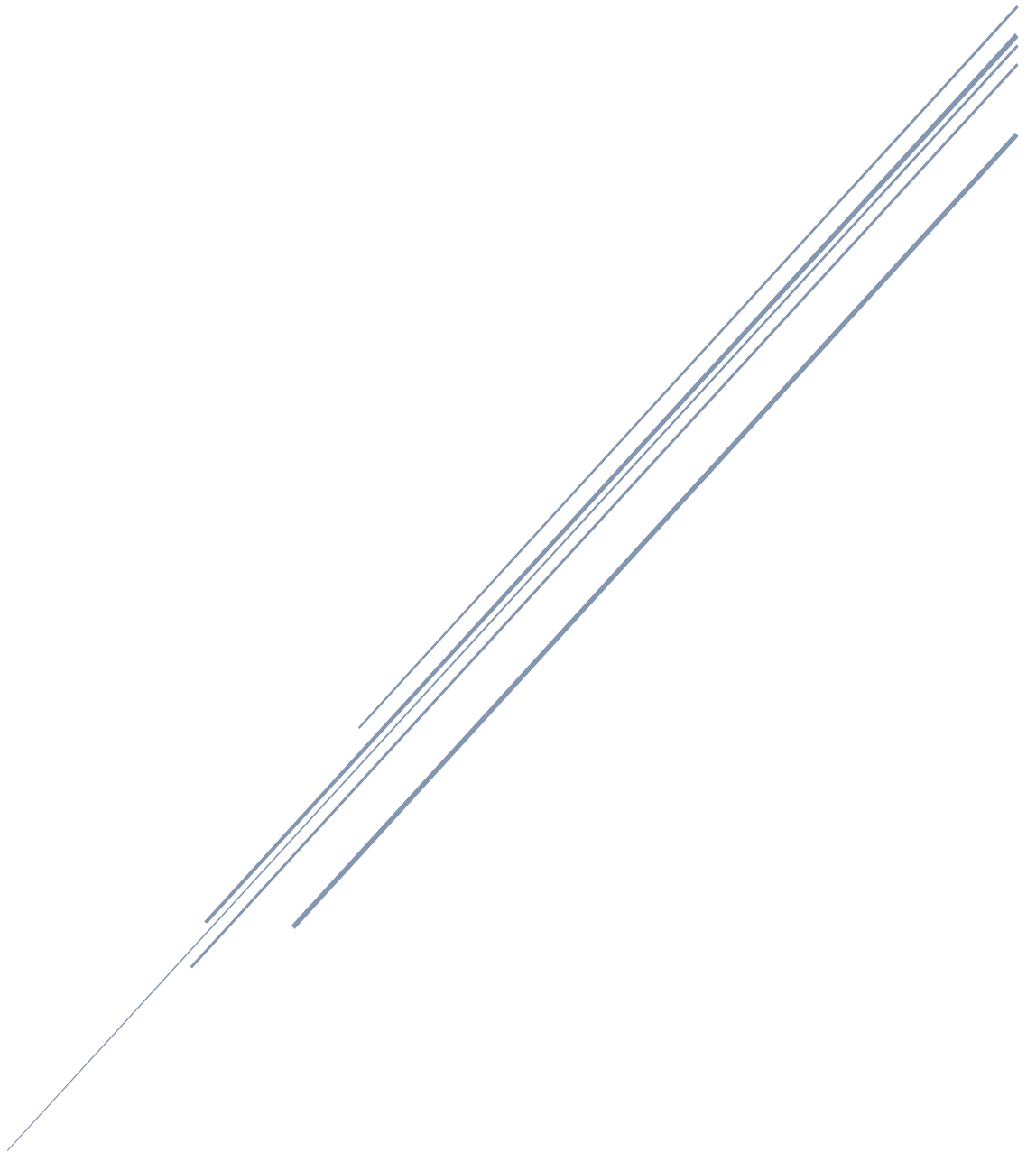


# CURRENT AFFAIRS FOR UPSC

2nd to 8th February 2025





## INTERNATIONAL

### CRIPPLING AID WORK

Insularity often stems from contempt, and the kind now being exhibited by U.S. President Donald Trump and his administration is no exception. Withdrawing from international commitments has become a defining feature of Mr. Trump's foreign policy, and the latest decision to freeze foreign assistance adds to the list of drastic moves, following the withdrawal from WHO and the Paris Accord. This decision will disrupt established global aid structures and have dire consequences for the millions who rely on U.S. assistance for survival. While the full impact is yet to unfold, it is clear to those in the development sector that a cascade of negative repercussions is imminent. On his first day in office, Mr. Trump imposed a 90-day freeze on foreign assistance, citing inefficiencies and ideological opposition to USAID. His administration argues that USAID misallocates funds and operates at odds with his policies. Elon Musk, head of the Department of Government Efficiency, went so far as to label USAID a viper's nest of radical-left Marxists who hate America. The official USAID website has been stripped of its content, but announced that all personnel would be placed on administrative leave, with only a few exceptions for mission-critical staff. The administration also ordered the rapid repatriation of overseas USAID personnel within 30 days.

USAID was established in 1961 as an independent agency under the Foreign Assistance Act, designed to provide global humanitarian and development aid. According to the U.S. government's official spending tracker (USASpending.gov), USAID was allocated \$44.2 billion in the 2024 budget. While this amounts to just 0.4% of the total U.S. federal budget, media reports indicate that it accounted for nearly 42% of all humanitarian aid tracked by the UN in 2024. USAID funds a range of programmes which include health care, food aid (including assistance to Gaza), and policy advocacy. The agency has maintained a strong presence in India since the 1960s, supporting initiatives in education, immunisation, HIV/TB prevention, polio eradication, and child health. Though direct financial aid to India has declined in recent years, USAID contributions still amounted to over \$150 million for the latest fiscal year. However, in many conflict-ridden regions, USAID remains a lifeline. Withdrawing from international aid efforts is more than a bureaucratic shift: it risks leaving millions without food, medical assistance and critical resources. The decision reflects an inward-looking approach that dismisses the interconnectedness of global affairs. As the U.S. retreats from its historical leadership in international development, the world will be left grappling with the consequences of this reckless policy shift.

### A CALL FOR CHAOS

When the state of Israel was created in Palestine in 1948, more than 7,00,000 Palestinians, the land's original inhabitants, were displaced. Palestinians remember this forced mass expulsion as the Nakba (catastrophe). More Palestinians were expelled during the Six-Day War in 1967. Some moved to Gaza, others to the West Bank, while the majority fled to other countries, where they and their descendants are refugees. In successive peace talks, Israel has outrightly rejected their right to return to their homes, a fundamental right. Now, U.S. President Donald Trump wants to forcibly transfer the 2.3 million Palestinians out of Gaza, the Mediterranean enclave that has suffered relentless Israeli bombardment for 15 months. His plan involves relocating Palestinians to neighbouring Arab countries, taking over the 360 sq. km strip which he calls a "hellhole" and redeveloping it into the Riviera of the Middle East. At a press conference in Washington DC, with Israeli Prime Minister Benjamin Netanyahu, he also stated sending troops to Gaza "if necessary".

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



The White House later claimed that he meant a temporary relocation of Palestinians. It also clarified that he had not committed to deploying U.S. troops but reaffirmed that his “out-of-the-box” proposal for Gaza was a serious one. However, Mr. Trump’s plan has at least three fundamental problems.

First, Palestinians are not an imperial possession that Israel and the U.S. can bomb and relocate at will. They are a people with a national identity, whose collective history, present and future, is deeply tied to the Palestinian land. Despite relentless Israeli bombardment, the Palestinians of Gaza have refused to leave. Now, Mr. Trump is advocating what is essentially a call for ethnic cleansing, another Nakba. Second, Arab countries, including many of America’s allies, have unequivocally rejected Mr. Trump’s proposal. They understand that Palestinians who were forcefully removed never managed to return. Even authoritarian Arab rulers, regardless of their dependence on U.S. aid, must pay attention to the sentiments of their people, who overwhelmingly support Palestinian rights. Third, Mr. Trump’s vision of rebuilding Gaza aligns closely with the Israeli far-right’s agenda: resettling the land with Jewish settlers. This will further alienate an already desperate population and plant yet another time bomb in West Asia. Mr. Trump must abandon his calls for the ethnic cleansing and instead use America’s influence to ensure a successful ceasefire in Gaza. The U.S. should be working toward a lasting, just solution — one that acknowledges Palestinian rights and upholds the principles of peace and stability in the region.

#### WHY JORDAN, EGYPT DON’T WANT GAZA REFUGEES

US President Donald Trump on Saturday told reporters that he would like Egypt and Jordan to “take” Palestinian refugees to “just clean out” the Gaza Strip. “You’re talking about a million and half people, and we just clean out that whole thing,” he said. Both Egypt and Jordan immediately and firmly opposed the idea.

- Around 90% of Gaza’s 2.3 million residents have been displaced since October 2023, when Israel began its assault on the tiny strip of land. This is in addition to the millions of Palestinians displaced from Palestine since the creation of Israel in 1948.
- According to Article 11 of UN Resolution 194 from 1948, all refugees have the right to return home if they are willing to live peacefully with their neighbours. However, that has not prevented Israel from advocating for re-settling Palestinians in the past. At least since the first Arab-Israeli War of 1967, won by Israel, it has sought to deepen control over the West Bank by settling communities in violation of international law.
- Put simply, allowing Palestinians to return to their native lands undermines Israeli claims to statehood. Similarly, Palestinians fear that if they were to leave the region in large numbers, they would only further embolden Israel to take control of more territory, and undermine Palestine’s claims over the land.
- Jordan, which borders Palestine on the East, and Egypt, bordering it towards the south, have both rejected offers to take in more Palestinian refugees. Though they have diplomatic relationships with Israel, they also support a two-state solution to the Israel-Palestine conflict.
- Egyptian President Abdel Fattah el-Sissi said in 2023 that such a migration would also help in “eliminating” the Palestinian cause. Further, he argued, the presence of Palestinian militants could pose a security challenge for Egypt. He said Egypt’s Sinai Peninsula, which borders Gaza, “would



become a base for attacks on Israel. Israel would have the right to defend itself... and would strike Egyptian territory.”

**Do You Know:**

- After 15 months of devastating war between Israel and Hamas, a ceasefire marks a critical moment in a conflict that has reshaped West Asia. The agreement, brokered through months of painstaking diplomacy by Egypt, Qatar, and the United States, aims to halt the bloodshed and initiate a release of hostages held by Hamas in exchange for Palestinian prisoners held by Israel.
- During a 42-day first phase beginning Sunday, Hamas will release 33 hostages and Israel will release between 900 and 1,650 Palestinian detainees, including all of those detained since October 7, 2023.
- The IDF will withdraw from central Gaza and the Netzarim Corridor — a 2-4-km-wide security clearing that it has created, cutting Gaza in half up to the Mediterranean — and eventually from the Philadelphi Corridor, the buffer zone along the Gaza-Egypt border.

Negotiations for a second phase will begin on the 16th day after the ceasefire comes into effect, and is expected to produce almost a full Israeli withdrawal from the Strip, and the release of all remaining hostages by Hamas in return for a yet-to-be-decided number of Palestinian detainees.

**EXPRESS VIEW ON TRUMP’S ATTACK ON ‘PRO-HAMAS’ STUDENTS: UN-AMERICAN DREAM**

For the better part of the 20th century, and much of this one, an understanding underpinned the ephemeral “American dream” and helped the US become the superpower it is. The key components of this understanding are enshrined in the First Amendment to the US Constitution, which guarantees free speech, and the fact of the US being a “nation of immigrants”. This was symbolised by the lines from “The New Colossus” inscribed on the Statue of Liberty: “Give me your tired, your poor, your huddled masses yearning to breathe free”. Last week, President Donald Trump promulgated an executive order ostensibly meant to tackle “an explosion of antisemitism on campuses and streets”. In effect, it empowers the state to deport foreign students who protested Israel’s excesses in Gaza in the war against Hamas. Trump has threatened to deport “all resident aliens who joined in the pro-jihadist protests” and “Hamas sympathisers”.

One of the key factors behind American power and innovation has been the country’s ability to attract the best talent from around the world. In fact, one of the first rifts within the Trump camp after his election victory in November 2024 has been over H-1B visas, which allow companies to hire specialised foreign workers — the largest proportion of these are Indians. Elon Musk and other entrepreneurs pointed to the need for such expertise to keep the US on the cutting edge of frontier technologies, while the anti-migrant nativist camp objected to “outsiders” taking the best US jobs. Trump appeared to realise that to “Make America Great Again” migrants will be needed and came out in support of the H-1B visa. Demonising and punishing foreign students — many of whom pay their way — for exercising their right to free speech threatens to make the US a less attractive destination.

Ironically, one of the Trump campaign’s key talking points was the curbing of free speech because of “cancel culture”. Liu Lijun, a Chinese student at UCLA, is among the first to be deported — back to a country that is a rival of the US not just in strategic and economic terms, but also in the political system it propounds. If indeed Liu — and scores of students like her — spoke up in ways that offends the current White House administration, the answer cannot be to “cancel” them. In the



long run, such a policy will diminish the US immeasurably and rob its society and economy of the dynamism that has served the country so well.

## CRISIS IN CONGO

The Democratic Republic of the Congo is no stranger to civil conflicts. But the latest advances made by M23, a rebel coalition, capturing the mineral-rich city of Goma, is a humiliating setback for the Congolese government, which had vowed to crush the rebellion in the east. M23, which takes its name from a failed peace agreement signed between a Tutsi-led rebel group and the Congolese government on March 23, 2009, claims it is fighting to protect the rights of Congo's Tutsi ethnic minority. Congo and UN experts say neighbouring Rwanda, ruled by a Tutsi-led government, is backing M23. In 2012, shortly after it was founded, M23 seized much of Goma. But it withdrew as Rwanda came under international pressure. There was a short spell of calmness with M23 rebels agreeing to join the Congolese army in return for state protection for the Tutsis. But in 2021, the group took up arms again and started the latest spell of fighting. After Goma fell last week, Paul Kagame, Rwanda's President, called for a ceasefire but with little impact. Congo, on the other side, has termed the fall of Goma "a declaration of war" and vowed a "vigorous military response".

The crisis in Congo can be traced to the Rwandan genocide in 1994 in which about 8,00,000 people, mostly Tutsis, were massacred by ethnic Hutu militias. When tens of thousands of Hutus fled Rwanda for Congo in the mid-1990s after the fall of the genocidal regime in Kigali, Congo's local Tutsis took up arms in 'self-defence'. Rwanda has made military incursions into Congo in the past, accusing it of harbouring those who were complicit in the genocide. Today's Rwanda is much stronger than what it was in 2012. Mr. Kagame, a former guerrilla leader, has modernised the economy and built a disciplined military. Rwanda has also developed close ties with western countries, who see Mr. Kagame as a force of stability in an unstable region as well as a major contributor of forces to UN missions. So, unlike in 2012, Mr. Kagame seems to be making his moves from a position of strength this time. The conflict has exposed Congo's inherent vulnerabilities and Rwanda's insecurities and ambitions. But it is also a testament to the unresolved ethnic anxieties of the region, 30 years after the genocide was brought to an end. The international community should push Mr. Kagame to rein in the rebels. Congo should also realise that for long-term peace, it should take action against the genocide-linked groups that operate from its soil and take the Tutsi minorities, for whom the memories of the massacre are still fresh, into confidence.

## FRANCOIS BAYROU CALLS FOR DEBATE ON FRENCH IDENTITY, IMMIGRATION

Prime Minister Francois Bayrou on Friday called for a national debate on immigration and what it means to be French, days after stirring controversy with comments about immigrants "flooding" France.

Mr. Bayrou was responding to Justice Minister Gerald Darmanin who said on Thursday that the constitution should be changed to end current citizenship rights granted to people born in France, known as "jus soli" or "right of soil".

The Prime Minister said discussion on that topic alone would be "too narrow", calling instead for a wider debate about citizenship. "It's obvious that this question has been fermenting for years," Mr. Bayrou told broadcaster RMC.

"What does it mean to be French?" Mr. Bayrou said. "What rights does it give you? What duties does it demand of you? What advantages do you get? What do you commit to when you become a





member of a national community?" Mr. Bayrou said details of how to organise such a debate needed to be worked out but it should not be "postponed forever".

Late last month, Mr. Bayrou came under heavy criticism for remarks about a feeling of immigrants "flooding" France that he said was growing across the country. The angry outcry from the leftist Opposition, and rebukes from centrist allies, came after he said that immigration was "a positive" so long as it remained "proportionate" to the size of the population.

But his remarks also drew praise, from some conservative and far-right deputies.

The "jus soli" question has come into sharp focus in French politics recently because of mass immigration into Mayotte, a French territory in the Indian Ocean, from the neighbouring Comoros islands. After Parliament on Thursday voted to restrict that right in Mayotte, but not elsewhere, Mr. Darmanin said "jus soli" rights enshrined in the French constitution should come under review entirely.

