst form of government-sponsored antisemitism in Nazi-Germany. Today, on International Holocaust Remembrance Day (January 27), we remember those who became the victims of the unprecedented and systematic killings. Remembering the dead is our responsibility, and fighting against antisemitism and hatred is our resolve.

#### The need to counter disruptive behaviours

Violence and hatred are learned behaviours that disrupt the core humanitarian principles of peaceful co-existence and acceptance of differences. The Holocaust stands as a jarring example of the deadly consequences of hate crimes and antisemitism that made their way from the fringes to the mainstream. With antisemitism as the case in point, this is particularly dangerous when used for power-related purposes, or to appease anxieties during times of crisis and uncertainty. In this way, ideologies of hate can permeate the social fabric as human frailty gets exploited.

Unfortunately, the world is still struggling with inequality, intolerance, and injustice in many places. As evidence suggests, a host of grave economic, cultural, religious and ethnic issues continue to provoke division, hate crimes, and violence in many parts of the globe. There has been a dramatic increase in the number of antisemitic incidents against Jews all around the world. Most of these were incidents of harassment but hate speech on social media, assaults and antisemitic vandalism have also spiked in recent years. We must counter these phenomena, to avoid wider societal tension and conflict.

#### A path of remembrance

Today, as we mark the International Day of Commemoration in Memory of the Victims of the Holocaust, we recall the systematic murder of six million Jews. The Shoah or the Holocaust, in which Jews were systematically targeted solely for being born Jewish, stands out as a defining moment in history. Education about the Holocaust helps us understand the processes and factors that lead to the eradication of human rights and democratic values, and identify circumstances that can lead to the increase in hate speech, violence, and even mass atrocities. It is our duty to remember the past in order to understand that the relevance and impact of the Holocaust transcend time and history.

This path of remembrance is a moral imperative for many countries in Europe, and around the world. One of the key messages of Holocaust remembrance is vigilance against dehumanisation and discrimination. Instead of erasing the past, we must educate people to ensure that there is no residue of this deep-rooted history of discrimination and build up resilience to ideologies of hate and a cognisance of the effects.

Drawing from the concept of 'reparative futures', we must find ways to talk about the past by imbuing the responsibility to 'never forget' and developing competencies to fulfil the promise of 'never again' among the youth.

Important UNESCO initiatives such as the International Program on Holocaust and Genocide Education (IPHGE) are a step in the direction of fostering reparative justice. By teaching the youth to view this catastrophe as a watershed moment in history with the possibility of its recurrence in other shapes and forms elsewhere, we can equip them with fundamental skills, values, and



dispositions to address future challenges, such as critical thinking, empathy, tolerance, and respect for human rights.

#### For teachers and youth

Coming to terms with this past is equally important for countries that are seemingly unaffected by Nazism and antisemitism. It is unsurprising that for the academic community in India, the Holocaust remains a geographically and emotionally distant historical event.

At a time when antisemitism and other forms of discrimination, Holocaust denial, and distortion are on the rise globally, we must provide the youth with opportunities to engage with this history and interrogate the injustices of the past to create a just present. Likewise, teachers need to be equipped with the necessary skills and knowledge to develop and deliver lessons about the history of the Holocaust that resonate with their students in today's world.

After all, forewarned is forearmed. Education suffused with learnings from the past can demonstrate, as Jean-Paul Sartre very rightly said, that individual choices or the lack thereof can indeed make a difference.

# CASE STUDY PUBLISHED ON BINGE-WATCHING HABIT AMONG ELDERLY

A NIMHANS case study published in the Journal of Geriatric Mental Health has provided insights into the motives of the elderly for binge-watching.

The case study highlights the need to promote behavioural strategies for strengthening the healthy use of technology among the elderly, allowing them to age healthily with advancing technologies.

The case study titled "Understanding geriatric binge-watching from a case-based perspective" published on January 20 illustrates the mediating role of psychological factors in binge-watching among the elderly as well as seeking consultation for its management.

# Sedentary lifestyle

Manoj Kumar Sharma, Professor at the Department of Clinical Psychology at NIMHANS, who is the lead author of the paper, told The Hindu that the relatively sedentary way of life and its associated psychological factors among the elderly can make them vulnerable to technology misuse and potential problematic binge-watching.

Dr. Sharma, who also heads the Service for Healthy Use of Technology Clinic at NIMHANS, said he has seen three such cases.

"In this paper, we describe the case of a 72-year-old male professional who sought help to manage problematic binge-watching of teleseries. The clinical evaluation highlighted the mediating role of motivation factors (need for self-absorbing activities, compensatory motivation to manage low mood and loneliness) in binge-watching," he said.

The association of binge-watching with loneliness and anxiety further contributes to increased binge-watching to overcome negative mood states, he said.





After psychotherapy sessions, which also involved his wife for couple-coping enhancement, he showed a reduction in engagement with online self-absorbing activities and improvement in marital life, he said.

Technology has become an important modality to fulfil interpersonal and social needs among the elderly. However, the excessive use of technology can further deepen social isolation among the elderly and this phenomenon remains unexplored, he said.

# INDIA'S PLAN TO ERADICATE MEASLES, RUBELLA

#### The story so far:

As the new year dawned, so did a crucial target for India. India had set a target to eliminate measles and rubella (MR) by 2023, having missed the earlier deadline of 2020, due to a variety of reasons, exacerbated by disruptions due to the pandemic. An earlier target that was set for 2015 was also missed. It was in 2019 that India adopted the goal of measles and rubella elimination by 2023, anticipating that the 2020 goal could not be reached.

# Why is this target crucial?

The measles virus is one of the world's most contagious human viruses that kills more than 1,00,000 children every year globally, and rubella is a leading vaccine-preventable cause of birth defects, according to the World Health Organization (WHO). Both measles and rubella can be prevented by just two doses of a safe and effective vaccine. Over the past two decades, the measles vaccine is estimated to have averted more than 30 million deaths globally, as per the WHO's statistics. In both diseases, the symptoms are a rash and fever. While measles has a high fatality rate, rubella infection in a pregnant woman will have an impact on the foetus, resulting in birth defects.

#### What happened in 2022?

From October 2022, an outbreak of measles in Maharashtra, particularly Mumbai, had the authorities worried. As per media reports at least 15 children died among several hundreds who contracted the infection. Coming at the cusp of a year in which India had a crucial target to achieve, it perturbed authorities.

Dr. Jacob John, noted virologist who heads the India Experts Advisory Group for eliminating MR, equates it to a phenomenon similar to COVID-19 infections catching up in China end of last year, since they had 'escaped the previous waves of infection.' "It is a similar phenomenon, because during the winter months of 2020 and 2021 (November to January when there is the usual spurt in cases of measles) there were no outbreaks," he said. The 2022 outbreak was like epidemiological compensation. However, experts aver that this outbreak will contribute to ramping up herd immunity in the population which along with a robust vaccination programme will help achieve the necessary targets.

#### What has India done to achieve targets?

Though the pandemic led to poor immunisation rates, in a paper, Progress Toward Measles and Rubella Elimination — India, 2005-2021, published on the CDC website, Ratnesh Murugan and others explain the paths the country had taken in getting to where it stands now. During 2010-





2013, India conducted a phased measles catch-up immunisation for children aged 9 months–10 years in 14 States, vaccinating approximately 119 million children.

Mission Indradhanush was launched in 2014 to ramp up vaccinating the unvaccinated population. During 2017–2021, India adopted a national strategic plan for measles and rubella elimination, and introduced rubella-containing vaccine (RCV) into the routine immunisation programme, besides launching a nationwide measles-rubella supplementary immunisation activity (SIA) catch-up campaign. It also transitioned from outbreak-based surveillance to case-based acute fever and rash surveillance, and more than doubled the number of laboratories in the measles-rubella network.

# NOROVIRUS CASES DETECTED IN KERALA: WHAT IS THIS VIRUS AND HOW DANGEROUS IS IT?

The Kerala Health Department on Monday (January 24) confirmed two cases of the gastrointestinal infection norovirus in class 1 students in Ernakulam district. The two samples were tested after 62 persons — students and their parents — developed symptoms such as diarrhoea, abdominal pain, vomiting, nausea, a high temperature, headache, and body aches.

#### What is norovirus and how common are infections?

Norovirus is not new; it has been circulating among humans for over 50 years and is thought to be one of the primary causes of gastroenteritis. The virus is estimated to kill 200,000 persons globally every year, with most deaths occurring among those below the age of five years and those over the age of 65 years.

The virus is capable of surviving low temperatures, and outbreaks tend to be more common during the winter and in colder countries — that is why it is sometimes referred to as "winter vomiting disease". The reported cases of norovirus had seen a decline in the United Kingdom during the pandemic, likely due to lax surveillance, but numbers have since picked up. A 48% higher incidence of reported cases than expected was reported by the UK Health Security Agency (UKHSA) in 2022.

A 2022 study published in the peer reviewed journal Viruses says that norovirus infections are more frequently detected in high income countries, with almost 40% cases being seen in long-term care facilities. In contrast, the cases in India have mostly been detected in settings like schools and hostels, where people share food.

# And what is the incidence of infection in India?

Cases of norovirus are not as common in India as in many other places — at the same time, the recent cases in Kerala are by no means unique or one-offs. The infection has been reported in previous years as well, mainly from Southern India, and especially from Kerala.

A 2016 study by Christian Medical College-Vellore that followed a birth cohort of 373 for three years, detected 1,856 diarrhoeal episodes and 147 vomiting episodes. The study said that norovirus was detected in 11.2% of the diarrhoeal episodes and 20.4% of the vomiting episodes.

A 2021 study from Hyderabad reported that norovirus was detected in 10.3% samples of children who came in with acute gastroenteritis.





Dr E Sreekumar, director of the Institute of Advanced Virology-Kerala, said that the reported cases of norovirus have been on the rise in recent years. "One of the reasons could well be that we were not looking for the virus previously. Now we have systems to detect not just this virus but several others."

Dr Sreekumar said his institute follows a syndromic approach to testing patient samples — making clinical decisions based on a patient's symptoms and signs — rather than testing for one viral infection that the treating doctor might suspect.

"We have a panel for detecting 83 different viruses. Instead of testing for, say, just Covid-19 or flu, we will test for 12 viral infections that can cause respiratory symptoms. Or, if the physician says that a person has gastrointestinal symptoms, we will run a panel for six or seven viruses. That is how we end up picking up cases of norovirus," Dr Sreekumar said.

If institutes started doing genomic sequencing of the samples, more viruses were likely to be detected, he added.