## TRUMP OR BRICS? THE QUANDARY FOR AFRICA'S GOVERNMENTS

Beyond the short-term volatility and uncertainty created by U.S. President Donald Trump's tariff machinations, it's likely that the longer-term trend of the world splitting into two trading blocs is accelerating.

Stripping away Mr. Trump's bluster and often contradictory actions, the message seems to be fairly clear. Mr. Trump's view of the world is that you are either with the United States or against it. That presents a dilemma for Africa's mineral-rich countries as they want to develop their resources to provide them with the maximum benefit, but they also want to stay largely neutral.

But it's increasingly likely that at some level African countries will have to decide whether they are more in the Trump camp, or whether they prefer to do business with the China-led BRICS group.

There are risks and rewards under both scenarios, and the circumstances of each African country may cause to lean one way or another.

The continent is already a major producer of minerals, but its untapped reserves are the major prize in coming decades, especially if the energy transition accelerates.

Africa is richly endowed, with an estimated 20% of global copper reserves, about the same for aluminium raw materials, 50% of manganese and cobalt, 90% of platinum group metals, 36% of chromium, as well as reserves of lithium, uranium, gold and rare earths.

But developing its mineral resources has been often too challenging, given political instability and corruption, poor infrastructure, lack of capital and legal frameworks that make long-term investments hard to justify. However, the increasing appetite of the world for minerals is likely to set off a new scramble for Africa, this time Africans will have more say in how it unfolds.

Finding the right partners is the challenge for African countries. On the one hand the West still offers deep capital reserves, sophisticated equity markets and investors and skills and experience in mining.



## Not beggars

But Mr. Trump is undermining these advantages with his tariffs and threats to withhold aid and other funding, as well as his habit of turning on traditional allies and flip-flopping policies. The main issue with Mr. Trump is his apparent transactional view of the world, in which there must always be a winner and a loser, and he always wants to be the winner. This means getting a mutually beneficial deal from the U.S. is going to be more difficult under Mr. Trump.

It was this frustration that boiled over in the remarks on Monday when South Africa's Resources Minister Gwede Mantashe said Africa should withhold minerals from the U.S. if Mr. Trump cuts aid.

"If they don't give us money, let's not give them minerals. We are not just beggars," Mr. Mantashe said. "We cannot continue to debate these minerals based on the dictates of some developed nations as if we have no aspirations to accelerate Africa's industrialisation," he added.

These comments may be unwise in that they may serve to antagonise Mr. Trump, but they may also sharpen some thinking in the West on how best to get access to Africa's minerals.

Should Africa be looking more toward China and the rest of the BRICS nations, as the best option to unlock its mineral wealth?

The experience here has been somewhat mixed. While China has been willing to develop mines in Africa, it generally tends to want to do it mainly using its own people and processes, and it wants to export raw ores and beneficiate them in China. This has limited the benefits to African countries, but there may be an option to use legislation forcing companies to commit to domestic downstream operations as part of access to raw materials.

## NATION

### US DECISION ON G20: MESSAGE FOR ICJ, DIPLOMACY TEST FOR INDIA

The Trump administration's attacks on South Africa could be seen as a part of the ongoing international tussle between the US and South Africa over the latter's prosecution of Israel at the ICJ. But there are wider issues too – involving the role of India as a global player.

- United States Secretary of State Marco Rubio has announced on X that he would "NOT" attend the G20 Foreign Ministers' meeting in Johannesburg, South Africa, later this month.
- South Africa, Rubio alleged, is "doing very bad things", including using G20 to promote "DEI and climate change" in the garb of the summit's theme of "solidarity, equality, and sustainability".
- On Sunday, President Donald Trump had declared that "South Africa is confiscating land", treating "certain classes of people VERY BADLY", and that he would cut "all future funding" until the matter had been investigated. Trump's close aide Elon Musk has repeatedly claimed without evidence that South Africa, the country of his birth, follows an anti-white policy.
- Rubio's tweet should be understood primarily in the context of South Africa's genocide case against Israel at the International Court of Justice (ICJ), which has been receiving growing international support.



**Do You Know:**

- On January 31, South Africa and Malaysia announced a campaign to protect and uphold the rulings of the ICJ and the International Criminal Court (ICC) in the face of alleged “attempts by US Congress to hit the ICC through the use of sanctions”. A nine-nation “Hague Group” was formed under South Africa’s leadership to defend the rights of Palestinians and to coordinate legal, diplomatic and economic measures against violations of international law by Israel.
- It is pertinent to mention here that President Trump’s announcements on Tuesday wishing to resettle Palestinians from the Gaza Strip to Egypt and Jordan is completely at odds with core tenets of international law regarding territorial integrity and sovereignty. Gaza is recognised by the ICJ as part of the Palestinian territories under Israeli military occupation.
- It is also worth recalling that the first Trump administration (2017-21) imposed sweeping sanctions on the ICC and its officials. The decision was reversed by the Joe Biden administration, which supported the ICC investigation into Russian war crimes in Ukraine.
- The ICC and ICJ are both international tribunals seated in The Hague, Netherlands. The ICC was established pursuant to the Rome Statute of 2002, and has the jurisdiction to prosecute individuals for serious international crimes such as genocide, war crimes, and crimes against humanity. The ICJ is an organ of the United Nations that hears disputes between states.

**THAW IN CHINA CHILL: DIRECT FLIGHTS, MANSAROVAR YATRA, EASING OF VISAS**

Marking a major diplomatic breakthrough after the disengagement process between India and China was completed last November, New Delhi and Beijing decided on a slew of measures to improve bilateral exchanges: resuming Kailash Mansarovar Yatra in the summer this year; restoring direct flights between the two capitals; issuing visas for journalists and think tanks, and working towards sharing trans-border river data, an official statement from the Ministry of External Affairs said Monday.

- Recalling the agreement between Prime Minister Narendra Modi and President Xi Jinping at their meeting in Kazan in October, the MEA said that the two sides “reviewed the state of India-China bilateral relations comprehensively” and “agreed to take certain people-centric steps to stabilize and rebuild ties”.
- While there was no mention of the border situation in the Indian statement, it said, “It was agreed to resume these dialogues step by step and to utilize them to address each other’s priority areas of interest and concern.”
- This is an oblique reference to the border situation, with no specific timelines and pathway to de-escalation and de-induction of troops. The MEA official statement said: “The two sides decided to resume the Kailash Mansarovar Yatra in the summer of 2025; the relevant mechanism will discuss the modalities for doing so as per existing agreements.
- They also agreed to hold an early meeting of the India-China Expert Level Mechanism to discuss resumption of provision of hydrological data and other cooperation pertaining to trans-border rivers.
- The Foreign Secretary’s visit is a move to repair damaged bilateral ties after Chinese incursions in 2020 triggered a military standoff along the Line of Actual Control (LAC) in eastern Ladakh.



**Do You Know:**

- The Line of Actual Control (LAC) is the demarcation that separates Indian-controlled territory from Chinese-controlled territory. India considers the LAC to be 3,488 km long, while the Chinese consider it to be only around 2,000 km. It is divided into three sectors: the eastern sector which spans Arunachal Pradesh and Sikkim, the middle sector in Uttarakhand and Himachal Pradesh, and the western sector in Ladakh.
- The alignment of the LAC in the eastern sector is along the 1914 McMahon Line, and there are minor disputes about the positions on the ground as per the principle of the high Himalayan watershed. This pertains to India's international boundary as well, but for certain areas such as Longju and Asaphila. The line in the middle sector is the least controversial but for the precise alignment to be followed in the Barahoti plains.

**UNDER THE SCANNER: ADANI'S PROJECT IN SRI LANKA****The story so far:**

On January 24, news agency AFP reported that Sri Lanka revoked a 2024 power purchasing agreement signed with Adani Green Energy Limited. A Sri Lankan official told the agency that while the project itself had not been cancelled, the government has appointed a committee to review it. The Adani Group "categorically denied" cancellation of the project. The move drew attention, with many in Sri Lanka flagging President Anura Kumara Dissanayake's pre-poll pledge to cancel the "corrupt" project that has been mired in controversy from the time it was approved.

**What is Dissanayake's position?**

In its latest clarification, the Dissanayake government has said that there is no decision to cancel the project, but that it would renegotiate a lower rate of power purchase with the firm. Cabinet Spokesman Nalinda Jayatissa stated that the government is seeking a lower tariff that is below six cents per kilowatt-hour (kWh), instead of the formerly agreed rate of 8.26 cents per kWh.

The Minister's announcement stood out, since the Dissanayake government in October 2024 told the Supreme Court, in an ongoing case, that it would reconsider the approval granted by the previous government to the Adani Group for the wind power project.

Furthermore, Mr. Dissanayake and his party have in the past underscored the need for a competitive bid. "We welcome foreign capital, including from the private sector. But all investments should come through a fair tender process," Mr. Dissanayake told The Hindu in September 2024. "If the government had gone for a fair tender process, we could have got it for half the price," he said in the interview.

**What is the project?**

Adani Green Energy Limited is to build a wind power plant project in the Mannar and Pooneryn towns in Sri Lanka's northern province, investing \$442 million. According to Sri Lankan authorities, the project is expected to add at least 350 MW to the island's national grid by 2025.

In October 2021, Adani Group chairman Gautam Adani visited Colombo and called on then President Gotabaya Rajapaksa, weeks after his company sealed a deal with State-owned Sri Lanka Ports Authority (SLPA) to develop and run the strategic Colombo Port's Western Container Terminal, which is currently proceeding. At that time, officials of the Ceylon Electricity Board



(CEB) told media that the Group also “explored the possibility of investing in Sri Lanka’s wind and renewable energy sector”.

#### **When was the project approved?**

In March 2022, the CEB signed a Memorandum of Understanding with Adani Green for the wind energy project, but the development was kept under wraps. It was a report in the local Sunday Times that brought the move to light. Ever since, the project has remained in the spotlight, amid dramatic developments on the island. The Gotabaya Rajapaksa administration came under fierce attack from the Opposition, for “choosing” the Adani Group for the project without calling for competitive bids, and bypassing due process. The Group’s “back door” entry into Sri Lanka’s energy sector disrupted the country’s competitive electricity generation system, the main opposition party Samagi Jana Balawegaya contended, accusing the government of “pampering” Prime Minister Narendra Modi’s “notorious friends”.

In June 2022, Chairman of the CEB M.M.C. Ferdinando resigned, days after he told a parliamentary panel that Prime Minister Narendra Modi had “pressured” Sri Lankan President Gotabaya Rajapaksa to clear the Adani Group project. Meanwhile, Sri Lanka experienced a crushing financial meltdown, owing to an acute twin deficit problem. As a result, Mr. Gotabaya was dramatically ousted from office by a citizens’ uprising, following which former Prime Minister Ranil Wickremesinghe took his place in July 2022, even as the crisis endured.

There was renewed thrust on bringing in foreign investment in to the country to rebuild its battered economy. In February 2023, Sri Lanka’s Board of Investment approved a project to set up two wind power plants in northern Sri Lanka, with a \$442 million investment from Adani Green Energy Limited. The two wind power plants — 250 MW capacity in Mannar and 100 MW in Pooneryn — were scheduled to be commissioned in two years, and the project would generate around 2,000 new jobs, the Board had announced. Despite U.S. short seller Hindenburg accusing the Adani Group of serious corruption in January that year, then Foreign Minister Ali Sabry told The Hindu that Colombo sees the Adani projects in Sri Lanka as a “government to government kind of deal” and was confident of their future. In May 2024, President Wickremesinghe’s Cabinet cleared a proposal to purchase power at \$0.0826, or 8.26 cents, per kWh from Adani Green Energy.

#### **Why are locals opposing the project?**

Residents of Mannar have been raising concerns over the project’s likely impact on a crucial bird corridor in the region and on the livelihoods of local fisherfolk. Environmentalists, too, are opposing the plant. The Central Asian Flyway, an important migration route for many waterbird species, runs through Mannar. Last year, multiple petitioners challenged the Adani wind power project. The next hearing of the case is scheduled in March.

### **WHY IS THERE A ROW OVER BORDER FENCING?**

#### **The story so far:**

In January, India and Bangladesh exchanged words over security measures at the border, including issues around fencing, with both countries summoning diplomats and sending a message about protocols and past agreements.



### **What is the length of the border?**

India shares its longest border with Bangladesh which is 4,096 km. After the regime change in Bangladesh last August, disputes have erupted at several places over border fencing. While Bangladeshi officials allege that tensions have arisen at five places along the border because of fencing, the Government of India has reiterated its commitment to ensuring a crime-free border.

### **How much of the border is fenced?**

The annual report of the Ministry of Home Affairs for the year 2023-24 points out that of the total length of the India-Bangladesh border of 4096.7 km, about 78% or 3196.705 km, has been fenced. India's border with Bangladesh passes through five States — Assam, Meghalaya, Mizoram, Tripura and West Bengal — and is guarded by six frontiers of the Border Security Force (BSF): Assam Frontier, Meghalaya Frontier, Mizoram and Cachar Frontier, Tripura Frontier, North Bengal Frontier and South Bengal Frontier.

While in some frontiers over 80% of the border is fenced, in certain other areas the fencing has not even crossed 50%. For instance, in the Meghalaya Frontier, out of 443 km, 367 km (82.8 %) has been fenced whereas in the South Bengal Frontier which guards about 913 km from Sundarbans to Malda (in West Bengal) only about 405 km (44%) has been covered by fencing. The disparities in border fencing is because of the challenging terrain and habitations too close to the international border. For instance, 364 km of the 913 km of the border guarded by the South Bengal Frontier is riverine, with Ichamati and Padma serving as the international border between the two countries.

The Ministry of Home Affairs report notes that there have been some problems in the construction of fencing in certain stretches on this border. While the river and the chars (silt lands formed in and along the river) pose geographical challenges to erecting fences, sometimes the border population resists fencing as it can create obstacles in accessing their land close to the international border.

### **What is the protocol for border fencing?**

The 1975 Joint India-Bangladesh Guidelines for Border Authorities states that after the identifiable boundary line, whether 'real' or 'working' has been fixed, neither side will have any permanent or temporary border security forces or any other armed personnel within 150 yards on either side of this line. "No permanent post will be constructed till the final demarcation has been done and the problem is resolved," the agreement states.

In places where the border population is settled close to the international border and fencing is required within 150 yards, both countries have to mutually agree on it. Recently, disputes have emerged in such areas where the BSF authorities claim that their counterparts — Border Guard Bangladesh (BGB) — had agreed on erecting fences but are not honouring the agreements made before August 2024.

Director General of BSF Daljit Singh Chawdhary said even if certain areas are unfenced along the border, it does not necessarily mean that infiltration or other cross-border activities are going on. He pointed out that wherever there are such gaps, technological solutions are used, like flood lights, cameras and drones.



### What lies ahead?

There is a push from the Government of India to complete fencing on the remaining stretches. While the political rhetoric of accusing the BSF for lapses in border management by the ruling Trinamool Congress continues in West Bengal, at a policy level the State government agrees that there is a need for the border to be fenced. In January 2025, the West Bengal Cabinet approved the allocation of around 0.9 acres of land in Karimpur to the BSF for setting up fences.

Despite disputes emerging in the Malda Rajshahi and Cooch Behar Lalmonirhat border, border guards of both the countries have exercised restraint and held talks to ease the situation. "Since August 5, 2024, after the unrest in Bangladesh, BSF carried out many SCPs (simultaneous-coordinating patrolling) to keep vigil and held 643 border meetings with BGB," a press statement by the BSF stated on December 1, 2024. The issue of border fencing is also likely to dominate the Director General-level talks between the BSF and BGB, scheduled to be held from February 16 to 20.

### NOT WORTH THE RISK

The deportation of dozens of Indians, believed to be illegal immigrants in the United States, is neither surprising nor unprecedented. Over the past few years, the U.S. government has intensified its Immigration and Customs Enforcement (ICE) operations to identify, detain, and deport individuals without proper documentation. For instance, between June and October 2024, the Department of Homeland Security reported that 1,60,000 individuals had been deported on 495 international repatriation flights to more than 145 countries, including India. However, the manner and timing should be cause for concern for New Delhi. To begin with, these deportations coincide with a major crackdown by ICE, spurred by Donald Trump's swearing-in as the U.S. President in January. He has made illegal immigration his "number one priority". India, which has one of the largest populations of illegal immigrants in the U.S., estimated at 7,25,000 undocumented individuals, will need to prepare for a significant increase in the number of returning migrants. Second, for the first time, the use of military flights signals that the U.S. does not intend to be challenged. This move drew protests from Colombian President Gustavo Petro, particularly after reports emerged of deported migrants being shackled. The U.S. Embassy in Delhi has also made it clear that this deportation is part of a broader initiative to tighten immigration laws and enforcement, reinforcing the message that illegal migration is not worth the risk. Further, the timing, just ahead of Prime Minister Narendra Modi's U.S. visit, suggests that diplomatic efforts alone may not be enough to deter the Trump administration from pursuing such measures. This has the potential to become a bilateral flashpoint in India-U.S. relations.

Accepting its citizens, provided they are verifiably Indian and have entered other countries illegally, is undoubtedly the Indian government's responsibility. However, stricter controls must be enforced to prevent Indians from embarking on perilous journeys to cross into the U.S. via Mexico and Canada. The government must ensure that young people in States with high deportation rates (Gujarat, Punjab, and Haryana), understand that working illegally abroad is not a guaranteed path to success. Educational campaigns should highlight the dangers associated with illegal immigration. Importantly, the root causes must not be ignored. The central and State governments must address the underlying economic distress, deepening agricultural crises, social tensions, and employment shortages that push people to take such risks. Attention must be paid to those who deliberately travel to conflict zones in search of opportunities. While altering U.S. immigration policies may be difficult, the Indian government must address the reasons behind this large-scale migration with empathy and urgency.





## WHAT CITIZENSHIP LAWS DO COUNTRIES FOLLOW?

### The story so far:

In the gale of executive orders announced after Donald Trump assumed office for a second term, the President issued one diluting birthright citizenship, which has been written into the U.S. Constitution since 1866. The order has been challenged in court in more than 20 States and a federal judge has temporarily blocked it. If implemented, it will mean that children born to illegal immigrants — as well as those legally in the U.S. on temporary visas for study, work or tourism purposes — will not be eligible for automatic U.S. citizenship. At least one parent must now be a U.S. citizen or legal permanent resident, the order says.

### What is the history of birthright citizenship?

The 14th amendment to the U.S. Constitution, which granted citizenship to “all persons born or naturalized in the United States, and subject to the jurisdiction thereof” was enacted in 1866, against the backdrop of the Civil War which had just ended, and was an effort to guarantee equal civil and legal rights to Black citizens. It was meant to overturn the infamous U.S. Supreme Court ruling of 1857 in *Dred Scott vs Sandford*, which held that enslaved people brought to the U.S. and their descendants could not be citizens of the country.

The principle was challenged in the 1890s, a time of rising anti-immigrant sentiment, when Wong Kim Ark, born in the U.S. as the son of Chinese nationals, went to visit relatives in China and was denied re-entry into the U.S. on the grounds that he was not an American citizen. In 1898, the Supreme Court upheld his citizenship, establishing that “every citizen or subject of another country, while domiciled here, is within the allegiance and the protection, and consequently subject to the jurisdiction, of the United States”. Over a century later, Mr. Trump is seeking to contest the court’s interpretation of “jurisdiction”, arguing in his executive order that the children of those “unlawfully present”, or whose residence in the U.S. is “lawful but temporary”, are not subject to U.S. jurisdiction. His supporters rail against the practice of birth tourism, or anchor babies, where foreign nationals seek to give birth in the U.S., in the hope that those babies will be able to help their families migrate to the country as well.

### How do citizenship laws vary elsewhere?

The U.S. follows the principle of *jus soli* (the right of soil), based on geography regardless of parental citizenship, as opposed to *jus sanguinis* (the right of blood), which gives citizenship based on the nationality of the child’s parents. According to the CIA’s World Factbook, there are only 37 countries which currently enforce the *jus soli* principle (Canada, Mexico, Brazil, Argentina etc.), of which 29 are in the Americas. Of the other eight, two are in India’s neighbourhood: Nepal and Pakistan, though the latter introduced a Bill seeking to end this.

The other is ‘*jus sanguinis*’ which means ‘right of blood.’ Under this principle, a child’s citizenship is determined by the citizenship of parents. Many African, European and Asian countries like Egypt, South Africa, Germany, India etc., follow this principle.

*Jus soli* historically allowed colonisers to quickly outnumber native populations as citizens. “Countries that have traditionally built their national character through diverse immigrant populations have used *jus soli* as a way of integrating diversity into the common stream of nationhood,” says Amitabh Mattoo, dean of the School of International Studies at Jawaharlal Nehru University, adding that countries protective of their culture and identity have generally followed





the principle of jus sanguinis. Jus soli derives from English common law and, until anti-migrant backlash a few decades ago, was implemented in the U.K. and most of its former colonies, including India.

India offered automatic citizenship to all those born on Indian soil before 1987. Introducing the Citizenship Bill in Parliament in 1955, then-Home Minister Govind Ballabh Pant said, “The mere fact of birth in India invests with it the right of citizenship in India...we have taken a cosmopolitan view and it is in accordance with the spirit of the times, with the temper and atmosphere which we wish to promote in the civilised world.” Three decades later, sentiments had changed, in the wake of unrest in Assam due to increasing migration from Bangladesh as well as the influx of refugees from Sri Lanka, following the civil war there. “The time has come to tighten up our citizenship laws...We cannot be generous at the cost of our own people, at the cost of our own development,” said P. Chidambaram, Union Minister of State for Home Affairs, while introducing the Citizenship (Amendment) Bill in the Lok Sabha in 1986.

Between July 1987 and December 2004, it was required that either of the parents of a child born in India was a citizen of India for granting citizenship. Since December 2004, the requirement was further restricted wherein both the parents had to be citizens or one parent is a citizen and the other not an illegal immigrant. This was primarily to restrict citizenship to children born to illegal immigrants from Bangladesh. The Citizenship Amendment Act, 2019 (CAA) provides accelerated citizenship to Hindus, Christians, Sikhs, Jains, Buddhists, and Parsis from neighbouring countries of Pakistan, Afghanistan and Bangladesh who have entered India before December 31, 2014. India has differentiated on the basis of religion, by excluding Muslims, for grant of accelerated citizenship for the first time through CAA, 2019. Critics argue that this is against the basic structure of secularism under the Indian Constitution. The argument made by the government is that it is only to grant accelerated citizenship to religious minorities of these three neighbouring countries who have migrated to India owing to religious persecution in these countries and hence not discriminatory. The Supreme Court will decide on the constitutional validity of this law. Meanwhile, the government should ensure that implementation of this law does not create undue hardships for Muslim citizens.

#### **Will the order affect Indian immigrants?**

“America once considered itself a melting pot, welcoming immigrants to become citizens, but has lately abandoned that metaphor for the salad bowl of distinct ethnicities. The rise of identity politics as well as political Islam has led to this desire to redefine citizenship,” says Professor Mattoo. “It will certainly result in reduced immigration, both legal and illegal.”

Of the 47.8 million immigrants living in the U.S. in 2023, 2.8 million were born in India, the second-largest group after those born in Mexico, according to data analysed by the Pew Research Center. About 1,45,000 people born in India are estimated to have arrived in the U.S. in 2022, legally and illegally. There are estimated to be 7,25,000 illegal immigrants from India living in the U.S. Every year, more than 70% of H1B visas — a temporary work visa that is often seen as a pathway to permanent residency — are issued to Indian citizens. There are more than 3,30,000 Indians in the U.S. on student visas, many of whom hope to apply for permanent residency. Over a million Indians, including dependents, are also waiting for employment-based green cards. For many of them, Mr. Trump’s order comes as a blow. Reports have emerged of dozens of pregnant women on temporary visas seeking to give birth prematurely before the order comes into effect, so their children can be born as U.S. citizens.



## PM MODI TO VISIT PARIS FEB 10-11 TO CO-CHAIR AI ACTION SUMMIT

Prime Minister Narendra Modi will travel to Paris on February 10 and 11 to co-chair the Artificial Intelligence (AI) Action Summit hosted by France.

- This will be Modi's first visit to France in his third term, and a possible opportunity to meet US President Donald Trump if he, too, attends the AI summit. India will also hold bilateral engagements with President Macron and other leaders attending the summit.

- The AI Action Summit, to be held at the Grand Palais, will be attended by Heads of State, leaders of international organisations, CEOs of small and large companies, academics, non-governmental organisations, artists and civil society members.

- France is looking to build on the momentum generated by the UK and South Korea, which had organised the previous two summits in November 2023 and May 2024, respectively.

- The Paris Summit, which is campaigning for "ethical, sustainable and inclusive AI", will focus on five "main pillars" forming the basis of the preparatory work.

- The first is "AI in the service of the general interest" or "the public interest". The second is "the future of work" based on the principle that "the integration of artificial intelligence is transforming labour markets, job content, tasks and ways of working".

- The third pillar is "innovation and culture", with the aim to "boost technological excellence in the service of innovation and artistic creation".

The fourth pillar is "trusted artificial intelligence". And finally, the "global governance of AI", the last point stemming from the four previous pillars.

### Do You Know:

- On the second day of his presidency, Donald Trump announced billions of dollars worth of investment to build artificial intelligence infrastructure in the United States of America.

- The Stargate Project is essentially a new company that aims to invest \$500 billion towards building advanced AI infrastructure in the US over the next four years. The initiative will invest \$100 billion almost immediately. This ambitious project seeks to push American AI leadership, create hundreds of thousands of jobs, and provide significant global economic benefits.

- Maharashtra's minister of Information and Technology Ashish Shelar on Friday declared that Maharashtra will become the first state in India to establish an Artificial Intelligence University.

## AN IMPORTANT MORNING, BEFORE FIRST R-DAY PARADE

- "Seventy-five years ago, on January 26, 1950, the nation's first Republic Day parade was held in the afternoon at New Delhi's Irwin Stadium (christened National Stadium in 1951 and renamed Major Dhyan Chand National Stadium in 2002). Even as that first parade marked India's transition to a democratic republic and celebrated the adoption of the Constitution, quiet but important changes were brewing since that morning."

- "One of the most significant shifts to take place that day was the transfer of power from C Rajagopalachari, India's last Governor-General to Independent India's first President."

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



- “Administered the oath of office by India’s first Chief Justice, Harilal Jekisundas Kania, the newly appointed President was given a national salute, followed by the band playing the National Anthem once again and a 31-gun salute. The Governor-General’s flag was lowered, and the President’s flag hoisted in its place. Moments later, Prasad administered the oath of office to Nehru and his Cabinet. The oath-taking was followed by a farewell for Rajgopalachari, which included a resolution passed by the new Cabinet.”
- “The festivities included a fly-past, comprising four-engine Liberators and heavy bomber aircraft of the Royal Indian Air Force, over the stadium. Despite a ban on formation flying over towns and cities then, Air Marshal Sir Thomas Walker Elmhirst, then the Chief of Air Staff and Commander-in-Chief of the Royal Indian Air Force, approved one anyway in view of the significance of the event.”
- “Three military awards recognising acts of bravery in the presence of the enemy were instituted and notified the same day: Param Vir Chakra (highest honour), Maha Vir Chakra and Vir Chakra. Another award, the Ashok Chakra, was instituted for both the Armed Forces and civilians to recognise acts other than in combat with the enemy (in maintaining law and order, for example).”
- “At the parade that day, Param Vir Chakras were awarded to Major Somnath Sharma (who had died in the Battle of Budgam in 1947) and Lance Naik Karam Singh (India’s first living soldier to be awarded the honour for heroic deeds performed despite 16 bullet injuries in Tithwal sector of Jammu and Kashmir during the 1948 conflict with Pakistan).”

**WHEN FREEDOM CAME ON AUG 15, 1947, HE WAS IN JAIL; HIS CASE A BENCHMARK FOR PERSONAL LIBERTY**

Minutes past midnight, on August 15, 1947, the echoes of Mahatma Gandhi ki jai and Bharat Mata ki jai reverberated through the Cannanore (now Kannur) jail where Communist leader A K Gopalan, then 43, was in solitary confinement.

- A day later, accused of stirring up the people “against His Majesty the Emperor”, Gopalan (or AKG, as is popularly known) was produced before a magistrate in Calicut (now Kozhikode) and charged with sedition.
- He was released on October 12, 1947, but just over a month later, he was detained again under the colonial laws that were still in place in the newly independent nation. After India became a republic, the Preventive Detention Act, 1950 was passed to ‘regularise’ detentions of many including AKG.
- In 1950, he moved the Supreme Court against his detention, perhaps hoping that the freedoms guaranteed by the new Constitution that came into force in 1950 would ensure his release from jail. After all, Article 21 stated that “no person shall be deprived of his life or personal liberty except according to procedure established by law”.
- AKG argued that the preventive detention law violated his fundamental rights under, among others, Article 21 and Article 22 of the Constitution (protection against arrest and detention).
- However, Article 22, while providing for “protection against arrest and detention”, including the right to be informed of charges, the right to a lawyer and the right to be produced before a court within 24 hours, carves out a strategic exception — that protection is suspended when an arrest



is under a law that specifically provides for preventive detention. Thus, *AK Gopalan v State of Madras* would thus go on to become the first case to question the Constitution's contrariety.

- On May 19, 1950, a six-judge bench held that the preventive detention law was valid and only allowed minor procedural safeguards that the length of detention had to be informed at the time of arrest although it could be extended. While AKG lost his case, the prescient questions it raised continue to shape our rights and freedoms.
- "Preventive detention is curtailing someone's freedom based on their past conduct that was used in England and other parts during war situations. The British used it in India and while we continued it in our Constitution, Gopalan's case brought in some procedural safeguards.

#### Do You Know:

- Born on October 1, 1904, in Peralasseri village in Kerala's Kannur district, Ayillyath Kuttiari Gopalan came from an upper-caste Hindu Nambiar family. After completing college, Gopalan worked as a school teacher for seven years. But the stirrings of the nationalist movement drew him away from the classroom. His participation in the Civil Disobedience Movement landed him in jail for the first time at the age of 26.
- While he went on to become president of the Kerala Congress and a member of the All India Congress Committee, interactions with communist leaders in prison shifted Gopalan's politics. By 1934, Gopalan had joined the Congress Socialist Party and, in 1939, when the party merged into the Communist Party, Gopalan became one of Kerala's earliest Communist leaders, alongside P Krishna Pillai and E M S Namboodiripad.
- It is during one such detention, with fellow Communist leader M R Venkataraman, when Gopalan "filed occasional affidavits and wrote to the court as a matter of course". One of these writ petitions became the *AK Gopalan case*. The legendary lawyer Nambyar, then a Mangalore-based mofussil lawyer, appeared against then Attorney General and Constituent Assembly member M C Setalvad.
- AKG wrote in his autobiography that he was taken to Delhi to witness the hearing in a "special First Class compartment by two Inspectors and twelve policemen".
- In his book, *M.K. Nambyar: The Constitutional Visionary*, K K Venugopal says that his father, while arguing for AKG, invoked everything from India's dharmic traditions of justice; a Latin enunciation, saying that the "procedure established by law" under Article 21 would mean 'jus' (a broader concept of justice and morality) and not just 'lex' (a written law or rule) to even used a quick-witted "quote from an authoritative book by a respected author" to bolster his case — his adversary Setalvad's own book on civil liberties.

### A SUPREME COURT RULING THAT CONTINUES TO GUARDRAIL FREE SPEECH IN INDIA

In the summer of 1950, across Madras, copies of the weekly *CrossRoads* were quietly pulled off shelves — an article on police violence that killed 22 Communists in a Salem prison was deemed too subversive by the State. The Madras government had invoked the Madras Maintenance of Public Order Act to ban the sale and distribution of the magazine in the state.

- The editor of *CrossRoads*, Romesh Thapar, moved the Supreme Court, perhaps bullish about the new Constitution that guaranteed a remedy for the enforcement of fundamental rights, including the right to freedom of speech and expression.





- His faith in the new Republic and the ideals on which the Constitution was framed wasn't misplaced. On May 26, 1950, a full bench of the Supreme Court ruled in his favour and *Romesh Thapar v State of Madras* became the first landmark ruling protecting free speech and limiting arbitrary use of State power. It is, till today, a widely recognised precedent for protection of a free press against State censorship. A crucial aftereffect of the ruling was the First Amendment to the Constitution that placed more limits on free speech.
- Five of the six judges of the Supreme Court — who in those days sat together for every case — held the Madras Maintenance of Public Order Act, under which Thapar's magazine was banned, as "wholly unconstitutional and void". The court said that unless a law was specifically conceived to address "security of the state", a general, wide law could not obstruct free speech on such grounds.
- The six-judge bench that delivered the ruling in *Romesh Thapar v State of Madras* said, "So long as the possibility of its (the Madras law) being applied for purposes not sanctioned by the Constitution cannot be ruled out, it must be held to be wholly unconstitutional and void." The court's view was that while a restriction on free speech is constitutionally sanctioned on the grounds that it impinges on the "security of the state", public order cannot be construed as a 'security of the state' issue.

**Do You Know:**

- Article 19 is part of the Fundamental Rights (Part III) of the Indian Constitution. It guarantees freedom of speech and expression and is invoked against the state. Some fundamental rights, such as those prohibiting untouchability, trafficking, and bonded labour, are explicitly against both the state and other individuals.
- Protection of certain rights regarding freedom of speech etc

(1) All citizens shall have the right

(a) to freedom of speech and expression;

(b) to assemble peaceably and without arms;

(c) to form associations or unions;

(d) to move freely throughout the territory of India;

(e) to reside and settle in any part of the territory of India; and

(f) omitted

(g) to practise any profession, or to carry on any occupation, trade or business

• Note: Originally, Article 19 (1) (f) and article 31 contained the right to property, i.e. to acquire, hold and dispose of property subject to the right of State to compulsory acquisition for public purposes by authority of law. However, right to property ceased to be a fundamental right when the Constitution (44th Amendment) Act, 1978 omitted sub-clause(f) of Article 19 (1) and Article 31 from the Constitution.