#### But why is the infection so common in Kerala, especially?

It probably has more to do with Kerala's strengths than any weaknesses. Dr Sreekumar said that the state has a strong public health system that is capable of picking up clusters of infection and getting them tested quickly.

#### Can norovirus infection cause a large-scale outbreak?

No. Even though more cases of norovirus are being detected, experts say that this is unlikely to lead to a large-scale outbreak. "Although we haven't studied the epidemiological co-relates of these cases, what we have seen is that the norovirus cases are sporadic and found in small clusters in schools or hostels where people consume the same foods. The spread of the infection is also self-limiting. It is an individual problem, not a public health one," Dr Sreekumar said.

# What are the symptoms and how to prevent its spread?

Norovirus leads to diarrhoea, vomiting, nausea, and abdominal pain. Being a diarrhoeal disease, it can lead to dehydration, so drinking plenty of fluids is recommended.

The infection can be transmitted through foods contaminated with the virus, touching surfaces that are contaminated with the virus and then touching the mouth, and being in direct contact with someone with the infection like taking care of them and sharing foods and utensils with them.

Good hand hygiene is the best way to prevent infection. Wash your hands with soap and water for 20 seconds. Hands sanitisers are thought to not work too well against norovirus. As the infection can be transmitted by foods, it is suggested that a sick person not prepare food for others. All food items should be carefully washed and cooked at high temperatures. The norovirus can survive temperatures as high as 60 degrees Celsius. Areas where a sick person has vomited or had diarrhoea should be cleaned using disinfectants or bleach.

#### RAMCHARITMANAS OF TULSIDAS, AND CRITICISM OF THE HOLY BOOK

On January 11, Bihar Education Minister Chandra Shekhar said the Ramcharitmanas "spreads hatred in society", and that Goswami Tulsidas's epic poem — along with the Manusmriti and M S Golwalkar's Bunch of Thoughts — should be burned.





"Why was Ramcharitmanas resisted, and which part of it was resisted? Lower castes were denied education, and the Ramcharitmanas says that once educated, lower-caste people become as poisonous as a snake," Shekhar said at the convocation ceremony of Nalanda Open University.

Days later, Samajwadi Party MLC and a former minister in UP governments led by the BJP and BSP, Swami Prasad Maurya, told a television channel: "Kai crore log isko (Ramcharitmanas) nahin padhte... Dharm ho, hum uska swagat karte hain. Par dharm ke naam par gaali kyon? Dalit ko, adivasiyon ko, pichhdon ko. Jaati lekar ke naam. Shudra keh kar ke, kyon gaali de rahe hain? (Crores of people don't read Ramcharitmanas. We welcome religion, but why abuse in the name of religion? Dalits, tribals, backwards, naming their castes, abusing them by calling them shudra?)"

#### The Ramcharitmanas

The poem was written in the 16th century in the Awadhi dialect that is mainly spoken in the areas that are today's Lucknow, Prayagraj, and Ayodhya districts. It is divided into seven chapters (Kand) that tell the story of Lord Ram from birth to his becoming King of Ayodhya.

The Ramcharitmanas is based on the Ramayana, sage Valmiki's great epic. It is the holiest book of the Indo-Gangetic region, and among the world's most read holy books — by one estimate, Geeta Press (Gorakhpur) has sold almost 7 crore copies. Across the Hindi heartland, a reference to "Ramayan" often actually means Ramcharitmanas.

#### Goswami Tulsidas

Tulsidas, a Brahmin whose original name was Ram Bola Dubey, is believed to have been born in Rajapur by the Yamuna in today's Banda district. He composed the Ramcharitmanas on the bank of the Ganga in Varanasi — he is said to have begun writing on Ram Navami day in 1574, and completed the poem over the next few years.

In the seventh shloka of the first chapter (Baal Kand), Tulsidas declares, "Swantah sukhay Tulsi Raghunathgatha..." — that is, he has written the "story of Raghunath (Lord Ram) for his own happiness".

Tulsidas lived in the time of Emperor Akbar, and some believe that he was in touch with Abdurrahim Khan-e-Khanan, the son of Akbar's commander Bairam Khan, and they possibly exchanged some poetic communication as well.

Tulsidas made the story of Lord Ram popular among the masses because he wrote in the regional dialect that most people understood. This earned him the ire of Sanskrit scholars of the time, and Tulsidas recorded his anguish in his Kavitawali: "...Kahoo ki beti son, beta n byahab, kahoo ki jaati bigad na sou...Maangi ke khaibo, maseet ke soibo, laibo ko eku na daibe ko dou... (I don't have to marry my son to anyone's daughter, nor do I have to degrade any caste... I can survive on alms and sleep at the mosque, I have nothing to do (with anyone)."

# Portions that are criticised

\* The main criticism is of a chaupai in Sundar Kand. Lord Ram is on the coast, but the Sea is refusing to make way. When the Lord threatens to dry the Sea out, he says, "...dhol ganwar shudra pashu naari (imbeciles, illiterates, shudras and women), sakal tadana ke adhikari." While the Geeta Press Ramcharitmanas (54th edition, 1997) translates "taadan" as "shiksha (education)", some critics say it means beating or reprimanding.





- \* In Uttar Kand, Kagbhushundi (the crow) tells Garuda, the king of birds: "Je barnadham teli kumhara, swapach kiraat koli kalwara, naari mui grih sampatti nashi, mood mudai hohin sanyasi (Lower castes like Teli, Kumhar, Chandal, Bheel, Kol and Kalwar, etc. become sanyasis by tonsuring their heads after their wife dies or they lose their wealth)."
- \* Later, Kagbhushundi says, "Adham jaati may shiksha paaye, bhayau jatha ahi doodh pilaye... (Educating a lower-caste person is like feeding milk to a snake)." This was the line that Bihar Minister Chandra Shekhar mentioned.
- \* In Aranya Kand, Lord Ram kills the demon Kabandh. When Kabandh mentions Durvasa, Lord Ram praises the sage: "Shapat, tadat parush kahanta, bipra pujya asi gavahin santa, pujiye bipra sheel gun heena, shudra na gun gan gyan praveena (Saints have said that a Brahmin should be respected even if his conduct is not good, and he curses, beats people, or speaks harshly; a Shudra cannot be respected even if he has good qualities and knowledge)."
- \* When Lord Ram reaches Lanka, Ravan's wife Mandodari tries to persuade her husband not to go to war. An angry Ravan then describes the eight "avgun (bad habits)" of women.

#### **Past controversies**

While in the Ramcharitmanas, Lord Ram is maryada purushottam, the epitome of righteousness, his conduct has been criticised by leaders of anti-Brahmin movements like E V Ramasamy Periyar.

One of the 22 pledges that Dr B R Ambedkar administered to his followers while embracing Buddhism in October 1956 was: "I shall have no faith in Rama and Krishna, who are believed to be incarnation of God, nor shall I worship them."

Non-upper caste assertion in politics has sometimes been manifested in criticism of the Ramcharitmanas. Critics have used these parts of the poem to accuse Tulsidas of being against the non-upper castes and women, and a flagbearer of the idea of Brahminical superiority.

In 1974, the Socialist Party MLA from Derapur (Kanpur), Chaudhary Rampal Singh Yadav, while participating in a discussion on empowerment of Dalits, tore pages from the Ramcharitmanas in the UP Assembly. Speaker Prof Vasudev Singh frowned at Yadav's behaviour against a "religious book", and said "every member should respect all religious books".

# ANDAMAN ISLANDS RENAMED: HONOURING SOLDIERS IN INVENTIVE WAYS

On January 23, the birth anniversary of Subhas Chandra Bose, 21 of the largest unnamed islands in the Andaman and Nicobar Islands were named after soldiers who have been awarded India's highest military honour, the Param Vir Chakra. Prime Minister Narendra Modi said the renaming conveyed a message about the "immortality of the sacrifices" that the soldiers of the Indian Army, all from different states, speaking different languages and dialects and leading different lifestyles had made, as they united "in the service of Maa Bharti". During an earlier visit of the Prime Minister to the Union Territory in 2018, Ross Island had been renamed Netaji Subhas Chandra Bose Island, and Neil Island and Havelock Island were, respectively, renamed Shaheed Dweep and Swaraj Dweep.

In his address on Monday, the Prime Minister invoked the image of the "sea that connects different islands" as a metaphor for the "feeling of 'Ek Bharat, Shreshtha Bharat'" that unites Indian citizens, including the soldiers who "dedicated themselves to national defence", many of them laying down





their lives in the process. With the renaming done in their honour, the islands have become more than just distant outposts of a vast country — they become a way of making those 21 soldiers a part of the very geography of this land, memorialised in earth and water. Thus it is that their stories — of Second Lieutenant Rama Raghoba Rane who, in the 1948 war with Pakistan, helped navigate a safe path for Indian tanks by crawling beneath one across a minefield; of Major Shaitan Singh who, despite grievous injury continued to motivate his men and fight the enemy in 1962 war; of Company Quartermaster Abdul Hamid who, in 1965, helped destroy several Pakistani tanks before succumbing to injuries; of Lance Naik Albert Ekka in taking down an enemy gunner in hand-to-hand combat in 1971; of Subedar Major (then Rifleman) Sanjay Kumar as he helped the Army capture Flat Top Point in the 1999 war — all are now an indelible part of the landscape of the nation.

Across the country and around the world, the sacrifices made by soldiers in the performance of their duties have been honoured in monuments and plaques. Memorials are built in stone, wood and metal, with the names of the fallen inscribed on them, their brave actions described and their sacrifices enumerated, as gestures of remembrance. The naming of 21 Indian islands after 21 soldiers is an imaginative new way of continuing this tradition.

#### AHOM BURIAL SITES TO VIE FOR UNESCO TAG

Centre chooses Assam's Charaideo Maidams from 52 sites across the country to be nominated for World Heritage Site status

The Centre has decided to nominate Assam's Charaideo Maidams — the Ahom equivalent of the ancient Egyptian pyramids — for the UNESCO World Heritage Site status this year.

"There is currently no World Heritage Site in the category of cultural heritage in the northeast. The dossier [to push for the case of the Charaideo Maidams] was prepared in collaboration with the Archaeological Survey of India," Assam Chief Minister Himanta Biswa Sarma said on Saturday.

Prime Minister Narendra Modi chose the Maidams, representing the late medieval (13th-19th century CE) mound burial tradition of the Tai Ahom community in Assam, from among 52 sites across the country seeking the World Heritage Site tag.

The Ahom rule lasted for about 600 years until the British annexed Assam in 1826. Charaideo, more than 400 km east of Guwahati, was the first capital of the Ahom dynasty founded by Chao Lung Siu-Ka-Pha in 1253.