• Clause (2) of Article 19 of the Indian constitution imposes certain restrictions on free speech under following heads: Security of The State, Friendly Relations with Foreign States, Public Order,





Decency and Morality, Contempt of Court, Defamation, Incitement To An Offence, and Sovereignty and Integrity of India.

## ON THE APPOINTMENT OF AD-HOC JUDGES TO HIGH COURTS

### The story so far:

To address the growing backlog of criminal cases, the Supreme Court on January 30, allowed High Courts to appoint retired judges on an ad-hoc basis, provided they hear only criminal appeals as part of a Bench led by a sitting judge. A Bench of Chief Justice of India (CJI) Sanjiv Khanna and Justices B.R. Gavai and Surya Kant relaxed a rule set in Lok Prahari Through Its General Secretary S.N. Shukla IAS (Retd.) vs Union of India (2021), which had limited such appointments to High Courts where judicial vacancies exceeded 20% of the sanctioned strength.

### How are ad-hoc judges appointed?

Article 224-A, introduced by the Constitution (Fifteenth Amendment) Act, 1963, allows the appointment of retired judges to High Courts on an ad-hoc basis. Such appointments require the consent of both the retired judge and the President of India. These judges receive allowances as determined by the President's order and exercise the same jurisdiction, powers, and privileges as a sitting High Court judge. The detailed procedure for such appointments is outlined in the 1998 Memorandum of Procedure (MoP).

### When are such appointments made?

In Lok Prahari, the Court identified specific circumstances that could warrant the appointment of ad-hoc judges in certain High Courts. At the time, nearly 40% of judicial positions across all High Courts were vacant. The Court also referred to Law Commission reports from 1979, 1988, and 2003, which advocated for the temporary appointment of retired judges as an effective measure to address the mounting backlog of cases. However, the Supreme Court expressed concerns that Article 224A could result in "inaction in making recommendations" for regular judicial appointments. Consequently, the Court clarified that ad-hoc judges can only be appointed when recommendations for filling less than 20% of vacancies have not been made, after considering both the number of sitting judges and the pending proposals for judicial appointments.

The Court outlined several "trigger points" for such appointments, although the list is not exhaustive. These include — 1) if vacancies in a High Court exceed 20% of its sanctioned strength; 2) if cases in a specific category have been pending for more than five years; 3) if more than 10% of the High Court's cases are pending for over five years; 4) if the case disposal rate is lower than the rate at which new cases are filed (case clearance rate). The Court also recommended that each Chief Justice form a panel of retired judges, along with soon-to-retire judges, for appointments.

### What does the latest order say?

The CJI-led Bench noted that, as of January 25, there are 62 lakh pending cases across High Courts, according to data from the National Judicial Data Grid. Of these, over 18.2 lakh are criminal cases, while more than 44 lakh are civil cases. To tackle this growing pendency, the Court decided to set aside the condition laid down in Lok Prahari, which permitted the appointment of ad-hoc judges only when judicial vacancies exceeded 20% of the sanctioned strength.



It further ruled that ad-hoc judges can only hear criminal appeals. Additionally, the number of ad-hoc judges cannot exceed 10% of a High Court's sanctioned judicial strength, meaning each High Court can have only 2 to 5 such appointments.

#### **Have there been prior instances?**

There have only been three documented instances of ad-hoc judicial appointments. In 1972, Justice Suraj Bhan was appointed to the Madhya Pradesh High Court shortly after his retirement to adjudicate election petitions. Justice P. Venugopal was similarly appointed to the Madras High Court in 1982. More recently, in 2007, Justice O.P. Srivastava was appointed to the Allahabad High Court to preside over the Ayodhya title suits.

#### **SC criticises reluctance of high courts and trial courts in granting bail**

Giving bail to a Muslim cleric accused of converting a mentally challenged minor boy, the Supreme Court on Monday criticised the reluctance of trial courts and high courts to exercise their discretionary power to grant bail.

- The top court was hearing a petition by Maulvi Syed Shad Kazmi alias Mohd Shad, challenging the Allahabad HC's order refusing him bail. In custody for 11 months now, he was earlier denied bail by a trial court as well. He was booked under the relevant sections of the IPC and the Uttar Pradesh Prohibition of Unlawful Conversion of Religion Act, 2021.
- "There was no good reason for the high court to decline bail. The offence alleged is not that serious or grave like murder, dacoity, rape etc," the top court said.
- The court said it was "conscious of the fact that grant of bail is a matter of discretion," but that it has to be "exercised judicially keeping in mind the well-settled principles of grant of bail."
- The bench said that "every year so many conferences, seminars, workshops etc. are held to make the trial judges understand how to exercise their discretion while considering a bail application as if the trial judges do not know the scope of Section 439 of the CrPC or Section 483 of the BNSS."

#### **Do You Know:**

- The CrPC does not define the word bail but only categories offences under the Indian Penal Code as 'bailable' and 'non-bailable'. The CrPC empowers magistrates to grant bail for bailable offences as a matter of right. This would involve release on furnishing a bail bond, without or without security.
- Non-bailable offences are cognisable, which enables the police officer to arrest without a warrant. In such cases, a magistrate would determine if the accused is fit to be released on bail.

### **SEIZE THE LULL IN MANIPUR**

It has been 21 months since ethnic violence erupted in Manipur, straining its social fabric. In the past few weeks, an uneasy calm has been maintained in the northeastern state, where faultlines have deepened between the Meiteis and the Kukis. The most severe episode of violence in recent months occurred in November 2024, when 22 people were killed over 11 days, the majority in Jiribam district — reassuringly, no casualties have been reported since then. The last major face-off was a shootout in the Kadangband area of Imphal West district, just hours after Chief Minister N Biren Singh's New Year eve apology for the ongoing crisis. A day earlier, on December 31, a



group of protesting Kuki women clashed with the CRPF, followed by a mob attack on the SP's office in Kangpokpi district. Since then, Manipur has seen a lull in ethnic violence.

Meanwhile, an escalation of conflict in Myanmar's Sagaing region, not far from Manipur's Kamjong district, has sparked concerns about a potential spillover. Manipur shares a 400-km-long border with Myanmar to its south and east. The military and community ties between insurgents in both regions sharpen these fears. Amid airstrikes by the Burmese military and retaliation from rebel forces, more than 200 refugees from Myanmar have reportedly taken shelter near the Moreh border in Manipur's Tengnoupal district since January 27. There have also been reports of deaths of Meiteis and Kukis fighting in Myanmar, with the former groups fighting alongside the junta, the latter with the rebels.

As security forces combat the border threat, both the central and state governments should seize the lull as an opportunity to initiate meaningful reconciliation efforts. Peace is not merely the absence of war; Manipur remains a deeply divided state. The valley has been emptied of its last Kuki residents, just as the Kuki-dominated hills have seen the exodus of the Meiteis. The trust deficit between the two communities remains unaddressed, making the prospect of either group returning to their homes seem distant. Efforts towards normalcy must begin at the highest levels of leadership. The absence of any mention of Manipur in the President's Address in the Lok Sabha this week signals a troubling lack of urgency. The Prime Minister is yet to visit Manipur since the ethnic conflict started on May 3, 2023. The Supreme Court is awaiting a forensic analysis of the audio tapes regarding Chief Minister Biren Singh's alleged role in exacerbating the violence. None of this bodes well for trust-building. The Centre must expedite its efforts to bring back social harmony, Manipur cannot be allowed to slide back into the vicious circle of conflict.

#### SC TO WAIT FOR CFSL REPORT ON ALLEGED BIREN AUDIO

The Supreme Court on Monday decided to wait for a report from the Central Forensic Science Laboratory (CFSL) on the veracity of audio recordings allegedly "establishing complicity" of Manipur Chief Minister N. Biren Singh in the ethnic violence in the State which led to many deaths.

A Bench of Chief Justice Sanjiv Khanna and Justice Sanjay Kumar was informed by Solicitor-General Tushar Mehta that the Union government had sent the content handed over to it by the petitioner, Kuki Organisation for Human Trust, to the CFSL. Mr. Mehta said the government had requested individuals who had uploaded material on Twitter (now 'X') to share the original recording.

"Please examine all this," Chief Justice Khanna said. Advocate Prashant Bhushan, appearing for the petitioner, submitted that Truth Labs report of the audio tapes show "93% chances that it is his [Mr. Singh's] voice. We had sent it to Truth Labs."

Mr. Mehta sought to dismiss the submission by Mr. Bhushan, saying Truth Labs was a private organisation. Mr. Bhushan said its reports had been extensively used in court as evidence.

Chief Justice Khanna reminded the petitioner that the "State was slowly limping back to normalcy". The court would look into whether the case ought to be referred to the Manipur High Court.

Justice Kumar, at the beginning of the court session, announced in open court that Chief Minister Singh had hosted a dinner for him when he was elevated to the Supreme Court. Justice Kumar was the Chief Justice of the Manipur High Court till his appointment to the top court. The judge said he



was ready to recuse if the parties wanted him to do so. “There is no issue whatsoever... Not one bit,” Mr. Bhushan responded.

The petition has sought the court to order a court-monitored investigation by the Special Investigation Team into leaked audio clips.

The NGO, also represented by advocate Cheryl D’Souza, alleged the “Chief Minister of Manipur was instrumental in inciting, organising and thereafter centrally orchestrating the large-scale murder, destruction and other form of violence against the Kuki-dominated areas in Manipur”.

“In 2023, violence broke out in Manipur due to the clash between the majority Meitei community and the tribal Kukis. Thereafter, in August 2024, an audio of approximately 48 minutes allegedly recorded in a closed-door meeting with the Chief Minister was published in various newspapers. The recorded conversation prima facie shows the complicity and the involvement of the State machinery in violence against Kuki Zo community,” the petition said.

#### WAITING FOR MUHURAT? DEPORT 63 DECLARED FOREIGNERS: SC TO ASSAM

Castigating the Assam government for “indulging in suppression of facts” on the continued detention of people declared foreigners, the Supreme Court Tuesday directed the state to immediately deport 63 declared foreigners whose nationalities are known, and file a status report in two weeks.

- Questioning Assam’s explanation that the addresses of the people declared foreigners were not available, Justice A S Oka, who was on the bench with Justice Ujjal Bhuyan, told Assam Chief Secretary Ravi Kota who appeared via a video link: “You have refused to start deportation saying their addresses are not known. Why should it be our concern? You deport them to their foreign country. Are you waiting for some muhurat?”
- Justice Oka told the Chief Secretary that the state can deport foreigners even without an address. “ ‘Foreign address not divulged’ — this is the reason to not deport?...You can’t continue to detain them indefinitely.”
- “Once they are held to be foreigners, they should be deported immediately. You know the status of their citizenship. Then how can you wait till their address is received? It is for the other country to decide where they should go.”
- When the counsel for the Assam government asked “where do we deport them to” without the address, Justice Oka said, “You deport them to the capital city of the country.”
- “Suppose the person is from Pakistan, you know the capital city of Pakistan? How can you keep them detained here saying their foreign address is not known? You would never know the address,” he said.
- Joining him, Justice Bhuyan told the state counsel, “Once you declare a person as a foreigner, then you have to take the next logical step. You can’t detain them forever. Article 21 right is there.”

#### Do You Know:

- A break-up of individuals at the camp accessed by The Indian Express shows two categories of “foreigners” among the 270 inmates. There are 103 Rohingya people, 32 Chin people and an individual from Senegal who had been referred to sessions courts where they were sentenced and





convicted for violations of the Foreigners Act, the Citizenship Act and the Passports Act. These individuals are citizens of other countries, and after completing their sentences in prisons, they have been placed in the “transit camp” while awaiting deportation.

- The rest of the 133 inmates have been declared “foreigners” by Foreigners Tribunals in Assam – quasi-judicial bodies that determine whether or not a person presented before them is an Indian citizen. The tribunals receive two kinds of cases – those referred to them by the border police when they suspect someone of being a foreigner and those related to people listed as “doubtful” voters in electoral rolls.
- According to a senior Assam government official, 70 of these 133 declared foreigners have “admitted to being Bangladeshi nationals” and have shared addresses in Bangladesh. Another individual has been released on bail. However, the 63 people who the Supreme Court referred to have not shared an address.

### SC ISSUES NOTICE IN PLEA CHALLENGING BIHAR PSC CHAIRMAN APPOINTMENT

The Supreme Court on Monday appointed an amicus curiae and issued formal notice to the State of Bihar on a plea challenging the appointment of State Public Service Commission Ravi Manubhai Parmar.

A Bench of Justices P.S. Narasimha and Manoj Misra appointed advocate Vanshaja Shukla as the amicus curiae in the petition filed by advocate Brajesh Singh to declare the appointment as “illegal and void”.

Mr. Singh argued that the appointment defied the mandate of Article 316 of the Constitution which “impliedly requires only a person with impeccable integrity should be appointed as Chairman or Member of Public Service Commission”.

Mr. Singh alleged Mr. Parmar was accused in a vigilance case in connection with “large-scale scam and corruption in the scheme of Bihar Mahadalit Vikas Mission and the same is still pending adjudication before the Special Judge, Vigilance, Patna”. “Thus, apparently respondent number 2 (Parmar) is facing serious charges of committing offences of corruption and forgery, and as such his integrity is doubtful and therefore in such circumstances he ought not to have been appointed Chairman of Bihar Public Service Commission... It cannot be the case the State government would not be aware about the criminal antecedents of respondent number 2,” the petition said.

It alleged the appointment was a result of the “deadly nexus of bureaucracy and the politicians in the State of Bihar”.

Justice Narasimha asked Mr. Singh, why as a lawyer, he would want to dabble in such affairs through the filing of a writ petition. Mr. Singh said he was domiciled in Bihar. The exchange led to the appointment of Ms. Shukla as the amicus curiae. The court said the case would come up after two weeks.

### WHAT IS THE SC DIRECTIVE ON SACRED GROVES?

#### The story so far:

On December 18, 2024, the Supreme Court directed the Forest Department of Rajasthan to map on the ground and via satellite every ‘sacred grove’ in detail. They were to be identified





irrespective of their size and based “solely on their purpose and their cultural and ecological significance to the local community”. After mapping, the court directed the department to classify them as ‘forests’ and notify them as ‘community reserves’ under the Wildlife Protection Act (WLPA) 1972. Effectively, the decision would transfer the sacred groves from community protection to forest officialdom for the purposes of conservation. The move defies the Forest Rights Act (FRA) 2006, which by virtue of being enacted later overrides the WLPA, and which the government had intended to do the reverse: i.e. recognise traditional and customary rights over all forest lands and transfer them back from the Forest Department to gram sabhas.

The sacred groves of Rajasthan, also known as ‘orans’, ‘malvan’, ‘deo ghat’, and ‘baugh’, number around 25,000 and cover about six lakh hectares of the State.

#### **What was the case about?**

In T.N. Godavarman v. Union of India, the Supreme Court ordered that ‘forest land’ in Section 2 of the Forest (Conservation) Act, 1980, “will not only include ‘forest’ as understood in the dictionary sense, but also any area recorded as forest in the government record irrespective of the ownership of the land”. The court then directed State governments to constitute expert committees to identify areas that met this understanding of ‘forest land’.

In 2004, the expert committee report of the Rajasthan government identified only those sacred groves that fulfilled the criteria of ‘deemed forests’ — that is, trees covering 5 hectares of land with at least 200 trees per hectare were classified as ‘forests’, while the remainder was not.

The Supreme Court’s Central Empowered Committee (CEC) disagreed with this choice because it was inconsistent with the court’s definition of ‘forest land’. The CEC also said all such areas diverted for non-forestry purposes before 1980 could be exempted. The apex court agreed with the CEC and directed Rajasthan to implement the recommendations post-haste in 2018.

In early 2024, the Rajasthan government — responding to interlocutory applications seeking directions to implement this order — said that sacred groves were being identified and documented as ‘forest lands’. Ironically, the Rajasthan Forest Policy 2023 omitted the detailed framework for the protection of sacred groves specified in its 2010 policy.

The present order came in response to a challenge to these positions at the Supreme Court.

#### **What do sacred groves mean to communities?**

Sacred groves are community-regulated and conserved patches of forest land. They are created and managed traditionally by communities in various ways deeply rooted in their identity. The groves are kept inviolate through customary laws and taboos, many of which completely prohibit the extraction of any resources in any form, except for custodians to access medicinal plants. The grove’s conservation ethos is strongly linked to piety and sanctity, enforced in terms of the community’s relationship with its spirits and gods.