Out of 386 Maidams or Moidams explored so far, 90 royal burials at Charaideo are the best preserved, making them showpieces of mound burial tradition of the Ahoms. The Charaideo Maidams enshrine the mortal remains of the members of the Ahom royalty, who used to be buried with their paraphernalia.

After the 18th century, the Ahom rulers adopted the Hindu method of cremation and began entombing the cremated bones and ashes in a Maidam at Charaideo.

"The nomination of the Charaideo Maidams has attained significance at a time when the country is celebrating the 400th birth anniversary of Lachit Barphukan," Mr. Sarma said. Lachit Barphukan was a legendary Ahom general who fought the Mughals in 1671.

PURI'S JAGANNATH TEMPLE: WHY NON-HINDUS AND FOREIGNERS CAN'T ENTER HERE



Odisha Governor Ganeshi Lal has backed the entry of foreign nationals inside the world-famous Jagannath Temple in Puri, wading into a debate that has lasted for decades and periodically triggered controversy.

"If a foreigner can meet Gajapati, servitors, and Jagatguru Shankaracharya, he/ she should also be allowed to meet eyes with the Chakanayana (a name of Lord Jagannath). It is my personal opinion irrespective of whether people will appreciate it or not," Governor Lal said at Utkal University in Bhubaneswar.

Servitors at the 12th-century shrine and researchers of Jagannath culture have expectedly opposed the suggestion, saying that the traditions and practices of the Temple should not be broken.

# The Jagannath Temple

The Temple is one of the four dhams (char dham) where Lord Jagannath, a form of Lord Vishnu, is worshipped along with his elder brother Lord Balabhadra and sister Devi Subhadra. Only Hindus are allowed inside the shrine to offer prayers to the sibling deities in the sanctum sanctorum. A sign at the Lion's Gate (main entrance) of the Temple clearly states: "Only Hindus are allowed."

# Why no non-Hindus?

It has been the practice for centuries — even though there is no clearly articulated reason for it. Some historians believe that multiple attacks on the Temple by Muslim rulers might have led the servitors to impose restrictions on the entry of non-Hindus. Others have said that this was the practice from the time the Temple was built.

# Patitapaban darshan

Lord Jagannath is also known as Patitabapan which literally means "saviour of the downtrodden". So all those who are barred from entering the Temple because of religious reasons get the privilege of a darshan of the Lord in the form of Patitapaban at the Lion's Gate.

#### When the Lord emerges

Jagannath, Lord of the Universe, comes to Bada Danda (the Grand Road) along with his siblings during the nine-day Rath Yatra (car festival) in June-July every year — an occasion when non-Hindus can have His darshan. As the deities go on a sojourn to the Gundicha temple, their birthplace, devotees from around the world throng Puri for a glimpse of the Lord.

# **Past controversies**

In 1984, the servitors famously opposed the entry of then Prime Minister Indira Gandhi inside the Temple, saying she had married a non-Hindu. The PM was forced to offer prayers from the Raghunandan Library nearby.

In November 2005, Thai Princess Maha Chakri Srinidhorn, who was on her maiden visit to Odisha, viewed the Temple from the outside because foreigners are not allowed. In 2006, Swiss citizen Elizabeth Jigler was denied entry because she was Christian, even though she had donated Rs 1.78 crore to the Temple.





In 2011, a proposal by Pyari Mohan Mohapatra, then adviser to Chief Minister Naveen Patnaik, supporting the entry of non-Hindus into the Temple to boost Odisha's tourism potential, triggered a major controversy. Mohapatra had to withdraw his statement.

# OF A BYGONE ERA: EXCAVATIONS REVEAL BUDDHIST MONASTERY COMPLEX AT BHARATPUR IN BENGAL

Recent excavations at Bharatpur in Paschim Bardhaman district of West Bengal have revealed the presence of a Buddhist monastery. The Kolkata Circle of the Archaeological Survey of India (ASI) started excavating the site in the second week of January and a structural complex of a monastery has now been partially exposed.

The site was initially excavated almost 50 years ago between 1972 and 1975 when archaeologists from the ASI and Burdwan University found a Buddhist stupa there. "The site had been left unexcavated for almost 50 years. We were looking at the cultural sequence of the stupa from where black and red ware pottery belonging to the Chalcolithic Age was also recovered. A Buddhist stupa cannot exist in isolation, and the recent excavations have revealed the presence of an extended monastery complex," said Shubha Majumder, Superintending Archaeologist at the ASI Kolkata Circle.

Mr. Majumder, who is supervising the excavations, said archaeologists would be able to ascertain more details about the monastery complex and its date of construction once the excavation progresses. "So far, we have exposed some structures which appear to be the outer wall of the monastery, containing nine layers of brick and a small circular structure, probably a stupa," he added.

#### Unique stupa

According to experts, what makes the site unique in terms of other Buddhist sites in the State is the presence of a large stupa, along with a monastery complex and black and red ware pottery, from the Chalcolithic or Copper Age. In other sites across West Bengal, such as Karnasubarna in Murshidabad, Moghalamari in Paschim Medinipur and Jagjivanpur in Malda, archaeologists have found only smaller votive stupas.

A Buddhist stupa is a commemorative monument usually housing sacred relics associated with the Buddha or other saints or priests, whereas votive stupas have similar significance but are smaller structures originating in eight cylindrical structures. When the site was excavated in the 1970s, archaeologists found black and red ware pottery associated with the Chalcolithic Age, which predates any Buddhist structures. "The excavation is likely to shed more light to understand the earliest occupation of the site and its continuity till the establishment of a Buddhist monastery," Mr. Majumder said.

#### **Early settlements**

Rupendra Kumar Chattopadhyay, former Professor at the Department of Archaeology, University of Calcutta, said the site was important for two main reasons: one, because it is an early village settlement on the bank of the Damodar river which could date to around 2000 BC; and two, the Buddhist monastery complex.

"So there are two significances to the site: one is secular which is an early village settlement, and second, religious, which is the Buddhist site," he said.





Professor Chattopadhyay said the site could have been a nucleus of an early village farming site from where sites radiated to other areas along the other bank of the Damodar and other rivers such as Ajoy and Darakeshwar.

Referring to other pre-historic sites in the region, Mr. Majumder said there were early village farming sites at Dihar and Pakhanna on the other bank of the Damodar in Bankura district. He said the excavation was an attempt to trace the cultural continuity of the site where settlements could have been located for thousands of years.

#### **Sculptures found**

In the 1970s when the site was excavated along with the stupa, five beautiful seated sculptures of the Buddha in Bhumisparsha Mudra — with all five fingers of the right hand extended to touch the ground — were found. These miniature sculptures, each about 30 cm in height, were most likely used for worship in the monastery.

Professor Chattopadhyay and Dr. Majumder said that almost all the Buddhist sites have been found in the Rarh Bengal region, which is the south-western part of the State. The excavation at Bharatpur, also in the same region, has the potential to reveal interesting aspects about the extension of Buddhism in the region.

#### UNDERSTANDING KERALA'S MAN-ELEPHANT CONFLICT

On Sunday, the Kerala forest department captured a rogue tusker that had been raiding villages in Palakkad district for over a year. Another had been sedated on January 9; this one had attacked a person in Sulthan Bathery in Wayanad. And demands are getting louder for capturing an elephant that has responded to overenthusiastic tourists in Munnar by thwacking a few vehicles since December.

# Kerala not the worst

Yet, the magnitude of Kerala's human-elephant conflict — projected as acute enough to trigger even political agitations — is not commensurate with the state's relative abundance of wild jumbos.

Of the estimated nationwide population of 30,000 wild elephants in 2017, Kerala had about 5,700, or 19%. Between 2018-19 and 2021-22, elephants killed 2,036 people in India, data collected by the central government show. Kerala accounted for only 81 (4%) of these deaths. (Field data add up to 92 deaths.)

Clearly, the conflict in Kerala is not comparable to the situation in, say, North Bengal or Odisha, where smaller jumbo populations are blamed for much bigger human casualties. But Kerala has seen a relative spike in the conflict in recent years. In 2021-22, the number of human deaths scaled a new high of 35.

# Managing perception

Assessment of Kerala's jumbo conflict depends on who one asks — the tribal populations of the Western Ghats, or the settlers who came there from the central and southern parts of the state.

"Kerala has a history of settler-agriculture since pre-Independence days, and state policy continues to allow such migration. The tribal and the elephant are seldom in conflict, but their





ways are alien to the settler who must outcompete both to gain control of the land. Their (settlers') panic at the so-called conflict is often just optics," said a sociologist who has worked in the Wayanad hills.

In places like Munnar, conflict tourism has become popular. "An elephant on the road is neither an imminent threat nor an idle curiosity. All one needs to do is keep calm and allow it space. But people blow horns impatiently and try to drive the animal away. Tourists crowd around, and even approach (the elephant) on foot for selfies. The moment the animal decides it has had enough, it becomes a 'marauder' or a 'terror' in the media," veteran wildlife crime investigator Jose Louise said.

Experts underline that simply altering how people perceive elephants can make their interaction a lot safer. However, they agree that on rare occasions, elephants can go rogue, with or without provocation.

# Big boys on the loose

As a fraction of all encounters with elephants, the chances of coming across a rogue animal increase with the number of bull elephants roaming outside the forest. That number is on the rise in Kerala.

Elephants have traditionally preferred Kerala's moisture-rich forests, where they move in from adjoining Tamil Nadu, particularly during the summer months. In recent years, this concentration of wild elephant populations in Kerala has exhibited a significant number of young bulls.

"Over the last two decades, the sex ratio in southern elephant populations, particularly those north of the Palghat gap, has recovered from the onslaught of ivory poachers who ruled these forests and selectively took out tuskers in the 1980s and '90s," ecologist Raman Sukumar, who has been working on Asian elephants since the late 1970s, pointed out.

In the matriarchal elephant society, bulls leave the natal herd after the onset of puberty between the ages of 14 and 16 years, and join what are known as boys' groups to explore new foraging areas under the tutelage of older bulls. Many of them must step out of Kerala's elephant forests — which are getting increasingly infested by exotic invasive weeds such as Lantana and Senna, leading to a loss of natural forest feed, especially in the swamp areas.

#### Tackling the rogues

Within the male social order, the training of the young bulls continues as they emerge as mature males after getting musth — a secretion from the head signifying a burst of reproductive hormones for 2-3 months a year — that makes them easily irritable and aggressive, but not necessarily a threat to humans.

However, a bull showing habitual aggression towards people and posing a threat to life and property requires prompt intervention. Provoked by human callousness or not, such rogue behaviour may potentially set the standard for other young bulls to emulate and quickly exacerbate conflict, experts say.