India is estimated to have 1-10 lakh sacred groves of this nature — the highest in the world. They are called ‘devara kadu’ in Karnataka, ‘devban’ in Himachal Pradesh, ‘kavu’ and ‘sarpa kavu’ in Kerala, ‘sarna’ in the Chota Nagpur Plateau region, ‘devbani’ in Chhattisgarh, ‘jahera’ or ‘thakuramma’ in Odisha, ‘devgudi’ by the Muria, the Madia, and the Gond adivasis of Maharashtra and Chhattisgarh, ‘ki law lyngdoh’, ‘ki law kyntang’ or ‘ki law niam’ in Meghalaya, ‘sabarkantha’, ‘dahod’ or ‘banaskantha’ in Gujarat, and so forth.



They are often associated with temples, monasteries, shrines, pilgrim sites, and/or burial grounds. These sites are thus also repositories of various herbal medicines and gathering points for local healers, as much as they are biodiversity hotspots. They are also, frequently, sources of perennial streams that support the growth of unique and endemic flora and fauna.

Local legends, myths, and beliefs surround sacred groves, and communities have transmitted them orally through several generations as a matter of conserving their cultural identities. Communities' relationships with their groves have also helped mitigate the effects of floods, landslides, and droughts on their lives while stabilising the soil and preventing erosion. Anthropologists have also documented the impact of sacred groves on their respective communities' mental and physical well-being.

### **What are community reserves?**

The WLPA 2002 introduced the category of Protected Areas called 'community reserves', in addition to 'national parks' and 'sanctuaries'.

Community reserves are notified over community or private land where locals have volunteered to conserve habitats to protect "fauna, flora, and traditional or cultural conservation values and practises".

The community, or even the individual, is thus required to prevent any offences specified in the WLPA, assist the authorities in arresting any offenders, report the "death of any wild animal," and prevent or extinguish any fires. The offences include damaging the boundary marks, teasing or molesting wild animals, littering in the community reserve, setting fires or allowing a fire to burn, and using any chemical substances that endanger wildlife.

Further, a land-use pattern within a community reserve cannot be changed without the approval of the reserve management committee and the State government. The Chief Wildlife Warden, under whose jurisdiction community reserves fall, effectively has overall control of the reserve and its management plan.

The Supreme Court's directions also obligate the State government to constitute a 'Community Reserve Management Committee' to conserve, maintain, and manage the reserve and to protect wildlife and habitats. This committee is to have at least five members nominated by the gram panchayat (or members of the gram sabha if there is no gram panchayat) and a representative of the Forest or Wildlife Department in whose jurisdiction the community reserve is located. If the reserve is on private land, the committee will consist of the land owner, a representative of the Forest or Wildlife Department, and a representative of the concerned Panchayat or tribal community.

The elected chairperson of the committee will be designated the reserve's 'Honorary Wildlife Warden'.

The court also recommended that the Union Environment Ministry identify and map sacred groves nationwide and formulate a policy for their governance and management.

### **How will the Forest Department's takeover clash with the FRA's provisions?**

If sacred groves had fallen under the FRA's purview, they would have been part of 'community forest resources'. According to the FRA, a community forest resource is the "customary common forest land within the traditional or customary boundaries of the village... including reserved



forests, protected forests and protected areas such as sanctuaries and national parks to which the community had traditional access”.

Thus, the gram sabhas would have been the statutory authority to protect, regenerate, conserve or manage community forest resources, along with the wildlife, flora, and biodiversity within. The gram sabhas would also have been responsible for preventing activities that harm their cultural and natural heritage.

To this end, the sabha would have to constitute its own Community Forest Resource Management Committees to develop and execute the managed plan approved by the gram sabha. And State governments would be duty-bound to support these plans.

All sacred groves in forest areas are currently subsets of community forest resources, which are in turn under the jurisdiction of gram sabhas, and not the Forest or the Wildlife department. All sacred groves outside forest land, if any, also come under the FRA's purview if a proposal to notify them as 'forest land' comes into being. In sum, notifying sacred groves as community reserves controlled by the Forest Department could conflict with the customs of communities, and with the community forest resources notified by the FRA, which complies with the customs by bringing them under its governance.

#### DO NOT REDUCE FOREST LAND FOR LINEAR PROJECTS, SAYS SC

The Supreme Court made it clear to the Union government and States on Monday that no steps will be taken by them to reduce forest land unless compensatory land is provided by them for afforestation.

“We will not allow you to reduce the forest area... You cannot use any forest land for linear projects. If you are using any area for these projects, the same amount of land must be given for compensatory afforestation,” a Bench of Justices B.R. Gavai and K. Vinod Chandran addressed Additional Solicitor-General Aishwarya Bhati, appearing for the Centre.

The court was hearing a clutch of petitions challenging amendments made in 2023 to the Forest (Conservation) Act, 1980. The 1980 statute was enacted to check further deforestation leading to ecological imbalance.

In February last year, the top court significantly declared in an order that the expression 'forest' would continue to have a “broad and all-encompassing” meaning and include 1.97 lakh square km of undeclared forest lands.

The petitions had argued that Section 1A introduced through the amended Act had “circumscribed or substantially diluted” the definition of forest to two categories — declared forests and lands recorded as forests in ‘government records’ after 1980. The Centre, however, had denied using the amendments to reduce the forest cover. It pointed to the ‘explanation’ to Section 1A, which expanded the term ‘government records’ contained in the provision to include lands recognised as forest by any State or Union Territory authority, local body, council or recognised communities.

#### Meaning of ‘forest’

However, the court had directed the government, for clarity's sake, to revert to the “dictionary meaning” of ‘forest’ as upheld in a 1996 Supreme Court decision in the TN Godavarman



Thirumulpad case. The term ‘forest’ had been given a broad meaning by the court then to preserve these green expanses, irrespective of their nature, classification or ownership.

“The adoption of this dictionary meaning to forests was made to align with the intent of the Forest Conservation Act, 1980. It is clarified that the expression ‘forest’ will cover but not be confined to lands recorded as forests in the government records,” the court had noted last year.

The Bench had clarified that the “all-encompassing” dictionary meaning upheld by the Supreme Court in the Godavarman Thirumulpad case over 25 years ago would continue to hold field till the States and Union territories prepare a “consolidated record” of all the lands recorded as “forest” in government records, including forest-like areas, unclassified and community forest lands.

The court said the exercise to prepare such a consolidated record was part of Rule 16 of a notification issued by the Environment Ministry on November 29, 2023, and would take a year.

### ‘ADOPTED OWN PROCEDURE’: SC ON TN GOV WITHHOLDING ASSENT TO BILLS

THE SUPREME Court Thursday questioned Tamil Nadu Governor R N Ravi’s decision to withhold assent to some Bills presented to him by state legislature and said “he seems to have adopted his own procedure”.

- Hearing the Tamil Nadu government’s petitions against the Governor withholding assent on certain Bills and referring some to the President, Justice J B Pardiwala, presiding over a two-judge bench, said, “It doesn’t make any sense... (Governor) saying that ‘I withhold assent but will not ask you to reconsider the Bills’ and thereby frustrate the second part of Article 200. He seems to have adopted his own procedure.”
- The bench, also comprising Justice R Mahadevan, told Attorney General R Venkataramani, representing TN Governor, that he will have to show to the court what weighed with the Governor in arriving at the decision to withhold assent. It wondered what contemporary material was available “except one letter addressed by the secretary” to explain how the Governor approached the issue.
- Explaining why it was seeking material to back the Governor’s decision, Justice Pardiwala said “because they have alleged not just malice in law, but malice in fact also”. He told the AG, “Today we are called upon to interpret just one Article 200 which we will, but on factual aspect, you need to show us why the Governor decided to withhold assent.”
- The bench sought to know why the Governor had kept the Bills pending for three years before declaring that he was withholding assent.

#### Do You Know:

- The Supreme Court on 7th Feb 2025, asked if it is open to a Governor to reserve Bills sent by the state Assembly, for the consideration of the President after they have withheld assent to a Bill.
- While Article 163 of the Constitution deals with the powers of the Governor generally, Article 200 specifically deals with the issue of granting assent to Bills. Both the provisions are read together to determine the contours of the power the Governor holds on this issue.





- When a Bill passed by the legislature of a state is presented to the Governor, the Governor has four options: (1) grant assent to the Bill; (2) withhold assent to the Bills; (3) return the Bills for reconsideration; or (4) reserve the Bill for the consideration of the President.
- Article 200 reads: “When a Bill has been passed by the Legislative Assembly of a State or, in the case of a State having a Legislative Council, has been passed by both Houses of the Legislature of the State, it shall be presented to the Governor and the Governor shall declare either that he assents to the Bill or that he withholds assent therefrom or that he reserves the Bill for the consideration of the President.”
- However, the Article has a key proviso. It says that the Governor “may, as soon as possible” return Bills other than money Bills, with a message requesting that the House reconsider it in parts or in whole. However, once the Legislative House reconsiders the Bill and sends it to the Governor once again, the Governor “shall not withhold assent therefrom”.
- An indefinite timeline in deciding on Bills can in effect amount to paralysing the elected government. At the same time, giving assent to Bills is one of the few areas in which the Governor can exercise his discretion. But again, this discretion cannot be used arbitrarily or based on a personal preference, but only in Constitutional terms with cogent reasons. Additionally, Article 200 uses the word “shall” which indicates that the framers of the Constitution intended a mandatory tone for the Governor on this aspect. The Supreme Court in its landmark 2016 ruling in the Arunachal Pradesh Assembly case (Nabam Rebia and Bamang Felix vs Deputy Speaker) discussed this aspect briefly.

## ON LIVE-IN RELATIONSHIPS IN UTTARAKHAND

### The story so far:

Uttarakhand’s Uniform Civil Code passed by the State Assembly in February 2024, mandates the registration of live-in relationships both at their commencement and termination. This requirement applies not only to residents of Uttarakhand but also to individuals residing elsewhere in India. The rules, which came into effect on January 27, 2025, impose extensive documentation requirements for such registrations. “Requiring individuals in a live-in relationship to register with the government constitutes a gross violation of the right to privacy enshrined in Article 21 of the Constitution. It also contravenes the nine-judge Bench decision in Justice K.S. Puttaswamy versus Union of India, which affirmed that the right to privacy encompasses both informational privacy and decisional autonomy. There can be no disproportionate intrusion by the state into the private realm of an individual,” Alok Prasanna Kumar, co-founder of Vidhi Centre for Legal Policy told The Hindu.

### What is the registration process?

Under the code, only unmarried, heterosexual couples can enter into live-in relationships. Couples currently in a live-in relationship or intending to enter one can register through the newly launched online portal. For offline registration, they have to submit a 16-page form along with supporting documents to the concerned registrar. As stipulated in Rule 15(3)(e), applicants are required to submit an extensive set of documents for registration such as their photographs, their income tax Permanent Account Number (PAN), their Aadhaar linked to their phone number, and proof of residence or domicile within the State.



If either partner is between the ages of 18 and 21, they must provide the Aadhaar-linked phone number and address of each of their parents or legal guardians. The registrar is legally obligated to notify the guardians regarding the registration of the relationship, as well as its termination.

#### **Is relationship history relevant?**

A distinctive feature of the rules is their attempt to equate live-in relationships with the status of marriage. If a couple falls within the “degrees of prohibited relationships” as outlined in Schedule 1 — meaning they are related by blood — they must obtain approval from a religious or community leader certifying their eligibility to marry. The term “degrees of prohibited relationships” is derived from the Hindu Marriage Act, 1955, which forbids marriages between individuals who are lineally or consanguinely related, unless such unions are permitted by local customs. Couples are also required to furnish proof of any prior relationships, particularly if they have previously been in a live-in relationship. Further, they are required to disclose their current status — whether single, married, divorced, annulled, separated, or widowed.

#### **What about housing?**

If the partners are already living together, they must provide proof of their shared household, such as the most recent electricity or water bill. If they reside in rented accommodation, they must also submit the landlord’s full name, contact number, and a copy of the rent agreement. The registrar is obligated to contact the landlord while verifying the application details. If the partners are not yet living together, they must apply for a provisional certificate. Upon receiving such a certificate, the couple must secure accommodation within 30 days, with a possible 15-day extension. They must then apply for final registration, providing proof of their new premises.

The rules also impose specific obligations on landlords. When leasing property to a live-in couple, landlords must request either a provisional or final registration certificate, which will be incorporated into the rent agreement. Failure to comply will result in a penalty.

#### **Will there be penalties?**

Under the rules, the registrar is empowered to conduct a summary inquiry to verify the authenticity of submitted documents and ensure that the relationship was not established through coercion, undue influence, misrepresentation, or fraud.

Failure to register a live-in relationship within a month may result in both civil and criminal penalties. Upon conviction, a magistrate may impose a jail term of up to three months, a fine of up to ₹10,000, or both. Providing false information or concealing details carries a stricter penalty — imprisonment of up to three months, a fine of up to ₹25,000, or both. The registrar, either acting suo motu or upon receiving a complaint regarding non-registration, can issue a notice directing compliance. False complaints may attract a fine, with repeat offenders facing a higher penalty.

#### **What have experts said?**

According to Apar Gupta, advocate and co-founder of the Internet Freedom Foundation, the rules allow third-party disclosures of personal data without sufficient safeguards. “This will lead to large-scale social surveillance of relationships, which appears to be the intended consequence of the legislation,” he said. “There are no penalties for third parties in cases of data leaks, which is particularly concerning since the exposure of personal information can pose real-world threats. This is likely to disproportionately affect interfaith and inter-caste couples,” Mr. Gupta added.



**Do You Know:**

- The Seventh Schedule of the Constitution provides that both the Centre and state legislatures can legislate on matters pertaining to family laws.
- A live-in relationship may be terminated by either of the parties to the live-in relationship by submitting a “statement of termination”.
- A progressive reform reflected in the Code pertains to the abolishment of the concept of “illegitimate children”. At present, parent-child relations are governed by both secular and personal laws on guardianship, which discriminate against children born out of wedlock by deeming them illegitimate and not granting them rights at par with children born within wedlock. While courts have attempted to extend certain rights to children born out of wedlock specifically in matters pertaining to inheritance under Hindu law, as well as maintenance, the concept of an “illegitimate” child continues to prevail.
- The Uttarakhand UCC treats children born in void and voidable marriages, as well as children born in live-in relationships, as legitimate.
- One striking feature of the Code is that it abolishes the coparcenary system, which exists under Hindu personal law. Under the Hindu Succession Act, 1956, property can be held as coparcenary property or self-acquired property. Four generations of Hindus hold ancestral property as coparceners. Self-acquired property is individual property, and passes as per rules for intestate succession on death.
- The share of the deceased in the coparcenary property forms part of the property pool again. Consequently, for a person to get their individual share in coparcenary property, the property has to be partitioned. The Uttarakhand UCC does away with the coparcenary system, and extends the same scheme of succession to all persons irrespective of religion. Thus, all property will pass as individual property as per the scheme of intestate succession laid down under the Code.

**WHAT DOES RAJASTHAN’S BILL AGAINST ‘UNLAWFUL’ RELIGIOUS CONVERSIONS SAY**

On Tuesday (February 4), a Bill was tabled in the Rajasthan Legislative Assembly to stop “unlawful” religious conversions. Though it is yet to be debated, the Bill is not expected to see major changes, if at all, and will likely be passed during the ongoing budget session.

- The Bill, tabled by cabinet minister Gajendra Singh, states that those in violation can be punished for 1-5 years in jail with a minimum fine of Rs 15,000.
- In case of conversion of a minor, a woman or a person belonging to the Scheduled Caste or Scheduled Tribe (SC/ST), the punishment will be 2-10 years with a fine of Rs 25,000.
- In case of mass conversions, the imprisonment would be between 3-10 years with a minimum fine of Rs 50,000, with repeat offenders facing not more than double the punishment provided under the law for each subsequent offence.
- Those willing to convert will have to fill up a prescribed declaration form and submit it to the District Magistrate (DM) or the relevant authority 60 days in advance, and any violation of this would invite up to three years’ punishment and at least Rs 10,000 fine. Then, the “convertor” or the person performing the ceremony would give a month’s advance notice to the DM through a



prescribed form, and violating this would invite up to five years' imprisonment and a minimum fine of Rs 25,000.

**Do You Know:**

- Under the Rajasthan Prohibition of Unlawful Conversion of Religion Bill, 2025, unlawful conversion mainly refers to religious conversion through coercion, force, allurement or fraud, with allurement including cash, material benefits, employment, free education, etc.
- The burden of proof – that a religious conversion was not effected through misrepresentation, force, undue influence, coercion, allurement or by any fraudulent means or marriage – lies on the person who has “caused” the conversion, the Bill states. This is a reversal of the principle of assumption of innocence, which normally applies to the accused person in a criminal case.
- The Bill mainly empowers blood relatives to lodge an FIR in a suspected case. It says, “Any aggrieved person, his/her parents, brother, sister, or any other person who is related to him/her by blood, marriage or adoption may lodge a FIR”.

All offences under the Bill are cognizable (where the police can make an arrest without a warrant) and non-bailable (where bail is not a matter of right and a magistrate determines if the accused is fit to be released on bail).