"Welfare of individual animals is a valid concern but not isolating a rogue bull in time puts at risk the future of other bulls in the area. Our experience shows that sparing the brat can spoil the batch," a retired forest officer said.





#### Saving a success story

Elephants are far-ranging animals. Most often, fragmentation of habitats and corridors due to legal and illegal changes in land use — clearances for mining, or encroachment for agriculture — squeeze the jumbos and fuel conflict. In Kerala, fortunately, the frontiers between the wilderness and civilisation have remained largely unaltered in recent years.

Changes in agricultural practices in cropland adjoining forests also lure herbivores, including elephants, into conflict. But while elephants do target paddy, banana or tapioca in Kerala's villages, they have little interest in coffee, pepper or tea — the dominant crops in the plantations.

These factors have contributed to the success of elephant conservation in Kerala and helped limit conflict, otherwise an inevitable cost of such success. Significantly, Kerala recorded only 14 of the 251 elephants (5.6%) that India lost to electrocution and poaching between 2018-19 and 2020-21.

Proactive perception management and stricter enforcement by the state can ease the pressure on jumbos. Also, say experts, a pragmatic policy for problem elephants needs to recognise that zoos and temples are no place for these magnificent animals — and packing them into rescue centres is an untenable drain on resources in the long run. They are best absorbed in forest workforces for patrolling and conflict management.

# TIGER SAFARI IN CORBETT RESERVE: SC PANEL SLAMS FORMER MINISTER, POLICY

THE SUPREME Court's Central Empowered Committee (CEC) has held Uttarakhand's former Forest Minister Harak Singh Rawat "largely responsible for the mess" of illegal construction activities inside the Corbett tiger reserve and blamed the National Tiger Conservation Authority (NTCA) for "serious flaws" in policy that allow zoo tigers to be sourced for safaris within such reserves.

The Committee's findings are part of the report it submitted to the Supreme Court Tuesday on alleged illegalities in tree felling and construction work in setting up a tiger safari facility, meant to display captive tigers for tourists, inside the Corbett reserve.

Faulting the NTCA for revising its 2016 guideline in 2019 to allow tigers from zoos and other safaris be brought to stock safaris inside tiger reserves, the CEC report said such practices were "bound to endanger" wild tigers since zoo animals often harbour deadly diseases.

In the report, the CEC sought an <mark>amendment or w</mark>ithdrawal of NTCA guidelines that allow locating tiger safaris within buffer and fringe areas of tiger reserves.

The report's other recommendations include:

- \* Central Zoo Authority should stop approving zoos and safaris within tiger reserves, wildlife sanctuaries, national parks, and along animal corridors and dispersal routes.
- \* Environment Ministry should amend its guidelines to discourage the use of wildlife habitat for wildlife tourism activities that are non-site specific, such as zoos.
- \* Uttarakhand government should demolish all construction done for the tiger safari inside the Corbett reserve, barring the minimum facilities required for running an animal rescue centre an off-display facility not meant for tourists.





Concluding that "the sequence of events leads to only one conclusion that the then forest minister was the main architect of the entire matter," the CEC report also recommended appropriate action after hearing Harak Singh Rawat.

"(Rawat) had got Kishan Chand DFO, with a dubious past, posted to Kalagarh Forest Division (of Corbett tiger reserve) without any recommendation from CSB or the Forest Department with the objective to develop (his) constituency (Kotdwar) as a tourist destination at the cost of forest and wildlife. It is most unfortunate that all the senior functionaries of... the state government preferred to remain mute spectators to the glaring irregularities," the report said.

In December 2021, The Indian Express had reported on Uttarakhand's construction spree worth at least Rs 157 crore — six times the approved project cost — without legal, administrative or financial sanction.

The unapproved work included 18 buildings with at least 60 rooms with attached baths at four locations around the proposed tiger safari; creation of a water body, requiring felling of trees, to attract wildlife for tourists; and, reinforcement of a forest road with provisions to widen it as a highway.

Asked at the time why the approvals were not taken, Rawat, who was then the state's Forest Minister, had told The Indian Express: "Who gives these approvals? The government only, no? Modi-ji announced the tiger safari. The state and the Centre are working on it together. Maybe there are certain technical issues due to internal differences among some officials but ultimately tourism will benefit our people whose support is important for conservation."

#### CHEETAH PROJECT TO BRING IN 12 BIG CATS FROM SOUTH AFRICA

Both countries sign a long-pending agreement that will allow for the translocation of 12 cheetahs to Madhya Pradesh's Kuno National Park; SA to send more batches for the next 8-10 years

India and South Africa have finally signed a long-pending agreement to translocate 12 cheetahs to India, the Environment Ministry said in a statement on Friday.

The cheetahs will be transported to India by February-end and reintroduced at the Kuno National Park in Madhya Pradesh, where eight such cats were brought from Namibia in September last year under a similar agreement.

The initial batch of cheetahs from South Africa will be followed by transport of batches of 12 annually for the next "eight to 10 years", the Ministry added.

"A batch of animals has been under quarantine and ready to travel. A team from India will go to South Africa, choose the animals to be brought and accompany them. In India, our enclosures to host the animals are ready," S.P. Yadav, Director, National Tiger Conservation Authority, and a key official involved with the translocation project, told The Hindu.

"The Memorandum of Understanding on Reintroduction of Cheetah to India facilitates cooperation between the parties to establish a viable and secure cheetah population in India; promotes conservation and ensures that expertise is shared and exchanged, and capacity built, to promote cheetah conservation," the Ministry said.

The cheetahs from South Africa were expected to arrive in India last year but were delayed as a final deal had been held up, The Hindu reported in August.





In December, the Press Trust of India reported that a dozen cheetahs quarantined in South Africa for more than four months "had lost their fitness" in their wait to be flown to the Kuno National Park. Eight cheetahs, including five females, were flown from Windhoek, Namibia to Gwalior, followed by a helicopter ride to the grasslands of Kuno Palpur last September. They were released into dedicated enclosures by Prime Minister Narendra Modi. Thereafter, five of the cheetahs began hunting on their own and have largely adapted to the local environment.

#### WOMEN'S PREMIER LEAGUE: SHATTERING MYTHS ABOUT WOMEN'S SPORTS

Even before a single ball has been bowled in the Women's Premier League, it has debunked an age-old myth — the perception that there would be few buyers for the franchises. The five franchises were auctioned, after intense bidding, for Rs 4,666.9 crore, the broadcast deal was sold for Rs 961 crore. In a few weeks, the best women players in the world would get signed up for astronomical sums, the salary cap has been fixed at Rs 12 crore, almost 10 times as much as BBL's, the only other T20 franchise league for women in the world.

No other tournament — neither BBL nor the World Cup — contains the potential to burnish women's cricket as much as the WPL. Even after the recent attention the sport had garnered, with the Indian cricket board levelling up the wages of both men and women cricketers, the sport has remained an outlier. The WPL could potentially change that because it would spread the pool of players. Eighteen players would comprise each team, with a maximum of six overseas players in the squad. That means 12 of them would be domestic players. So the League would naturally launch the platform for a wider spectrum of cricketers, at least 60, as opposed to the national team, wherein 20-25 players form the crux. The diligent scouts would ensure that talent would not go unspotted, the net could be cast wide and long.

More players in the forefront means more talent and competition, and potentially more tournaments at the local level. Many more women would begin to dream of embracing cricket as a livelihood. Almost every bowler in the team, across formats, is an IPL product. Take Jasprit Bumrah. The fast bowler's immeasurable talents would have gone unnoticed but for Mumbai Indians' scouts who spotted him. Like the IPL, the WPL could be a game-changer too.

# MURMURS IN SANGH OVER HIGH HONOUR FOR MULAYAM SINGH

The Padma awards announced on Wednesday underlined, once again, the Modi government's consistent trend of choosing political leaders ideologically opposed to the BJP in the Republic Day honours, be it Bharat Ratna for former President Pranab Mukherjee or Padma Bhushan for former Assam Chief Minister Tarun Gogoi. But Padma Vibhushan for Mulayam Singh this year seems to have created discomfort among some in the ideological spectrum of the BJP.

As soon as the socialist leader's name was announced, social media supporters of the government and the BJP expressed displeasure, saying Mulayam, as Uttar Pradesh Chief Minister, ordered police firing on Kar Sevaks in the aftermath of the Ram Rath Yatra in Ayodhya on November 2, 1990.

The firing led to the death of many Kar Sevaks, with official reports putting the number at 16, which is disputed by those involved in the movement.





The family members of Ram Kumar Kothari and Sharad Kumar, known as the "Kothari brothers" who were killed in the firing, were among the 175 people invited for the bhoomi poojan of the under-construction Ram Temple in Ayodhya in 2020.

However, Mulayam was also instrumental in bailing out the BJP at key junctures, as when then Congress president Sonia Gandhi in 1999 tried to form a government and said the famous phrase "we have 272" (the majority number in Parliament) only to have him switch sides, or in 2002, when he offered support to the National Democratic Alliance's Presidential candidate, A.P.J. Abdul Kalam.

It is perhaps this history between the two parties, BJP and Samajwadi Party, as also the fact that the BJP under Prime Minister Narendra Modi commands the support of several communities which earlier were under the Mandal umbrella, especially in Uttar Pradesh, that led to the choice of Mulayam.

Mr. Modi, in his condolence message when Mulayam passed away, said he was a "key soldier" for democracy during the Emergency, and as Defence Minister, he worked for a stronger India.



# DreamIAS



# **BUSINESS & ECONOMICS**

# HAS THE WORLD DODGED RECESSION? REASONS FOR HOPE, CAUTION

Last year was terrible for the global economy. By the time 2022 came to a close, observers across the world believed that several key economies would witness a recession in 2023.

But by the time the most influential policymakers, CEOs and economists met at the World Economic Forum (WEF) in Davos earlier this month, the mood had started to shift.

There is a growing sense that a global recession may not happen, and that some of the biggest economies, such as the US and the Euro-zone countries, may achieve a soft-landing.

# What was the picture before WEF?

Between 2020 and 2021, governments and central banks across the world, especially in the richer developed countries, had used a loose fiscal policy (governments spending lots of money) and loose monetary policy (cheaper credit/loans) to contain the economic downturn during Covid. This policy prescription had not only set the world economy up for a period of elevated inflation, but also made it more vulnerable to unexpected supply shocks.

This shock came early in 2022 when Russia invaded Ukraine. The invasion disrupted global supply chains, which had barely recovered from the Covid-induced lockdowns, and spiked commodity (crude oil, fertilisers and foodgrains) prices so sharply that the whole world witnessed historic surges of inflation.