- Those converting voluntarily would undergo a seemingly exhaustive process over a few months. A prescribed declaration form should be filled and submitted to the District Magistrate (DM) or the relevant authority 60 days in advance, with violations inviting up to three years' punishment and a minimum fine of Rs 10,000.

#### HUNTING FIELDS OF ENGLAND TO PARLIAMENT: ORIGINS OF WHIP SYSTEM

Vice President Jagdeep Dhankhar's recent statement that party whips curtail an MP's freedom of expression by enforcing a party line has sparked a debate. “Why should there be a whip? Whip means you are curtailing expression, curtailing freedom, and subjecting your representative to servility. You do not allow such a person to use his or her mind,” Dhankhar had told a group of students at his residence on January 23.

- In popular perception, a party whip is sacrosanct, especially when it comes to being present in Parliament when a matter important for the party is up for voting and casting their vote as per the party's wishes. There are consequences, including expulsion, for defiance of a whip.

- There are three kinds. A one-line whip just informs members about a vote but permits them to abstain. A two-line whip asks them to be present but does not tell them how to vote. The three-line whip, largely the norm these days, directs members to be present and vote as per the party line.

A three-line whip to party members by a party's chief whip carries the heading “Three-Line Whip”. Under each sentence, there are three thick horizontal lines. Largely the norm these days, this kind of whip directs members to be present and vote as per the party line.

- In Practice and Procedure of Parliament, former parliament secretary M N Kaul and former Chief Election Commissioner S L Shaktiher write: “In a legislative body, not only the fate of a particular measure under consideration but the very life of the Council of Ministers itself may depend upon the result of a single division.”





- Former Lok Sabha Speaker Sumitra Mahajan told The Indian Express that the whip system was important for the functioning of Parliamentary democracy. “If you are an Independent MP, you are free and can choose how to vote on a matter. However, if you are elected on a party ticket, you have been elected because of a party vote. Being a member of a party also means that you agree with its ideology and policies. So, discipline is necessary. You can express disagreement with, say, a Bill in an internal party forum. Once the party has made a decision, you should either comply or leave the party,” she said.

**Do You Know:**

- Whip originates from the hunting fields of England, where a whipper-in was a member of the hunting party whose job was to bring straying hounds back into the pack. Its use in politics comes from Anglo-Irish politician and philosopher Edmund Burke. As per Courtenay Ilbert’s book Parliament, Its History, Constitution and Practice, Burke, during a speech in the House of Commons, is said to have talked about how the King’s ministers “had made great efforts to get their followers together” and “had sent for their friends to the north and to Paris, whipping them in”.

- In India, the whip system is as old as its parliamentary history, according to former Lok Sabha secretary-general P D T Achary. The system is important for parliamentary functioning as parties see voting on some matters as crucial to how their politics is perceived. Hence, MPs are expected to be present at the time of voting on matters critical to the party and follow the organisation’s line. Absence or voting against the party line can be a huge embarrassment to the party.

- For the ruling party or parties of the ruling coalition, full attendance and compliance during division — where each MP’s vote on a motion is counted — on a crucial matter is also a marker of the real strength of the party or alliance and is seen as symbolic of whether they are indeed in a majority. Failure to demonstrate majority in the Lower House in such a context can also lead to a no-confidence motion.

- Given that parties require their MPs to be present and vote as per the party line during division (voting) on an important matter, the party chief whip in a House is required to inform all members about what the party leadership thinks of an important matter. The whip also has to ensure their attendance when the vote takes place. Essentially, the whip is the bridge between the party leadership and the MPs and also has a sense of which members ought to speak on different issues in Parliament.

**PRIME TIME**

The Prime Minister’s parliamentary interventions are always keenly watched, as they are expected to provide the clearest insights into the government’s priorities and its responses to pressing concerns and criticisms, particularly from the Opposition. This week, Prime Minister Narendra Modi spoke extensively in both Houses. However, his speeches largely sidestepped critical national issues. Key developments such as the inhumane way in which Indian deportees were flown back by the United States, the stampede at the Maha Kumbh in Prayagraj, and the transformative advancements in Artificial Intelligence, each with significant implications for India’s future, received little to no substantive acknowledgment. Instead, Mr. Modi’s speeches relied heavily on campaign slogans, minimal engagement with the Opposition, and repeated attacks on past governments, particularly the Congress. He even took a dig at the fact that Sonia Gandhi and her children, Rahul and Priyanka, have become Members of Parliament



simultaneously. His speech also made mention of Ms. Gandhi's poorly chosen words when she referred to President of India Droupadi Murmu as a "poor thing", as well as Leader of the Opposition's Rahul Gandhi's controversial remark about his political fight being against the Indian state. While Mr. Modi undoubtedly scored political points, his addresses fell short of providing the country with the reassurance and clarity needed on key domestic and global challenges. In an increasingly uncertain world, foreign policy must remain above partisan bickering, and the government must do more to build consensus on India's development trajectory, particularly in the face of rapid technological disruption. Rahul Gandhi's argument for India to develop its own AI model and indigenous production ecosystem resonates with a broad segment of the population, and the government would do well to engage with such ideas rather than dismiss them outright.

Mr. Modi can rightfully claim credit for some of the better governance initiatives that have shaped India's trajectory since 2014. However, slogans alone cannot resolve mounting challenges. The government's legislative agenda, rhetoric, and refusal to be accountable on crucial issues indicate a lack of effort in forging a cohesive national vision. While it may argue that its stance is merely a response to an adversarial Opposition, it ultimately remains the government's responsibility to lead, govern, and deliver. At a time when political hostility is at its peak, what India needs most is a shift toward constructive engagement and consensus-building, something only the government can initiate.

#### A SHADOW AS LEGACY

Yogendra Yadav writes: With Kumar's departure, the Supreme Court has a choice: Allow the next CEC to be appointed through a government-dominated process or insist on an independent process.

- As Rajiv Kumar retires this month, our constitutional system faces a stark choice. Either the Supreme Court intervenes to ensure that the next CEC is chosen through a fairer system and can be trusted to display at least a modicum of fairness, neutrality and transparency. Or we could be headed towards an irreversible political crisis, as in our neighbourhood where election outcomes are routinely disputed.
- To be fair, Kumar is not entirely and personally responsible for the current state of this once-great institution. He comes at the end of a long process. During the first 40 years of its existence, the one-member ECI acted like an extension of the Government of India, rarely exercising the powers granted by the Constitution.
- Complaints of electoral irregularities and bias towards the ruling Congress were not unheard of. Yet, except allegations of large-scale fraud in West Bengal in 1972 or Jammu and Kashmir in 1987, these disputes did not generally implicate the ECI. It was administratively subservient to the government, but not visibly subservient to the ruling party.
- It took T N Seshan to disrupt business as usual and claim the constitutional powers of the ECI in 1990. By all accounts, he was no democrat. But his bull-in-a-china-shop adventures, adequately moderated by the Supreme Court and the appointment of two other commissioners, served to push this sleepy institution into a phase of fierce independence. This phase lasted till 2004, covering the tenure of M S Gill and J M Lyngdoh.



**Do You Know:**

- There are just five Articles (324-329) in Part XV (Elections) of the Constitution. Article 324 of the Constitution vests the “superintendence, direction and control of elections” in an Election Commission consisting “of the Chief Election Commissioner and such number of other Election Commissioners, if any, as the President may from time to time fix”.
- The Constitution does not lay down a specific legislative process for the appointment of the CEC and ECs. The President makes the appointment on the advice of the Union Council of Ministers headed by the Prime Minister.
- The Constitution of India gave the Election Commission sweeping powers without going into the specifics. Introducing this provision in the Constituent Assembly on June 15, 1949, Babasaheb Ambedkar had said “the whole election machinery should be in the hands of a Central Election Commission, which alone would be entitled to issue directives to returning officers, polling officers and others”. Parliament subsequently enacted The Representation of the People Act, 1950, and The Representation of the People Act, 1951, to define and enlarge the powers of the Commission.
- The Supreme Court in ‘Mohinder Singh Gill & Anr vs The Chief Election Commissioner, New Delhi and Ors’ (1977) held that Article 324 “operates in areas left unoccupied by legislation and the words ‘superintendence, direction and control’ as well as ‘conduct of all elections’ are the broadest terms”. The Constitution has not defined these terms.
- The SC said Article 324 “is a plenary provision vesting the whole responsibility for national and State elections” in the ECI “and, therefore, the necessary powers to discharge that function”. The Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991 (EC Act) requires that the EC and CEC must hold the post for a period of six years. This law essentially governs the conditions of service of the CEC and ECs.

**FORGERY, GHOST APPLICANTS, FAKE RATION CARDS MAR JMM GOVT. SCHEME FOR WOMEN**

11,200 fake applications detected in Bokaro district; Deputy Commissioner orders registration of FIRs against offenders; State has become breeding ground for corruption under Soren, says BJP

The Mukhyamantri Maiya Samman Yojana, the flagship scheme of the Jharkhand Mukti Morcha (JMM)-led coalition government in the State that provides monthly aid to women in the 18 to 50 age group, has run into rough weather with 11,200 fake applications being detected in Bokaro district on Friday.

Launched last August, the scheme initially provided ₹1,000, but the honorarium was raised to ₹2,500 from December 2024. The last instalment was credited on January 6, when Chief Minister Hemant Soren transferred ₹1,415.44 crore to the bank accounts of 56.61 lakh women.

The scheme had played an important role in the INDIA bloc winning 56 out of the 81 seats in the Assembly election last year.

The fraud came to light during physical verification of applications, Bokaro Deputy Commissioner Jadhav Vijaya Rao told reporters. “There are many ghost applicants. Even ration cards are fake. One bank account was mentioned 49 times in Chandankiyari, 20 times in Kasmar, 12 times in



Bermo, and seven times in Gomia. It was also used in Chas and Chandrapura. Altogether, this bank account was used 94 times. Many beneficiaries also gave the same Aadhaar card number,” Ms. Rao said.

Following a probe, it was found that the bank account holder’s name is Yousuf, a resident of North Dinajpur, West Bengal. In another case, 78 applications mentioned one account of IndusInd Bank.

“The bank account holders are from West Bengal and the entry of the bank accounts has been done from the Common Service Centre in Daltonganj, Palamu. The ration cards in Bokaro district start with the digits 20, but in these applications, they start with 00. On checking with officials, we found that these ration card numbers do not exist,” Ms. Rao said.

In most of the fake applications, surnames like Kisku, Hansda, and Murmu that are common in tribal-dominated regions have been used. Ms. Rao has ordered the registration of FIRs against those responsible for the fraud.

#### EXPRESS VIEW ON MAHARASHTRA MIDDAY MEALS: NOT WITHOUT EGG

The Maharashtra government’s decision to remove egg from its midday meal scheme a year after it was introduced, ostensibly for financial reasons, seems to place political imperatives over public-health prudence, especially since it comes on the heels of protests from right-wing groups against its inclusion. The state government had earlier allocated an annual budget of Rs 50 crore to provide eggs or bananas or a local fruit once a week to government school children to combat malnutrition. It later amended it to state that in schools where a sizeable number of parents protested against the inclusion of eggs, it would not be served. The new directive cites a finance issue in its amendment and has asked schools to seek public sponsorship should they wish to include eggs or sweets in the menu. In withdrawing egg pulao and rice kheer or nachani satva, a sweet dish, for students of Classes I to VIII, the Devendra Fadnavis-led government has joined a list of BJP-ruled states that do not provide eggs in midday meals. Only three BJP-ruled states — Uttarakhand, Odisha and Assam — still do. The decision in Maharashtra shows a callous disregard for the already alarming rates of malnutrition among schoolchildren from economically disadvantaged backgrounds by a government that has returned to power with an overwhelming mandate.

According to the National Family Health Survey (NFHS), child malnutrition remains a significant challenge in India, with data pointing to alarming levels of undernutrition, stunting, and wasting. NFHS-V (2019-21) reported that 35.5 per cent of children under the age of five in India were stunted (low height for age), while 19.3 per cent were wasted (low weight for height). In Maharashtra’s Dhule and Chandrapur, districts in the bottom 10 across India in wasting, the numbers stood at 38.9 and 38.5 respectively. In Nandurbar to the northwest of the state, 57.2 per cent of children under the age of five were underweight, second only to Pashchimi Singhbhum in Jharkhand. These figures indicate the deep-rooted nutritional deficiencies many children face, particularly in rural areas. The data also highlights the critical role of protein in addressing these deficiencies. Compared to pulses, milk or even fruits such as bananas, eggs remain a more effective, affordable and easily accessible source of nutrition. The Maharashtra government has sought to replace eggs with alternatives like chickpea and soybean but the substitution ignores the logistical challenges of providing these at scale. By removing eggs, it risks exacerbating the nutritional gap.





Food choices are inextricably tied to questions of caste and religious identity and to privilege. Over the last decade, protracted, and often violent, dissensions over non-vegetarian food, be it over eggs or beef, have propelled the myth of India as a vegetarian nation. Before Maharashtra, Madhya Pradesh had dropped eggs from its midday-meal menu. In 2022, Goa, too, briefly introduced and dropped eggs from its midday meal. According to NFHS-V data, however, 45.1 per cent women and 57.3 per cent men eat non-vegetarian food at least once a week. In a country struggling to deliver nourishment to its children, to discriminate on the basis of food can have grave consequences. The Maharashtra government must reconsider its decision.

#### EXPRESS VIEW ON IIT MADRAS'S RESERVED SEATS FOR ATHLETES: SEA OF OPPORTUNITIES

In its recognition of the fact that excellence cannot be confined to the classroom alone, the Sports Excellence Admission (SEA) scheme by IIT-Madras marks a transformative step. Launched in July-August 2024, with an investment of around Rs 25 crore and operational only in the Madras campus, 34 supernumerary seats are reserved for athletes who have won at least one medal in a national or international event in a sport recognised by federations under the Union sport ministry in the last four years, scored at least 75 per cent in their Class XII board exams and cleared the JEE (Advanced) test. It rewards athletic prowess with infrastructural support, as well as the opportunity to pursue higher education at one of the country's most coveted institutions.

In India, there has traditionally been a disconnect between academic dreams and athletic ambitions, with the focus largely being on the former. But sports requires a unique set of skills — discipline, perseverance, teamwork, and leadership — that can be equally invaluable in the world of innovation and technology. Providing athletes with specialised support offers them a chance to excel in their chosen sport and academic career. This can create a more diverse and rounded educational environment, where success is not solely defined by the ability to excel in a single domain but by a broader range of skills. These changes are also aligned with the global trend of holistic education. By embracing and supporting athletic excellence, IIT-Madras sets a precedent for other educational institutions across the country towards a more inclusive definition of achievement.

The fact that the origin of the scheme lies in tragedy — a series of student suicides on campus between September 2022 and April 2023 — also points at the larger malaise affecting higher education in India, where the barriers are too many, the opportunities too few and the stakes impossibly high. In recent years, IITs have consciously tried to address the lack of diversity, both in terms of gender and socio-economic backgrounds, through implementation of a supernumerary quota of 20 per cent for women in their undergraduate engineering programmes and open-door policies for aspirants to interact with faculty members, among others. Creating a culture of inclusivity and support will allow for better integration of diverse communities into these institutions and help dismantle stereotypes of a homogenous, masculine STEM ecosystem. However, it is essential that these measures are complemented with other reforms, including mentorship, financial assistance for the marginalised, and counselling services. A diverse IIT campus will encourage creativity, collaboration, and critical thinking — the foundation upon which India's technological future should be built.



## SIX STATES RESOLVE AGAINST UGC'S NEW DRAFT REGULATION

On Wednesday, Ministers for Higher Education and their representatives from six States passed a joint resolution opposing the draft of the University Grants Commission Regulations, 2025, and grading of higher education institutions based on the New Education Policy, 2020.

This was the outcome of the conclave of State Higher Education Ministers, 2025, hosted by Karnataka. Representatives from Himachal Pradesh, Jharkhand, Kerala, Tamil Nadu, Telangana and Karnataka participated and came out with a 15-point resolution, urging the Centre to withdraw the new draft regulations. In their resolution, the States said that the BJP-led Union government is trying to push its ideology through the new regulations.

The Maharashtra representative, who was to virtually attend the conclave, was unable to continue due to technical glitches. The Jammu & Kashmir Minister communicated that they could not take part due to emergency meetings, said Karnataka's Higher Education Minister M.C. Sudhakar.

He claimed that even some parties which are in alliance with the BJP have expressed their objection to the UGC draft regulations, including Telugu Desam Party in Andhra Pradesh, Janata Dal United (JDU) and Lok Janshakti Party (LJP-Ram Vilas) of Bihar. West Bengal has constituted an expert committee to look into it.

## WIDE GAP BETWEEN 'STREET MATHS' AND 'SCHOOL MATHS', SHOWS STUDY

Child vendors can mentally calculate complex market transactions in seconds but struggle with simpler abstract maths taught in schools, while their school-going peers excel at academic maths but fail at basic real-world calculations, reveals a new study by a team of researchers including Nobel laureates Esther Duflo and Abhijit Banerjee that exposes a stark disconnect in India's mathematics education.