This, in turn, forced central banks to rapidly raise interest rates in a bid to contain inflation by dragging down overall demand. Governments, on their part, pulled back excess spending.

But these policy u-turns essentially meant that economic growth would plummet across the board. With lower growth, it was expected that unemployment would also rise.

Unsurprisingly, all manners of growth forecast were revised down right through 2022. The International Monetary Fund's World Economic Outlook (WEO), the benchmark for such forecasts, downgraded global growth outlook thrice during 2022.

In the last WEO published in October, the IMF warned the following: "More than a third of the global economy will contract this year or next, while the three largest economies—the United States, the European Union, and China—will continue to stall. In short, the worst is yet to come, and for many people 2023 will feel like a recession."

# What changed?

The WEF had a panel discussion on global economic growth outlook moderated by a CNBC anchor, who said the following in a bid to capture the sentiment at the end of the summit: "Investors and CEOs are increasingly bullish but they are not optimistic."

What explains this contradiction was the answer by IMF's Managing Director Kristalina Georgieva in the same discussion.

"It (global economic growth outlook) is less bad than we feared two months ago but 'less bad' doesn't quite mean 'good'."





She further listed four factors that led to such an assessment.

First, the world over, inflation has fallen off its historic peak and is consistently trending downwards.

Two, China, the world's second largest economy, has seen its growth prospects improve. In 2022, thanks to its Zero Covid policy, China's growth rate fell below the global average growth rate — the first time in 40 years. However, with China opening to business, its economy is expected to rebound and, in the process, boost global growth.

Three, it was widely expected that as central banks raised interest rates, unemployment levels would rise in the developed countries. But this has not happened to the extent policymakers and economists apprehended. In fact, the developed countries continue to enjoy historically low levels of unemployment.

The fourth and closely related factor is the sustained consumer demand. Georgieva said the strength of labour markets (read low levels of unemployment) in countries such as the US has kept consumer demand robust.

Larry Summers, former Secretary of US Treasury and currently President Emeritus at Harvard, explained the change in sentiment more succinctly: "We are experiencing some exhilaration of relief in Davos".

"Hyper populists have lost elections, Europe has not frozen, recession hasn't come, China has adjusted its policies and inflation has decelerated. Those are the reasons why we all feel better now than a few months ago," said Summers.

#### Will the world avoid recession?

A more exact answer will be available on January 31, when the IMF provides its next WEO update. But as things stand, policymakers are advising caution.

"Relief must not become complacency," warned Summers. In his view, inflation was down because of the same transitory factors that contributed to its spike.

"The greatest tragedy would be if central banks were to lurch away from a focus on assuring price stability prematurely and we were to have to fight this battle twice," said Summers.

Georgieva outlined three key factors that could deflate the fledgling confidence.

One, it is unclear whether inflation will continue to trend downwards. For instance, China's likely recovery, being seen as a positive factor, could also imply higher prices for crude oil and gas, pushing up inflation across the board. Energy prices remain high as it is.

Two, while labour markets have held up well until now, given the fact that central banks are not yet done with raising rates, it is quite possible that higher interest rates will finally begin to bite and lead to more unemployment. Dealing with the cost of living crisis in developed countries with historically low unemployment is one thing, but if there are widespread job losses, consumption will fall rapidly and with it, economic growth.

Lastly, the fact is that the Ukraine conflict is still unresolved and as such, continues to pose a risk for investors across the world.





# SOVEREIGN GREEN BONDS: WHAT DO THEY MEAN FOR INVESTORS, AND THE ENVIRONMENT?

The Reserve Bank of India (RBI) will auction maiden sovereign green bonds (SGrBs) worth Rs 8,000 crore on Wednesday. This is part of the Rs 16,000 crore Sovereign Green Bond auction that the RBI will conduct in the current financial year. The second green bond auction will be conducted on February 9.

#### What are Green Bonds?

Green bonds are bonds issued by any sovereign entity, inter-governmental groups or alliances and corporates with the aim that the proceeds of the bonds are utilised for projects classified as environmentally sustainable. The framework for the sovereign green bond was issued by the government on November 9, 2022.

#### Which green bonds are up for auction today?

The RBI is auctioning two green bonds with tenures of 5 and 10 years, worth Rs 4,000 crore each. The two bonds to be auctioned today are New GOI SGrB 2028 and New GOI SGrB 2033.

#### Why are these bonds important?

Over the last few years, Green Bonds have emerged as an important financial instrument to deal with the threats of climate change and related challenges. According to the International Finance Corporation (IFC), a World Bank Group's institution, climate change threatens communities and economies, and it poses risks for agriculture, food, and water supplies.

A lot of financing is needed to address these challenges. It's critical to connect environmental projects with capital markets and investors and channel capital towards sustainable development – and Green Bonds are a way to make that connection.

#### How beneficial is it for investors?

Green Bonds offer investors a platform to engage in good practices, influencing the business strategy of bond issuers. They provide a means to hedge against climate change risks while achieving at least similar, if not better, returns on their investment. In this way, the growth in Green Bonds and green finance also indirectly works to disincentivise high carbon-emitting projects, as per the IFC.

# When did the Govt plan these bonds?

In August last year, the government said it stands committed to reducing Emissions Intensity of GDP by 45 per cent from the 2005 level by 2030, and achieving about 50 per cent cumulative electric power installed capacity from non-fossil fuel-based energy resources by the same year.

In line with the commitment to significantly reduce the carbon intensity of the economy, the Union Budget 2022-23 made an announcement to issue Sovereign Green Bonds.

The country's climate actions have so far been largely financed from domestic resources and it is now targeting the generation of additional global financial resources. The issuance of the Sovereign Green Bonds will help the Indian government in tapping the requisite finance from



potential investors for deployment in public sector projects aimed at reducing the carbon intensity of the economy.

Where will the proceeds go?

The government will use the proceeds raised from SGrBs to finance or refinance expenditure (in parts or whole) for various green projects, including renewable energy, clean transportation, energy efficiency, climate change adaptation, sustainable water and waste management, pollution and prevention control and green buildings. In renewable energy, investments will be made in solar, wind, biomass and hydropower energy projects.

# BANKS MAY RAISE DEPOSIT RATES TO COMPETE WITH SMALL SAVINGS: RBI

Returns for the Oct.-Dec. 2022 quarter were 44-77 bps lower than the formula-determined rates, the RBI said in its October bulletin, though it doesn't share details in its latest release on exactly how the revised rates square up with the formula

The rate increases on some small savings schemes for this quarter could make it tougher for banks to raise deposits and compel them to lift rates, the Reserve Bank of India (RBI) said.

For the January-March 2023 quarter, the government has raised interest rates on eight of 12 small savings instruments, including a minimal 20 basis points (bps) increase for the National Savings Certificate and Kisan Vikas Patra and a 110 bps higher return on one-, two- and three- year time deposits. One basis point equals 0.01%.

Returns on the Public Provident Fund and the Sukanya Samriddhi Account scheme were left unchanged at 7.1% and 7.6%, prevalent since April 2020. Interest rates on small savings schemes are fixed on a quarterly basis with a spread of 0-100 bps over and above the yields on government securities of comparable maturities.

The returns for the October-December 2022 quarter were 44-77 bps lower than the formula-determined rates, the RBI had said in its October bulletin.

The PPF and the Sukanya Samriddhi scheme should have earned 7.72% and 8.22%, respectively, in the previous quarter, the central bank said.

# No data for comparison

Though the RBI has not elaborated on how the revised small savings rates square up with the formula-based returns in its latest bulletin, the central bank reiterated concerns about the implication of the increase for banks.

"The increase in rates on small savings schemes may pose competition to banks for raising deposits, and banks may be prompted to further increase retail deposit rates," it observed.

# NARCL ACQUIRES FIRST STRESSED ACCOUNT FROM IDBI BANK-LED LENDERS

After a much delay, lenders, led by IDBI Bank, have transferred the first large stressed account to the National Asset Reconstruction Company (NARCL), last week.





The bad loan transferred to NARCL, or bad bank, is Jaypee Infratech, which was among the 12 large accounts referred by the Reserve Bank of India (RBI) to the National Company Law tribunal (NCLT) in 2017.

"Previous Friday, one account has already been done (transferred to NARCL). We were the lead bank in this account," IDBI Bank Managing Director and CEO Rakesh Sharma said on Monday.

The bank's recovery in the account is close to 45 per cent.

While the total exposure of all the banks to Jaypee Infratech was over Rs 9,000 crore, IDBI Bank's exposure was Rs 3,750 crore.

Sharma said the bank in total had identified Rs 10,000-11,000 crore of bad loans, including JP Infratech, to transfer to NARCL. In the quarter ended December 2022, the bank's gross NPA declined to 13.82 per cent from 21.68 per cent.

He said the bank expects an overall reduction of 4 per cent in GNPAs once all the identified accounts are transferred to NARCL.

The transfer of Jaypee Infratech alone will bring down the GNPA ratio by 2.2 per cent, Sharma said.

Finance Minister Nirmala Sitharaman, in the Budget 2021-22, had announced the setting up of a bad bank as part of the resolution of stressed loans in the banking system.

NARCL will acquire assets on a 15:85 ratio of cash and security receipts (SRs).

SRs, which are issued in favour of the transferring lenders, are secured by government guarantee for its face value.

In the same quarter, IDBI Bank's net profit jumped by 60 per cent to Rs 927 crore from Rs 578 crore in the year-ago period.

The rise in profit was driven by net interest income,increasing by 23 per cent to Rs 2,925 crore from Rs 2,383 crore in the third quarter of the previous fiscal.

# BANK LOCKER AGREEMENTS: WHY DID RBI EXTEND THE DEADLINE?

In a major relief to customers, the Reserve Bank of India (RBI) on Monday extended the deadline for banks to complete the process of renewal of agreements for existing safe deposit lockers/safe custody article facilities in a phased manner till December 31, 2023, from an earlier deadline of January 1, 2023.

The RBI has also asked the Indian Banks Association (IBA) to review the model locker agreement and send it to banks by February 28, 2023.

#### By when can customers renew their existing agreements?

RBI has extended the deadline for banks to renew locker agreements with existing locker customers in a phased manner to December 31, 2023. The central bank has asked banks to inform all their existing locker customers about the renewal requirement by April 30, 2023. Banks will have to ensure that at least 50 per cent of their existing locker customers have renewed agreements by June 30 and 75 per cent by September 30, 2023.





#### How will banks aid customers?

The RBI has advised banks to facilitate execution of the fresh/supplementary stamped agreements by taking measures such as arranging stamp papers, franking, electronic execution of agreements and e-stamping, among others. Lenders will provide a copy of the executed agreement to customers.

# Why did the RBI extend the timeline?

In August 2021, the RBI, in a circular, directed banks to renew these agreements by January 1, 2023. However, in a recent review, the RBI found that a large number of customers were unable to renew locker agreements and were having difficulties in executing the same.

In many cases, banks did not inform customers about the need to renew locker agreements before January 1, 2023. The deadline has also been extended as the RBI was of the opinion that the model agreement drafted by the IBA needs a revision to fully comply with the revised instructions issued in August 2021.

# What happens to customers whose locker operations have been frozen?

In the absence of the execution of revised locker agreements by January 1, 2023, a few banks had frozen locker operations of some customers. RBI has asked banks to lift the restrictions on such lockers on an immediate basis.

#### EMPLOYMENT DAYS UNDER MGNREGS AT A FIVE-YEAR LOW

The average days of employment provided per household under the Mahatma Gandhi National Employment Guarantee Scheme (MGNREGS) is at a five-year low, this financial year.

As on Friday, the average days of employment provided per household is 42 days, while it was 50 days in 2021-22, 52 days in 2020-21, 48 days in 2019-20 and 51 days in 2018-19.

According to officials, there has been a decline in demand for jobs under the scheme this financial year as opposed to the two pandemic years, when a significant population depended on MGNREGS to make up for the deficit in their income created by job loss.

Academics and activists, however, do not buy this argument and allege that the programme has been plagued by systemic problems that is disincentivising participation.

# **Technical complexities**

"Choking of funds has led to suppression of work demand and delays in wage payments. It is most likely that such supply constraints have led to workers getting routinely discouraged from doing NREGA work. The introduction of unnecessary technical complexities like an app for attendance at worksites has caused more hardships for workers who will be more dissuaded going forward," Rajendran Narayanan, who teaches at Azim Premji University, explained.

Making the situation more bleak is the low utilisation of person days by several States. With less than two-months for the financial year to close, there are at least nine States and union territories which have utilised less than 70% of projected person days.

Person days under MGNREGS is defined as the total number of work days by a person registered under the scheme in a financial year. As per the statistics available till Friday, the errant States

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





and Union Territories s are: Arunachal Pradesh (63.92%), Chhattisgarh (61.60%), Goa (18.03%), Haryana (59.91%), Manipur (14. 52%), Meghalaya (55.65%), Andaman Nicobar (26. 84%), Daman & Diu (0%) and Lakshadweep (33.63%).

#### Sub-par performance

Other than Daman and Diu which was allotted a miniscule 1 lakh person days, Manipur is at the bottom of the pile having utilised only 14.52% of its projected 2.5 crore person days.

"The State's performance in this financial year has been particularly bad, from the statistics available with us. Because of financial mismanagement, wages have also been delayed for 3-4 months," a senior Rural Development Ministry official said.

Many activists point out that the performance of Chhattisgarh and Meghalaya in this financial year is also particularly worrying as the two States have had a strong record in the previous years.

With low utilisation, financial outlay for the underperforming States is expected to further shrink in the upcoming financial year.

Though the MNREG Act clearly states that it is a demand-driven programme which requires a bottom-up approach, more often than not the labour Budget put up by States is trimmed by the Centre without giving any cogent explanation.

"For the programme to run effectively and for the workers to get their legal dues, the allocation should minimally be ₹2 lakh crore," Mr. Narayanan said.

# NINE OUT OF 10 TRADERS INCUR LOSS IN EQUITY F&O

MUMBAI: Investors looking to make quick money from stock market without proper knowledge have burnt their fingers by losing their hard-earned money. Nine out of 10 individual traders in equity Futures and Options (F&O) segment incurred losses in financial year 2022, showed a study conducted by the Securities and Exchange Board of India (Sebi). Only a handful people made money as the top 1% of traders cornered 51% of the total profits during the financial year 2022.

#### CO-LOCATION CASE: SAT SETS SEBI'S PAYBACK ORDER ASIDE

The Securities Appellate Tribunal (SAT) on Monday set aside the Securities and Exchange Board of India's (SEBI) Rs 625 crore disgorgement order against the National Securities Exchange (NSE), its ex-CEOs Chitra Ramkrishna and Ravi Narain, in the co-location scam.

In its order, SAT pulled up the market regulator, asking, "how SEBI directed NSE to conduct an investigation against itself."

The tribunal also directed NSE to deposit Rs 100 crore to the Investor Protection and Education Fund (IPEF) created by the SEBI. The amount will be adjusted by the capital markets regulator from the deposits already made by NSE in 2019 and 2021, the order read.

"The excess amount along with interest accrued shall be refunded by the SEBI within six weeks," the tribunal said.

"The direction to disgorge 25 per cent of the salary from Ravi Narain and Chitra Ramkrishna is set aside. The direction prohibiting Narain and Ramkrishna from associating with any listed company



or a market infrastructure institution or any other market intermediary for a period of five years is set aside and substituted for the period undergone by them," SAT said.

"In our opinion, considering the gravity of the alleged charges, SEBI should have itself conducted an investigation/enquiry instead of delegating it to NSE to conduct an investigation," SAT said. "It is strange and it does not stand to reason as to how SEBI directed NSE to conduct an investigation against itself. It is clear that a casual approach was adopted," SAT said.

The co-location scam refers to giving preferential access to NSE's trading platform to highfrequency traders and brokers.

The tribunal said violations committed by OPG as found by SEBI is affirmed. However, the direction of the markets regulator directing OPG and its directors to disgorge Rs.15.57 crore along with interest at the rate of 12 per cent from April 7, 2014 onwards is set aside.

The matter, SAT order said, is remitted to SEBI to decide the quantum of disgorgement afresh. It gave four months' time to the market regulator for calculation.

#### ADDITIONAL TIER-1 BONDS, AND THE CASE AGAINST YES BANK

The Bombay High Court Friday quashed the write-off of Additional Tier-1 (AT1) bonds worth Rs 8,400 crore issued by Yes Bank Ltd, bringing relief to investors.

#### What are AT1 bonds?

AT1 bonds are unsecured bonds that have perpetual tenor. In other words, these bonds, issued by banks, have no maturity date. They have a call option, which can be used by the banks to buy these bonds back from investors. These bonds are typically used by banks to bolster their core or tier-1 capital.

AT1 bonds are subordinate to all other debt and only senior to common equity. Mutual funds (MFs) were among the largest investors in perpetual debt instruments.

#### What led to the write-off?

Yes Bank, which was on the verge of collapse, was placed under a moratorium by the Reserve Bank of India in March 2020 and a new management and board were appointed as part of a rescue plan worked out by the RBI. The central bank allowed a write-off of Rs 8,400 crore on AT1 bonds issued by Yes Bank after it was rescued by the State Bank of India.

#### What did Yes Bank do?

A Sebi probe found that the bank facilitated the selling of AT1 bonds from institutional investors to individual investors. It found that during the process of selling the AT1 bonds, individual investors were not informed about all the risks involved in the subscription of these bonds. The Sebi investigation also found that Yes Bank represented these bonds as a 'Super FD' and 'as safe as FD' to the investors.

SEBI also found that the push from the managing director of Yes Bank to down-sell the AT1 bonds led its private wealth management team to recklessly sell the bonds to individual investors.





# WHAT IS HINDENBURG RESEARCH, THE COMPANY THAT HAS ACCUSED ADANI GROUP OF STOCK MANIPULATION, FRAUD?

Days ahead of a \$2.5 billion share offering by Adani Enterprises, stocks of Adani Group companies fell sharply on Wednesday after investment research firm Hindenburg Research published a report that it said presented evidence that the conglomerate had "engaged in a brazen stock manipulation and accounting fraud scheme over the course of decades".

Hindenburg, which has short positions in Adani companies through US-traded bonds and non-Indian-traded derivative instruments, said key listed companies in the group had "substantial debt" which has put the entire group on a "precarious financial footing", Reuters reported.

Jugeshinder Singh, Chief Financial Officer of the Adani Group, said the company was shocked by the report, Reuters said, and called it a "malicious combination of selective misinformation and stale, baseless and discredited allegations".

# What does Hindenburg Research do?

Hindenburg Research says on its website that the company specialises in forensic financial research. It says it has decades of experience in the investment management industry, "with a historical focus on equity, credit, and derivatives analysis".

The company says it believes that "the most impactful research results from uncovering hard-tofind information from atypical sources", and that it especially looks for "accounting irregularities; bad actors in management or key service provider roles; undisclosed related-party transactions; illegal/ unethical business or financial reporting practices; and undisclosed regulatory, product, or financial issues" in companies.

#### Who are the people behind the company?

Hindenburg Research LLC was founded by Nathan (Nate) Anderson, 38, who studied international business management at the University of Connecticut and lived in Jerusalem before returning to the United States where he took a consulting job with a financial software company called FactSet and then at broker dealer firms in Washington DC and New York, according to a profile of the man published in the Financial Times in June 2021.

# THE ROUT IN ADANI GROUP SHARES AFTER A SHORT-SELLER REPORT CALLS FOR MORE SCRUTINY AND TRANSPARENCY

Following the sharp sell-off on Wednesday, shares of all listed Adani Group companies came under acute pressure on Friday as well. At the close of markets, Adani Enterprises, the flagship entity of the group, was down around 18 per cent. Adani Transmission has fallen 20 per cent, as have Adani Total Gas and Adani Green Energy. Adani Ports was down 16 per cent, while Adani Power and Adani Wilmar were down 5 per cent each. This souring of investor sentiment is being traced to the release of a report by Hindenburg Research, a New York-based investor research firm, which has raised several questions and concerns that range from the group's high debt levels and negative cash flows to the use of shell companies based in tax havens such as Mauritius. The report has accused the Adani group of engaging in "brazen stock manipulation and accounting fraud scheme over the course of decades".





In its response, the Adani Group has called the report a "malicious combination of selective misinformation and stale, baseless and discredited allegations." It says that the "timing of the report's publication clearly betrays a brazen, mala fide intention to undermine the Adani Group's reputation with the principal objective of damaging the upcoming FPO from Adani Enterprises". The timing does raise questions, the report was released just two days before Adani Enterprises' follow-on public offer was to open for subscription. The research firm also disclosed that it has "taken a short position in Adani Group Companies through US traded bonds and non-Indian traded derivative instruments." But notwithstanding the Hindenburg report and the Adani Group's response to it, concerns have been flagged in the past as well. CreditSights, a Fitch Group unit, had previously called the conglomerate "deeply leveraged". While following a conversation with the management, it claimed to have discovered some calculation errors, even as it did not change its investment recommendations. A report in this paper had pointed out that even as private mutual funds have shied away from investing in the group's firms, Life Insurance Corporation had been steadily increasing its shareholding in its companies, principally Adani Enterprises, Adani Total Gas, Adani Green Energy, Adani Transmission and Adani Ports. LIC's investment in the Adani group of companies was more than five times the value of the holdings of all equity mutual funds. Questions have also been raised about the group's shareholding pattern.