- The team set out to investigate whether mathematics skills acquired by children in real-world settings transfer to the classroom and vice versa.
- For this, the researchers worked with 1,436 child vendors in Delhi and Kolkata markets and 471 schoolchildren, and found that the first cohort could do complex mental maths for sales but struggled with the same problems in textbook format, while the latter was good at textbook maths but failed at practical market calculations.
- All children covered in the study were under the age of 17 years, with most in the age group of 13 to 15 years. Further, the working children considered for the study were either currently enrolled in school or had been in school earlier.
- Only 1% of schoolchildren could solve practical market problems that over one-third of working children managed easily. The study showed that working children use efficient mental shortcuts while schoolchildren rely on slow, written calculations.

### Do You Know:

- The study has been carried out by a team at The Abdul Latif Jameel Poverty Action Lab, comprising economists Duflo and Banerjee, Swati Bhattacharjee, Raghavendra Chattopadhyay, Alejandro J Ganimian, Kailash Rajah and Elizabeth S Spelke.



- The key problem here is that kids are taught an algorithm to solve a problem. They are taught that this is how you are supposed to solve a problem. Then they half understand the algorithm, so when they try to apply it, it doesn't quite work out."
- Speaking to The Indian Express on the findings, Duflo said: "The school system is too narrowly siloed. There is home knowledge and then there is school knowledge and the two are not talking to each other, which is bad for school learning and also bad for recognising a lot of talent that's already out there and we're missing... a way to rethink the curriculum is to link the two. In the early grades, that can be through games, activities in groups. The key problem here is that kids are taught an algorithm to solve a problem. They are taught that this is how you are supposed to solve a problem. Then they half understand the algorithm, so when they try to apply it, it doesn't quite work out."
- In contrast, when they were given problems that are used for NGO Pratham's Annual Status of Education Report (ASER), only 32% could solve division of a three-digit number by a one-digit number, and only 54% could solve two subtractions of one two-digit number from another. Almost all these children had attended second grade when subtraction is taught.

#### AYUSHMAN SCHEME, AWARENESS, FACILITIES AIDING TIMELY CANCER CARE IN INDIA: STUDY

BETTER knowledge, and healthcare facilities have helped reduce delay in starting cancer treatment in India, and this trend has been observed more among people enrolled under the Centre's flagship Ayushman Bharat programme, according to a recent study published in the Lancet journal.

- According to the report, timely initiation of cancer treatment increased by 36% across the population, but it increased by a massive 90% among those covered by the insurance scheme after 2018.
- The Ayushman Bharat scheme, which provides health cover to the poorest 40% of the population, was rolled out in 2018.
- While appreciating the government's health safety net, the study, which looked at data of nearly 6,700 cancer patients, made a strong case for a need to increase cancer care facilities such as radiotherapy machines. The highest delay in treatment initiation was for radiotherapy, followed by chemotherapy and surgery, it said. This "is an important argument for strengthening public healthcare infrastructure for provision of radiotherapy to cancer patients in India as well as inclusion of cost-effective chemotherapeutic agents in" Ayushman Bharat, the study said.
- It said there were an estimated 779 radiotherapy machines across the country, which was short of the required numbers. Most high-income countries have 4 machines per 10 lakh population, while WHO recommends at least 1 machine per 10 lakh population. By this standard, India would need between 1,350 and 5,000 radiotherapy machines, the study said.
- For the study, the researchers compared people who initiated treatment on time (within 30 days) to those who didn't. They found that timely treatment was started among patients under the age of 30 (77%), those who were more educated (70.2%), and those covered under some scheme (69%). Nearly 40% of the study participants were not covered by any scheme. Those with higher income were also less likely to delay treatment, the study said.



**Do You Know:**

- Launched in September 2018, Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) — is the world’s largest Government-funded health insurance scheme. Currently, beneficiaries are identified from the 2011 Socio-Economic Caste Census (SECC), based on specific deprivation and occupational criteria across both rural and urban areas. Initially covering 10.74 crore families, states implementing AB-PMJAY have broadened their reach to encompass 13.44 crore families (65 crore people).
- The scheme is jointly funded by the Centre and the states in the ratio 60:40 (90:10 in the case of North-East and hilly states). Government hospitals account for 58% of all facilities empanelled.
- In a landmark decision, the Union Cabinet approved an expansion of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) on September 11, 2024, offering comprehensive health insurance to senior citizens aged 70 and above.
- Everyone of age 70 or more will be entitled to a cover of Rs 5 lakh annually, shared within the family. This means if there are two elderly beneficiaries in the household, the cover will be split among them.
- Elderly members (age 70 and more) of families that are already covered in accordance with their economic status will get a top-up cover of Rs 5 lakh — to be used only for the elderly. These elderly beneficiaries will have to re-register to receive the top-up cover.
- The scheme will cover almost 6 crore individuals (from 4.5 crore families), of whom 1.78 crore are already covered by the scheme. “For the additional top-up amount, the financial implication is very little,” a senior official said. The Ayushman Bharat scheme already covers 1,670 procedures across 26 specialities, which includes 25 geriatric packages.
- The Longitudinal Ageing Study of India (LASI) 2021 report reveals that 75 per cent of the elderly have one or more chronic diseases, 40 per cent have some form of disability, and one in four suffers from multi-morbidity. Notably, 58 per cent of the elderly population are women, with 54 per cent being widows. Unlike many private insurance products for senior citizens, PMJAY does not exclude anyone because of a pre-existing illness, nor does it impose a year-long waiting period before the benefits are allowed. The scheme empowers the elderly to lead healthy and dignified lives.

**CYBERCRIMES SEE SHARP RISE SINCE 2021, OVER 17 LAKH CASES LAST YEAR: GOVT DATA**

A massive surge in cybercrime incidents was reported in India with fraudsters cheating people of Rs 33,165 crore in the last four years, including Rs 22,812 crore in 2024, with several Tier 2 and 3 cities identified as cybercrime hotspots, shows government data.

- Data compiled by the National Cyber Reporting Platform (NCRP), under the Ministry of Home Affairs, shows fraudsters cheated people of Rs 551 crore in 2021, Rs 2,306 crore in 2022, and Rs 7,496 in 2023.
- Data also shows that 1,37,254 complaints were received in 2021, 5,15,083 in 2022, 11,31,649 in 2023, and 17,10,505 complaints were received last year.
- “Domestic hotspots have been identified as Deoghar in Jharkhand, Deeg, Alwar, Jaipur, and Jodhpur in Rajasthan, Nuh in Haryana, Mathura and Gautam Buddha Nagar in Uttar Pradesh,

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





Kolkata in West Bengal, Surat in Gujarat, Nalanda and Nawada in Bihar, Bengaluru urban in Karnataka, and Kozhikode in Kerala,” a source said.

- Amid the steep rise in cybercrime cases, Union Home Minister Amit Shah is learnt to have asked the Home Ministry to develop an e-FIR system, in which a citizen can file their complaint via NCRP.
- According to an MHA source, a meeting was held in North Block in December last week, which was chaired by Shah and attended by senior ministry officials. “Several issues, trends and measures related to cyber fraud were discussed and among other suggestions, Shah is learnt to have asked [officials] to develop an e-FIR system, so that they can provide a hassle-free system to the cyber fraud victim, who lost Rs 10 lakh or above in cyber fraud,” said the source.
- Multiple teams, including the Indian Cyber Crime Coordination Centre (I4C), are currently working on this and discussing it with state police as well. “In this system, they are trying to make a nationalised cyber-police station of e-FIR in the NCRP portal where apart from lodging a complaint, they can also file their e-FIR. Later, the e-FIR will be transferred to their concerned jurisdiction police station for further investigation. As of now, Delhi Police has a system of e-FIR of theft and motor vehicle theft,” the source said.

**Do You Know:**

- As cybersecurity spans various domains, India has established a multifaceted institutional framework involving multiple ministries, departments, and agencies to address this issue. The Ministry for Electronics and Information Technology (MeitY) oversees policies concerning IT, electronics, and the Internet, including cyber laws.
- The Ministry of Home Affairs is responsible for internal security, including cybersecurity. It has established the Cyber and Information Security Division, which comprises a cybercrime wing, cybersecurity wing, and monitoring unit. In 2020, it formally launched the Indian Cyber Crime Coordination Centre.
- India lost approximately Rs 11,333 crore to cyber fraud in the first nine months of 2024, according to data compiled by the Indian Cyber Crime Coordination Centre (I4C), a division of the Ministry of Home Affairs (MHA).
- Stock trading scams accounted for the largest share, with losses of Rs 4,636 crore from 2,28,094 complaints. Investment-based scams caused losses of Rs 3,216 crore from 1,00,360 complaints, while Rs 1,616 crore was lost to “digital arrest” frauds across 63,481 complaints.
- Data from the Citizen Financial Cyber Fraud Reporting and Management System (CFCFRMS), as seen by The Indian Express, showed nearly 12 lakh cyber fraud complaints were received in 2024, with 45% of these originating from Southeast Asian countries—Cambodia, Myanmar, and Laos. Since 2021, the CFCFRMS has recorded 30.05 lakh complaints, leading to losses amounting to ₹27,914 crore. Of these, 11,31,221 complaints were registered in 2023, 5,14,741 in 2022, and 1,35,242 in 2021.
- An analysis of cyber frauds this year revealed that stolen money is often withdrawn using cheques, central bank digital currency (CBDC), fintech crypto, ATMs, merchant payments, and e-wallets. Over the past year, the I4C has frozen around 4.5 lakh mule bank accounts, typically used to launder the proceeds of cybercrime.



## STORY OF NAVIC: CRUCIAL INDIGENOUS SATNAV SYSTEM, HURDLES IN DEVELOPMENT PATH

India's space agency on Sunday (February 2) reported the partial failure of its NVS-02 navigation satellite due to the non-firing of its engines in space. This was the latest in a series of setbacks suffered by the Indian Regional Navigation Satellite System (IRNSS), operationally referred to as the Navigation with India Constellation (NavIC) system.

- The IRNSS was conceived in 1999 following the war in Kargil, during which India's military could not use the American Global Positioning System (GPS) in the conflict zone. (India and the US now cooperate in many fields, and Washington has approved the system.)
- An indigenous seven-satellite constellation serving both defence and civilian needs was proposed to be put in place by 2016, and the first satellite, IRNSS 1A, was launched on July 1, 2013.
- Eleven years later, however, only five of the 11 satellites launched in the Rs 2,250 crore NavIC program – including replacements for failed satellites – are fully operational, the Indian Space Research Organisation (ISRO) has said.
- After IRNSS-1A in 2013, the IRNSS-1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1J, and 1K were launched between April 4, 2014 and January 29, 2025. Following the launch of IRNSS-1G, the seventh in the series on April 28, 2016, ISRO had said that “the successful launch... [of the satellite] signifies the completion of the IRNSS constellation”.

### Do You Know:

- Mid-2016 onward, there were reports of failures of the rubidium atomic clocks used in several navigation satellites, including ISRO's IRNSS and the European Space Agency's (ESA's) Galileo Global Navigation Satellite System (GNSS). There are three atomic clocks on each IRNSS satellite.
- Then ISRO chairman A S Kiran Kumar announced in July 2016 that all the atomic clocks on IRNSS 1A had “stopped working”, even though the “overall performance of our navigation system” had not been affected, and the “rest of the satellite components [were] functioning perfectly”. A replacement satellite, IRNSS 1H, with modified clocks, would be launched in 2017, the space agency said.
- It is estimated that only four IRNSS satellites are fully operational currently – 1B, 1F, 1I (the replacement for 1A after the launch of 1H, the original replacement, failed), and 1J (the replacement for the partially failed 1G).
- ISRO's 2023-24 annual report says that following the launch of NVS-01 on May 28, 2023, five NavIC satellites are operational – IRNSS-1B, 1C, 1F, and 1I, and NVS-01 (IRNSS-1J). However, according to some estimates, 1C is only partially operational due to the presence of the old series of atomic clocks that were reported to be malfunctioning.



## HOW WILL THE GOVT. PRODUCE THE REQUIRED FUEL ETHANOL?

### The story so far:

Union Minister Nitin Gadkari said that India will achieve its target of 20% ethanol blending of petrol in the next two months, at least a year ahead of what was originally planned. This would entail the production of nearly 1,100 crore litres of fuel ethanol in one year.

### Where will this come from?

The 1,100 crore litres of fuel ethanol will come from sugar and high grade molasses, Food Corporation of India (FCI) rice, broken rice, and maize. India's ethanol distillery capacity has ramped up to 1,600 crore litres, driven by a range of government incentives and the promise of a stable, lucrative market.

Sugar is expected to provide some 400 crore litres this ethanol year, according to Deepak Ballani, director general of Indian Sugar and Bio-energy Manufacturers Association. India had closing sugar stocks of around 80 lakh tonnes in October 2024. The projected sugar production for next year is around 315 lakh tonnes out of which 40 lakh tonnes will go to fuel ethanol. Mr. Ballani said that ethanol for non-fuel uses will come from low grade molasses called C Heavy that don't go into sugar production.

The government recently decided to reduce the price of FCI rice to distilleries from ₹28 to ₹22.5 per kg. The government handout states that some 110 crore litres of ethanol will be produced from FCI rice this ethanol year. This means almost 400 crore litres of fuel ethanol should come from maize. For context, India was producing little or no ethanol from maize until 2020. Besides pure-play grain-based distilleries coming up, some sugar distilleries have modified to dual-feed so in the off-season they can use other feedstock (maize) to produce ethanol.

### How is maize playing a role?

India's maize production is just about enough for traditional needs such as for the poultry sector, livestock feed, starch production and some 10% for human consumption. As the government had imposed curbs on allowing sugar and high quality molasses for ethanol production, maize imports started ramping up in April 2024. From April to June, approx. ₹100 crore worth of maize was imported while, for 2023-24, maize imports were approx. \$33 million. Ministry of Commerce figures show that a total of \$188 million worth of maize was imported from April to November 2024.

The promise of a steady, lucrative ethanol market has meanwhile goaded many farmers to take to maize cultivation across India. The major maize producing States are Karnataka, Madhya Pradesh, Maharashtra, Andhra Pradesh, Rajasthan, Bihar, and Uttar Pradesh. For the 2024-25 ethanol year, maize output would be some 42 million tonnes out of which nine million can go towards producing the 350 to 400 crore litres of ethanol, H. S. Jat, director ICAR Indian Institute of Maize Research, Ludhiana, said. Citing good prospects for kharif this year, he said importing maize will not be necessary.

Since 2020-21. when ethanol production was almost all sugar-based, maize production had increased by nearly six million tonnes in three years, for potential ethanol use.



As things stand now, maize is cultivated in 10% more area at a higher yield, says Mr. Jat who also expects some diversion from traditional maize uses since supplying to ethanol is more lucrative for farmers. On whether that won't disrupt the market, Mr. Jat says DDGS (Distiller's Dried Grains with Solubles), a byproduct of ethanol, can be used for poultry. The long-term sustainability of fuel ethanol would depend on whether the switch to ethanol and stress on maize has a negative impact on production of other foodgrains. Mr. Jat estimates that 100 crore litres of fuel ethanol translates to ₹6,000 crore savings on oil imports and the money going into the internal economy including to farmers. For context, India's yearly oil import bill is some ₹10.5 lakh crore.

#### ENVIRONMENT MINISTRY PANEL CLEARS NEW SIKKIM DAM DESPITE ITS OWN CONCERNS

Over a year after a glacial lake outburst flood (GLOF) ravaged parts of Sikkim and washed away a 60-metre-high rockfill concrete dam of the 1200-MW Teesta-III hydel project, an environment ministry panel has cleared a proposal to build a new 118.64-m-high concrete gravity dam in its place.

- The proposal by M/s Sikkim Urja Ltd, the project operator, was approved by the Environment Ministry's Expert Appraisal Committee (EAC) on River Valley and Hydroelectric Projects on January 10 under the provisions of 'expansion or modernisation' in existing projects.
- Late in December 2024, an EAC sub-committee comprising the panel's chairman, a Central Electricity Authority official, a senior ministry official and an official of the Central Water Commission (CWC) visited the site to evaluate the planning and feasibility of the proposed concrete gravity dam in place of the earlier concrete rock-filled dam.
- A concrete gravity dam is made entirely out of concrete and is generally considered stronger than a concrete rockfill dam, but is more expensive to construct. A concrete rockfill dam has a core of concrete that is surrounded by rockfill material.
- Days after the December site visit, at its meeting on January 10, the EAC approved Sikkim Urja's proposal even as it noted – according to the minutes of the meeting of that day – that the “design directorate of CWC has suggested to carry out a revised study of the PMF (probable maximum flood) and diversion flood and get it approved through concerned hydrology directorate of CWC”.
- The EAC also set conditions for the new dam – including the setting up of early warning systems and the mapping of glacial lakes and landslide spots – while noting that the design aspects were yet to be approved by the CWC, Geological Survey of India and the Central Soil and Materials Research Station.