The sheer size of the Adani Group — it has interests across large swathes of the Indian economy — and the implications for the larger financial system, call for far greater scrutiny and transparency than what has been on display. The interests of the average Indian investor need to be protected, and the sanctity of capital markets must be maintained. The sell-off may have put a cloud over the firm's secondary share sale but how the Adani Group responds to the market — and addresses the concerns raised — has ramifications that go beyond just its own boardroom. The regulator, too, has its task cut out.

# DreamIAS





# **LIFE & SCIENCE**

# EARTH'S INNER CORE ROTATING SLOWER: STUDY

Earth's inner core, a hot iron ball the size of Pluto, has stopped spinning faster than the planet's surface and might now be rotating slower than it, research suggested on Monday.

Roughly 5,000 kilometres below the surface we live on, this "planet within the planet" can spin independently because it floats in the liquid metal outer core.

New research published in the journal Nature Geoscience analysed seismic waves from repeating earthquakes over the last six decades.

"We believe the inner core rotates, relative to the Earth's surface, back and forth, like a swing," the study's authors, Xiaodong Song and Yi Yang of China's Peking University, said.

The inner core started rotating slightly faster than the rest of the planet in the early 1970s.

But it had been slowing down before coming in sync with Earth's rotation around 2009, it said.

#### JAPAN TO FLUSH FUKUSHIMA WASTEWATER

#### The story so far:

Japan is expected to start flushing 1.25 million tonnes of wastewater from the embattled Fukushima nuclear power plant into the Pacific Ocean this year, as part of a \$76-billion project to decommission the facility. The project received the Japanese cabinet's approval in 2021 and could take three decades to complete. The idea, which experts and officials in Japan had floated in 2016, has been controversial for its suspected impact on the water, marine life, fishers' livelihoods and other countries in the area. It has also received flak within Japan for sidelining other options and stoked concerns about the government's sincerity.

# Why is the water a problem?

In March 2011, after an earthquake of 9 magnitude, a tsunami flooded the Fukushima Daiichi nuclear power plant in Okuma and damaged its diesel generators. The loss of power suspended coolant supply to reactors at the facility; the tsunami also disabled backup systems.

Soon, radioactive materials leaked from reactor pressure vessels, exploded in the facility's upper levels, and exposed themselves to the ambient air, water, soil, and local population. Winds also carried radioactive material thrown up into the air into the Pacific. Since then, the power plant and its surrounding land have been uninhabitable.

The water that the Japanese government wants to flush from the plant was used to cool the reactors, rainwater and groundwater. It contains radioactive isotopes from the damaged reactors and is thus itself radioactive. Japan has said that it will release this water into the Pacific Ocean over the next 30 years.

#### Can the water be treated?

The Tokyo Electric Power Company (TEPCO), which operates the Fukushima facility, has said that it has treated the water to remove most radioactive isotopes. Former Prime Minister Yoshihide





Suga said in 2021 that the water will be "far above safety standards". His government required the water to have 1/40th as much tritium as the permitted limit.

Experts expect the affected water to poison the fish; "anyone who knows this is happening will, or should, avoid eating fish caught in the vicinity of the discharge point".

South Korea banned seafood imported from around Fukushima, to Japan's displeasure, from 2013.

Another problem is that the TEPCO has not removed tritium from the water because this is very difficult to do so. Tritium is "easily absorbed by the bodies of living creatures" and "rapidly distributed... via blood," Dr. Ramana said.

In 2018, Kyodo News reported that there were other radionuclides in the water that the TEPCO's treatment procedure could not entirely remove. These include isotopes of ruthenium and plutonium, which could persist for longer in the bodies of marine creatures and on the seafloor.

# What are Japan's other options?

Some have asked why the Japanese government can't store the water for longer and then discharge it. This is because tritium's half-life — the time it takes for its quantity to be halved through radioactive decay — is 12-13 years. The quantity of any other radioactive isotopes present in the water will also decrease in this time (each isotope has its own half-life). So, at the time of discharge, the water could be less radioactive.

The Japanese government has also declared land around the Fukushima facility to be uninhabitable. The thousand or so tanks to hold the water, each with a capacity of 1,000 metre cube, can be situated here.

But in 2020, authorities determined that flushing the water would be the way forward, over storage and vapourisation. Many experts agreed.

After visiting Fukushima in February 2020, the International Atomic Energy Agency (IAEA) officials also said the discharge would be "technically feasible and would allow the timeline objective to be achieved".

# Will the Pacific Ocean be affected?

There are concerns about the water body as well as the region. China, South Korea and Taiwan have expressed concerns over Japan's plan. A representative of the Pacific Islands Forum, the bloc of Oceania countries including Australia, has called it "simply inconceivable" based on their experience with "nuclear contamination".

Researchers have also called for more studies to understand the precise composition of each tank before it is flushed and for more details about the TEPCO's water-treatment process.

The National Institute of Marine Laboratories, a non-profit group of more than a hundred research centres across the United States, published a position paper in December 2022 excoriating the plan: "The supporting data provided by the TEPCO and the Japanese Government are insufficient and, in some cases, incorrect, with flaws in sampling protocols, statistical design, sample analyses, and assumptions".

On the flip side, the Joe Biden government in the U.S. voiced support for Japan's plan to discharge the water.





#### How will the rest of the world be affected?

All nuclear accidents have global repercussions. The Fukushima Daiichi accident triggered an avalanche of public opposition to nuclear power worldwide, especially in Europe, diminishing its contribution to the clean-energy power generation mix.

In Japan itself, the accident reduced nuclear power's contribution to electricity generation from 30% before 2011 to 5% in 2022. But the incumbent Fumio Kishida government has articulated plans to upgrade and restart older reactors and build new ones in response to the increasing cost of fossil fuels.

However, both India and China doubled down on their domestic commitments. The then Prime Minister Manmohan Singh called nuclear energy an "essential option" for India's climate action and energy security. His successor, Prime Minister Narendra Modi, has clarified that India plans to expand its nuclear power programme with Russia's help.

Then again, the accident also revived concerns about some existing nuclear power plants — especially the Department of Atomic Energy's Kudankulam Nuclear Power Plant (KKNPP) facility in Tamil Nadu. In October 2012, police arrested nearly 2,000 protestors after they attempted to march to the Secretariat in Chennai against the KKNPP, in response to the Fukushima accident and what they said were parallels between the two sites.

Ultimately, Japan is also concerned about its reputation. An official committee including scientists, consumers' representatives and Ministry officials wrote in a 2020 report: "It is important to dispose of the... treated water as part of the decommissioning work... taking into account the reputational impact when the disposal method for the... treated water is examined."

# WHY IS CHINA'S POPULATION SHRINKING?

China's National Bureau of Statistics announced on January 17, 2023 that the country's population had fallen by 8,50,000 in the year 2022. This marked the first decline since 1961, when the country was in the midst of a four-year famine following the failed 'Great Leap Forward' campaign. Demographers say that with China's population now having peaked, India is set to become the most populous nation this year.

# What the reasons for this trend?

Birth rates in China have declined since the 1980s and in the wake of the "one-child policy", which introduced harsh measures such as forced abortions and high financial penalties. The Chinese government still defends the policy, arguing it spared China an additional 400 million births. But critics of the policy say the estimate is an exaggeration, when considering declining family sizes over time in many countries along with economic development and without similarly harsh measures, and when factoring into account the policy's legacy of leaving behind a rapidly ageing society.

If the one-child policy and its legacy has been one major factor, a second one, as pointed out by Barclay Bram of the Asia Society Policy Institute in a January 2023 paper, is that "young Chinese are marrying later, having fewer children, or forgoing having children altogether", with the number of couples who married in China dropping from 13.46 million to 8.14 million in the period from 2013 to 2020.





Meanwhile, the average age of first-time parents, in the three decade-period from 1990-2020, rose from 24.1 to 27.5. With a growing preference for getting married and starting families later, couples are choosing to have fewer children. In 2022, for the first time the number of births fell below the number of deaths. Births last year were 9.56 million, a more than 10% drop from 2021.

#### How has the Chinese government responded to the population crisis?

To arrest the slide, Beijing finally abandoned the one-child policy in 2016 — by then, the policy had, in any case, included many exceptions, for instance for couples who were both only children or in rural areas for families where the first child was a daughter.

The "two-child policy" introduced that year, however, failed to elicit the desired response. A government survey conducted that year found 70% attributed high costs of healthcare and education as a factor.

Ahead of the rollout of the current five-year plan (2021-25), the Politburo discussed "major policy measures to actively address the ageing of population" and in 2021 rolled out a "three-child policy" including financial inducements for families with three children. It has also pledged to address the economic factors such as healthcare costs and education expenses, for instance by cracking down on expensive private education companies, which had become a booming industry.

Harder to address, however, are the widening personal preferences for smaller families, a trend seen globally which also likely explains why the policies rolled out by China, as well as other countries such as Japan, have had limited impact in encouraging the public to have larger families.

A more realistic policy emphasis, some scholars have suggested, would be to deal with what appears to be an inevitable trend following Japan's experience, and to consider, for a start, raising the retirement age from the current 60 for men and 55 for women.

#### What will be the impact on China's economy?

China's 16-59 working age population has continued to decline. As of the end of 2022, the number was 875 million, or 62% of the total population, down by around 75 million from 2010.

The above-60 population was 280 million, or 20% of the total population, an increase of around 30 million in the same period. By 2050, the Chinese government estimates, the above-60 population will account for as much as 35% of the total population. According to China's National Working Commission on Ageing, healthcare spending on this group will rise to 26% of the GDP by 2050, up from 7% in 2015.

# A major concern is the economic impact of a shrinking workforce.

The size of China's labour force already peaked in 2011 at 925 million, and is likely to drop to 700 million by 2050. The glut of labour from the rural heartland that powered China's factories is already drying up. With wages rising, many factories in the lower end of the manufacturing spectrum are already moving out to Southeast Asia and Bangladesh. Chinese companies like ecommerce giant JD are already investing heavily in automation to deal with the coming labour crunch.

Articles in the Chinese media have recently expressed longer term anxieties about factories moving out to India, that will this year become the world's most populous country with a demographic dividend and labour force of a profile similar in age to China's in 1980.





# A BRIEF HISTORY OF ARTIFICIAL INTELLIGENCE

How rapidly the world has changed becomes clear by how even recent computer technology feels ancient to us today. Mobile phones in the 1990s were big bricks with tiny green displays. Two decades before that, the main storage for computers was punch cards. In a short period, computers evolved so quickly and became such an integral part of our daily lives that it is easy to forget how recent this technology is. The first digital computers were only invented about eight decades ago.

Since the early days of this history, some computer scientists have strived to make machines as intelligent as humans. The first system is the Theseus. It was built by Claude Shannon in 1950 and was a remote-controlled mouse that was able to find its way out of a labyrinth and could remember its course. In seven decades, the abilities of AI have come a long way. The language and image recognition capabilities of AI systems have also developed rapidly.

Just 10 years ago, no machine could reliably provide language or image recognition at a human level. AI systems have become steadily more capable and are now beating humans in tests in all these domains.

Outside of these standardised tests, the performance of these AIs is mixed. In some real-world cases, these systems are still performing much worse than humans. On the other hand, some implementations of such AI systems are already so cheap that they are available on the phone in your pocket: image recognition categorises your photos and speech recognition transcribes what you dictate. AI systems have also become much more capable of generating images.

#### **ROMAN CONCRETE**

The remains of vast networks of roads, aqueducts, ports, and massive buildings of ancient Romans have survived for two millennia. Many of these structures were built with concrete: Rome's famed Pantheon, which has the world's largest unreinforced concrete dome and was dedicated in 128 A.D., is still intact.

Researchers have spent decades trying to figure out the secret of this ultra durable ancient construction material, particularly in structures that endured harsh conditions, such as docks, sewers, and seawalls.

A team of investigators from the MIT, the Harvard University, and laboratories in Italy and Switzerland, has made progress in this field, discovering ancient concrete-manufacturing strategies, says a release. Besides pozzolanic material such as volcanic ash from the area of Pozzuoli on the Bay of Naples, they found small millimeter-scale bright white mineral features — lime clasts — which have been long recognised as a ubiquitous component of Roman concretes.

# HOW MUCH SLEEP DO YOU NEED TO CONTROL CHOLESTEROL AND DIABETES

The general idea of being fit is usually assumed as exercising regularly and having a healthy diet. Somehow on the face of it, it's true to some extent, but this is not always the case. People don't realise that sleep also plays a crucial part when it comes to physical and mental well-being by being a restorative process, which should not be negotiable.





Hectic working hours, increasing stress levels and an unhealthy lifestyle can cause irregular sleep patterns. This not only disturbs your daily routine but can also hamper your health leading to lifestyle conditions like deranged cholesterol and diabetes.

It's a preconceived notion that cholesterol and diabetes are usually genetic diseases and only unhealthy eating patterns and lifestyle cause them. A report published in the Harvard Health Journal stated that short-term sleep deprivation can put you at risk of both deranged cholesterol and diabetes.

# What happens when you sleep

Sleep helps your body and mind repair and recharge themselves. The release of a hormone called melatonin during sleep relaxes your body, leading to a slight drop in blood pressure and heart rate. But things can go for a toss if you are sleep-deprived or have a disrupted circadian rhythm. Insomnia can generally make your body work abnormally. It affects your mental and physical abilities to prepare your body for the next day. It leaves your brain exhausted, affecting the natural functioning of the body.

#### Connection between sleep deprivation and cholesterol

Lack of sleep can lead to higher cholesterol and blood pressure. In a 2009 study, called the "Issue of Sleep", it was found that men who slept less than six hours had higher LDL cholesterol. Additionally, women who slept almost the same amount had lower cholesterol levels. Now, this also depicts that sleep affects men and women differently. Sleep deprivation can dip levels of leptin, a hormone that stabilises metabolism and appetite. No doubt that people who are obese often have higher cholesterol levels. Even in 2020, a research by the Institute of Military Cognitive and Brain Sciences, Academy of Military Medical Sciences, Beijing showed that sleep deprivation increased the serum cholesterol levels and encouraged cholesterol pileup in the liver.

# Diabetes and lack of sleep

According to the Centers for Disease Control and Prevention (CDC), having irregular sleep patterns can increase insulin resistance in your body. A 2009 report in Diabetes Care found an increased risk of Type 2 diabetes in people with persistent insomnia. Similarly, people with diabetes are often sleep deprived because of frequent urination at night. Even if you have prediabetes, poor sleeping patterns will worsen your glucose intolerance.

Sleep deprivation has been found to raise levels of ghrelin, the hunger hormone, and decrease levels of leptin, the satiety hormone. That's why people seek relief in foods that raise blood sugar. The American Academy of Sleep Medicine and the Sleep Research Society recommend that adults should get a minimum of seven to eight hours of sleep per day. Staying up late at night means binge-watching and eating, which often results in consuming junk foods that are high in carbs and sugar. All this increases the risk of Type 2 diabetes and is equally connected to obesity.

#### Here's how you can improve your sleeping patterns and get quality sleep

Set up a sleeping schedule: Just like any other routine, having a definite sleeping pattern can help you maintain your cycle of rest and activity. Sleeping at the same time every day and waking up on time will help you attain quality sleep.

Relax before bedtime: Proper relaxation of body and mind before sleeping can make you sleep like a baby. For this, you need to keep your phone aside for at least half an hour before bed. Ensure





that your room is dark and quiet. Plus, you can always read a good book or listen to soothing music which can prepare you for deep sleep.

Healthy diet and exercise are the keys: Along with the sleeping routine, a proper meal and regular exercise will make you sleep more easily and peacefully. Have a nutritious and light meal four hours before going to bed. Exercising for 20-30 minutes is a must.

Following these tips and keeping a check on your sleep patterns can reduce your risk of high cholesterol and diabetes and lead to your well-being as well.

# A NOVEL TEST MAY HELP IN EARLY DIAGNOSIS OF PARKINSON'S

It is now a well-known fact that early diagnosis of Parkinson's Disease (PD) can help a patient reduce the risk of progression and live long and productively enough with this neuro-degenerative condition. It is this quest for detecting early signs that drove researchers at the Indian Institute of Technology-Bombay (IIT-B) to develop a blood-based assay. And now they have achieved a 95 per cent accuracy in detecting the disease early enough in a small cohort of patients at the KEM Hospital.

One of the most potent causes of PD is a special form of toxic protein aggregates (amyloids) formed by alpha-synuclein, which kills neuronal cells in the brain. These alpha-synuclein protein aggregates also cross the blood-brain barrier and enter the bloodstream in small amounts. The researchers from IIT-B's Department of Biosciences and Bioengineering, led by Prof Samir Maji, have developed a technology that entails a substrate added to blood samples. This amplifies the protein aggregates if present. As the aggregates amplify, they can be easily measured and confirm PD.

After gaining 95 percent success in early detection, the department is in the process of conducting large-scale high throughput clinical trials for the patented technology.

Right now, the standard diagnosis for Parkinson's is clinical; there is no test. So developing a conclusive test for Parkinson's is still very challenging. However, by the time the symptoms arise, 70 per cent of the dopaminergic cells in the brain have already died and the level of dopamine is drastically reduced. Studies carried out so far have remained unsuccessful in devising effective diagnostics for detecting the disease at earlier stages due to the absence of detectable physical symptoms (before the appearance of large-scale neurodegeneration), specific biomarkers (representing the disease initiation), and overlapping symptoms with ageing and other neurodegenerative disorders. Moreover, the initial loss of specific dopaminergic neurons in the Substantia Nigra pars Compacta (SNc) region of the brain is a very small change. Regular brain imaging techniques, such as MRI, PET scans might not be sensitive enough to map such small changes in the brain and distinguish them from other neuro-degenerative diseases and ageing. Thus, there is an unmet need to identify biomarkers that can detect the disease in the early stages."

"We have developed a novel substrate to amplify these ultra-low quantities of aggregated species of alpha-synuclein, which could be specific to patients suffering from Parkinson's Disease," he adds. A small cohort has validated this assay but a large-scale clinical trial is required to determine its sensitivity and specificity. "At present, the method of amplifying the small quantities of alpha-synuclein aggregates in the blood is highly time-consuming but with time, we might come up with solutions so that we can detect them in less time in a less expensive way," says Prof Maji.





# STUDIES FIND 'IMMUNE IMPRINTING' MIGHT BE MAKING BIVALENT BOOSTERS LESS EFFECTIVE: WHAT IS IT AND HOW DOES IT WORK?

Since last September, countries like the UK and the US have rolled out variant-specific or bivalent boosters, in the hope that they would provide better protection against the coronavirus infection in comparison to the original vaccine. However, a slew of recent studies has shown that a phenomenon in our bodies, called immune imprinting, might be making these new boosters far less effective than expected.

Two papers, published earlier in January in the New England Journal of Medicine (NEJM), pointed out that bivalent boosters — made to counter both the Omicron strains and the original Covid-19 strain — don't generate significantly greater antibody responses than an additional dose of the original mRNA vaccines.

The observed ineffectiveness of the bivalent or variant-specific boosters might be due to immune imprinting, scientists of both studies concluded.

# What is immune imprinting?

Immune imprinting is a tendency of the body to repeat its immune response based on the first variant it encountered — through infection or vaccination — when it comes across a newer or slightly different variant of the same pathogen.

The phenomenon was first observed in 1947, when scientists noted that "people who had previously had flu, and were then vaccinated against the current circulating strain, produced antibodies against the first strain they had encountered", according to a report published in the journal Nature. At the time, it was termed the 'original antigenic sin' but today, it's commonly known as imprinting.

Over the years, scientists have realised that imprinting acts as a database for the immune system, helping it put up a better response to repeat infections. After our body is exposed to a virus for the first time, it produces memory B cells that circulate in the bloodstream and quickly produce antibodies whenever the same strain of the virus infects again.

The problem occurs when a similar, not identical, variant of the virus is encountered by the body. In such cases, the immune system, rather than generating new B cells, activates memory B cells, which in turn produce "antibodies that bind to features found in both the old and new strains, known as cross-reactive antibodies", the Nature report said.

Although these cross-reactive antibodies do offer some protection against the new strain, they aren't as effective as the ones produced by the B cells when the body first came across the original virus.

#### How to circumvent immune imprinting?

Currently, several ongoing studies are trying to find a way to deal with imprinting. Some scientists have said nasal vaccines might be better at preventing infections than injected ones. They believe the mucous membranes would create stronger protection, despite carrying some imprint of past exposure.

Researchers are also trying to find if spacing out coronavirus vaccine shots on an annual basis, could help with the problem of imprinting.