#### Do You Know:

- On October 4, 2023, the South Lhonak glacial lake in Sikkim burst, causing a flood that Ministry panel clears Sikkim dam structure despite own concerns killed 40 people across four districts of Sikkim. The flood also washed away the 1,200 MW Teesta-III Chungthang Dam located 55 km downstream.
- The EAC nod for the new dam comes in the backdrop of concerns the panel had itself raised over the structure's safety and stability.





- Back in the mid- to late-2000s, when the project was being appraised, it was warned that a low spillway capacity risked overtopping, which is what eventually happened when the South Lhonak lake burst in the early hours of October 4, 2023.

## GREEN CARDAMOM'S NEW RELATIVES INCLUDE TWO NEWLY IDENTIFIED SPECIES FROM KERALA

Mention spices and invariably the first thing that springs to mind is the supremely aromatic, flavour-rich cardamom. But it now appears that the 'Queen of Spices' has several close, wild relatives and it is not the lone species of the genus *Elettaria* as previously thought.

An international team of researchers have identified six species that are close cousins to *Elettaria cardamomum*, better known as green cardamom. Of the six, four were previously placed in a separate genus, *Alpinia*, while the remaining two have been newly identified and described from Kerala's Western Ghats regions.

The findings have been published in a paper 'The cardamom conundrum resolved: Recircumscription and placement of *Elettaria* in the only pantropically distributed ginger lineage,' published in the journal *Taxon*. The international seven-member team from Denmark, India, Colombia, Czech Republic, Singapore, Sri Lanka, and the U.K. included Mamiyil Sabu of the KSCSTE-Malabar Botanical Garden and Institute for Plant Sciences, Kozhikode.

### Seven in all

Following the reclassification, the genus *Elettaria* now has seven species, including *Elettaria cardamomum*. *E. ensal*, *E. floribunda*, *E. involucreta* and *E. rufescens* were earlier placed in the genus *Alpinia*. The remaining two are new species, *Elettaria facifera* and *Elettaria tulipifera*, the former described from Kerala's Periyar Tiger Reserve in Idukki district and the latter from the Agasthyamalai hills in Thiruvananthapuram district and Munnar in Idukki by Dr. Sabu and Jana Leong-Skornickova of the Herbarium, Singapore Botanic Gardens.

These recent developments which highlight potentially overlooked genetic resources could play an important role in spice production in the future, Dr. Sabu said. Seed capsules of *Elettaria cardamomum* provide the commercial green cardamom.

The genus name is based on this spice's old Malayalam name, 'elletari' as used by Hendrik van Rheede in his 17th century botanical treatise *Hortus Malabaricus*.

## AFTER OLYMPIC BID, INDIA SETS SIGHTS ON HOSTING 2030 COMMONWEALTH GAMES

- But unlike 2010, when the Games were hosted in New Delhi, Ahmedabad has emerged as the frontrunner, with Bhubaneswar also in the mix, officials involved in the process told The Indian Express on Tuesday.
- Over the last week, CGF president Chris Jenkins and chief executive Katie Sadlier travelled to multiple cities in India, meeting state and central government ministers and senior bureaucrats in Gandhinagar, Bhubaneswar and New Delhi. They also toured potential venues in Ahmedabad and Bhubaneswar.



- On the sidelines of the National Games opening ceremony in Dehradun, Jenkins also met Indian Olympic Association (IOA) president P T Usha where the possible Indian bid was discussed. The IOA doubles up as the governing body for the Commonwealth Games in India.

**Do You Know:**

- The interest from India comes at a time when the CGF has found few takers to host its flagship event. In 2022, Durban was chosen as the host but the South African city later pulled out citing financial reasons. Birmingham was then named the new host.
- Similarly, the Australian state of Victoria gave up the hosting rights after winning the bid for the 2026 CWG. After a Commonwealth-wide hunt, Glasgow stepped up to rescue the Games. However, unlike the previous editions, Glasgow CWG will only be a 10-sport event with a tight cap on the number of athletes to make it affordable.
- The setback forced the CGF to come up with new hosting models and, officials said, Jenkins and Sadlier impressed upon their Indian counterparts that under the new measures, host cities are no longer required to construct a special athletes' village or build new venues.
- This, the Indian officials estimated, could reduce the costs by "almost 60 per cent". "Ahmedabad will already have a lot of venues ready in the next three to four years. These venues are being built to foster a sporting culture, regardless of whether India wins the bid to host the 2036 Olympics," the official said.
- As per the Gujarat government's plan, the SVP Sports Enclave will house the Narendra Modi Stadium, a multi-purpose indoor arena, aquatics and tennis centres as permanent venues. In Karai, an athletics stadium is being constructed along with a shooting complex and an indoor arena. The deadline to complete the entire project is 2028.

**SHORT NEWS**

**THE ALLIANCE FOR GLOBAL GOOD GENDER EQUITY AND EQUALITY**

- At the World Economic Forum in Davos held in Davos, Switzerland from January 20 to 24, former Union Minister Smriti Irani spoke about the business imperative of gender parity.
- She is the Chairperson of the Alliance for Global Good Gender Equity and Equality launched in Davos in 2024.
- It is a global collective of governments, industry and development organizations working towards inspiring intentional action to enable women across the globe to achieve their economic potential.

**INTERNATIONAL COURT OF JUSTICE (ICJ)**

- The United States announced that it wouldn't attend the G20 Foreign Ministers' meeting in Johannesburg, South Africa, later this month. The reason can be understood in the context of South Africa's genocide case against Israel at the International Court of Justice (ICJ), which has been receiving growing international support. Gaza is recognised by the ICJ as part of the Palestinian territories under Israeli military occupation.



— The ICJ is the principal judicial organ of the United Nations (UN). It was established in June 1945 by the Charter of the United Nations and began work in April 1946.

— The court is the successor to the Permanent Court of International Justice (PCIJ), which was brought into being through, and by, the League of Nations, and which held its inaugural sitting at the Peace Palace in The Hague, Netherlands, in February 1922.

#### CHAGOS DEAL: UK DEMANDS 'STRONG PROTECTION' FOR MILITARY BASE

British Prime Minister Keir Starmer on Friday told his Mauritian counterpart, Navin Ramgoolam, that he wants “strong protections”, including from “malign influence”, for a U.S.-British military base on Diego Garcia, according to a statement from Downing Street. Britain struck a deal in October to cede sovereignty of the Chagos Islands to Mauritius, while retaining control under a 99-year lease of the military base on Diego Garcia, the largest island of the Chagos Archipelago in the Indian Ocean.

#### NATIONAL COMMISSION FOR SAFAI KARAMCHARIS (NCSK)

— The Union Cabinet approved the extension of the tenure of the National Commission for Safai Karamcharis (NCSK) for a period of three years up to March 2028.

— The Commission was set up as a statutory body in 1994 under the National Commission for Safai Karamcharis Act, 1993. After the lapsing of the Act in 2024, the Commission is non-statutory.

— Its key mandate includes, among other things, recommending to the Centre specific programmes of action towards the elimination of inequities in status, facilities and opportunities for safai karamcharis.

#### PAROLE AND FURLOUGH

— Convicts of the Hashimpura massacre have moved the Delhi High Court against a Delhi prison rule about furloughs.

— Both furlough and parole stem from jail manuals and prison rule and are in the domain of the executive. Both are conditional releases, subject to good behaviour in prison and to not committing specific offences.

— In furlough, the sentence continues to run despite the convict being released from prison for a specified period of time. For example, if a person has been sentenced to 10 years' imprisonment and is released on furlough for 30 days, in effect he will be in jail for 9 years 11 months and yet will be deemed to have completed the sentence.

— When the convict is released on parole, the sentence is suspended and the quantum of sentence remains intact. Paroles are granted in short-term imprisonment, to provide relief to prisoners in certain specified exigencies such as illness, sowing and harvesting of crops, and to pursue an appeal against conviction in the SC.

— Parole is granted by the Divisional Commissioner while furlough is granted by the Deputy Inspector General of Prisons.



#### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)

- The CBI has arrested ten people in a case of bribery for a favourable NAAC rating.
- NAAC is a body set up in 1994 under the University Grants Commission (UGC) — the UGC chief heads its governing council — with the purpose of evaluating the performance of higher education institutions, and providing accreditation.
- UGC regulations of 2012 made it mandatory for higher education institutions to get accredited after six years of functioning, or after two batches have graduated. This means that for funds from the UGC, a higher education institution needs to be accredited.

#### VERY SHORT-RANGE AIR DEFENCE SYSTEM (VSHORADS)

- The Defence Research and Development Organisation (DRDO) has successfully conducted three successive flight-trials of the VSHORADS from Chandipur off the coast of Odisha.
- VSHORADS is a fourth generation technically-advanced miniaturised Man Portable Air Defence System (MANPAD), indigenously designed and developed by DRDO's Hyderabad-based premier facility Research Centre Imarat (RCI) in collaboration with other DRDO laboratories and Indian Industry partners.
- The DRDO said that the missile system has the capability to meet the needs of all three branches of the armed forces — Indian Army, Navy, and Air Force.

#### NEW RAMSAR SITES

- One day ahead of World Wetlands Day (2nd February), India announced four new Ramsar sites under the global agreement Ramsar Convention on Wetlands – Udhwa Lake in Jharkhand, Theerthangal and Sakkarakottai in Tamil Nadu and Khecheopalri in Sikkim. Now, India has 89 Ramsar sites.
- Tamil Nadu has the most Ramsar sites at 20. Punjab has six major wetlands, including north India's largest – the Harike wetlands or Harike Pattan which stretches over 86 sq.
- Wetlands are regions covered by water either perennially or seasonally, such as marshes and lakes. They are vital reservoirs of biodiversity, aid water conservation and provide habitat for numerous migratory birds, aquatic species, and plant life.
- To advance wetlands conservation globally, the Ramsar Convention of 1971 was signed in Ramsar, Iran, as an intergovernmental agreement.

#### POTASH RESERVE

- On February 6, the Punjab Mining Minister said the government will explore potash mining in Fazilka and Sri Muktsar Sahib districts, where surveys previously detected large mineral reserves in three mining blocks.
- Potash refers to potassium-bearing minerals that are primarily used in fertilisers. Over 90% of potash is used as fertilizer and it is one of the three primary agricultural nutrients (Nitrogen, Phosphorus and Potassium or N-P-K).





- Potash can be used on all plants to boost plant health and nutrition as well as to increase crop yields.
- Punjab is now the second state after Rajasthan to have significant potash reserves.

#### FENTANYL

- US President Donald Trump on January 31 imposed 25 per cent tariffs on Mexico and Canada, and 10 per cent on China, on the grounds of a “high trade deficit”. The US has blamed Mexico and China for the trafficking of fentanyl.
- According to the US Drug Enforcement Administration (DEA), “Fentanyl is a potent synthetic opioid drug approved by the Food and Drug Administration for use as an analgesic [for pain relief] and anaesthetic. It is approximately 100 times more potent than morphine and 50 times more potent than heroin as an analgesic.”
- Opioids are essentially a type of drugs that “derive from, or mimic, natural substances found in the opium poppy plant”. They produce a variety of effects, including pain relief and euphoria, and are highly addictive.
- Apart from fentanyl, some common opioids include oxycodone, morphine, codeine, and heroin.

#### INTERNATIONAL BIG CAT ALLIANCE

- On January 23, the International Big Cat Alliance (IBCA), launched by Prime Minister Narendra Modi in 2023 for the global conservation of seven big cats, formally became a full-fledged treaty-based intergovernmental organization.
- The five signatory countries are India, Nicaragua, Liberia, Eswatini, and Somalia.
- It is an initiative launched by Prime Minister Narendra Modi in April 2023 in Mysuru commemorating the 50th anniversary of Project Tiger. The objective of the IBCA is to ensure cooperation for the conservation of seven big cats: lion, tiger, leopard, cheetah, snow leopard, jaguar, and puma, and enhance knowledge exchange and threats associated with them.

#### MURUGAN TEMPLE IN JAKARTA

- Prime Minister Modi inaugurated the Murugan temple in Jakarta while virtually addressing the Maha Kumbabhishegam of Shri Sanathana Dharma Aalayam in Jakarta, which was also attended by Indonesian President Prabowo Subiant.
- Built on a 4,000 sq m plot donated by the government, the temple is located in the city’s western part. Besides housing shrines dedicated to Lord Murugan and other deities, it also houses a museum showcasing the historical connection between the two cultures.

**BUSINESS & ECONOMICS****THE FIRST SALVO**

After weeks of uncertainty, US President Donald Trump has fired the first salvo, igniting possibly a global trade war that will have implications for trade, growth and inflation. On Saturday, Trump signed executive orders imposing steep tariffs on three of the US's largest trading partners. Effective Tuesday, the US will levy 25 per cent additional tariffs on imports from Canada and Mexico and 10 per cent additional tariffs on China — three countries that account for around 40 per cent of US imports. The extraordinary decision, which involves a close US ally, is ostensibly meant to hold these countries “accountable to their promises of halting illegal immigration and stopping poisonous fentanyl and other drugs” from flowing into the US.

The affected countries have been quick to announce retaliatory measures. As per reports, Canadian Prime Minister Justin Trudeau has announced the levy of a 25 per cent tariff on \$107 billion worth of US products in a staggered manner. Mexican president Claudia Sheinbaum is reported to have directed the economy minister to implement tariff and non-tariff measures to defend the country's interests. China has been more circumspect in its response — its commerce ministry is reported to have said that it will file a case against the US at the WTO. Trump views tariffs as a negotiating instrument, a tool to boost manufacturing in the US, protect jobs and tackle the trade deficit. However, the Tax Foundation, a Washington-based think tank, has estimated that this measure would amount to an average tax of more than \$830 per US household in 2025, and would reduce long-run economic output by 0.4 per cent (before any foreign retaliation). Across the board tariffs on Canada and Mexico would imply a 0.7 per cent increase in core inflation and a 0.4 per cent hit to GDP as per economists at Goldman Sachs. This will also have implications for US monetary policy. A few days ago, Federal Reserve chairman Jerome Powell, in response to questions over the new administration's policies, had said that “the committee is very much in the mode of waiting to see what policies are enacted”. Higher inflation will increase the odds of the Fed not being able to cut rates any time soon, keeping policy tight. This will only sharpen the conflict between Trump and the Fed — the US President has in recent weeks been quite critical of the Fed and extremely vocal on his views on the direction that monetary policy should take.

Trump's first salvo adds to the uncertainty in global markets. India, however, finds no mention in the list. Prime Minister Narendra Modi is expected to visit the US this month. The government should leverage the bipartisan consensus in Washington for strong India-US ties to its advantage. In an increasingly uncertain global environment, India should play its cards carefully, and seize the opportunities that may arise in this period of uncertainty.

**CHINA HITS BACK WITH TARIFFS ON US, LAUNCHES PROBE AGAINST GOOGLE**

China on Tuesday announced a wide range of measures targeting U.S. businesses including Google, farm equipment makers and fashion brand Calvin Klein's owner, minutes after additional U.S. tariffs on Chinese goods took effect.

- The measures were announced as Beijing also slapped tariffs on some U.S. products such as coal, gas and electric trucks in a rapid response to the new duties on Chinese goods imposed by U.S. President Donald Trump, escalating trade tensions between the world's two biggest economies.



- China's Commerce Ministry said it had put PVH Corp, the holding company for brands including Calvin Klein and Tommy Hilfiger, and U.S. biotechnology firm Illumina on its "unreliable entity" list
- It said the two companies took what it called "discriminatory measures against Chinese enterprises" and "damaged" the legitimate rights and interests of Chinese companies.
- Companies added to the blacklist can be subject to fines and a broad range of other sanctions, including a freeze on trade and revocation of work permits for foreign staff.
- Separately, China's State Administration of Market Regulation said Google was suspected of violating the country's anti-monopoly law and an investigation was initiated into the company in accordance with the law. It did provide further details on the investigation or on what it alleged Google had done to breach the law.
- Google products such as its search engine are blocked in China and its revenue from there is about 1% of global sales.
- In 2017, Google announced the launch of a small artificial intelligence center in China. But the project was disbanded two years later and the firm does not conduct AI research in China, according to a blog posting. Google still works with Chinese partners such as advertisers.

**Do You Know:**

- According to the Investopedia, the term "trade war" is used to describe an economic conflict where, in response to protectionism, countries impose trade barriers such as tariffs, restrictions, and quotas against each other. Basically, one country imposes targeted tariffs on another's economy in order to protect its own economy, or to hurt that of its adversary. The former may believe that the trading practices of the latter are unfair.
- Trade wars are usually considered a side effect of protectionism. Protectionism refers to government actions and policies that restrict international trade. A country will generally undertake protectionist actions to shield domestic businesses and jobs from foreign competition. Protectionism is also a method used to balance trade deficits. A trade deficit occurs when a country's imports exceed the amounts of its exports. A tariff is a tax or duty imposed on the goods imported into a nation.
- Tariffs are a type of trade barrier that makes imported products more expensive than domestic ones. Tariffs typically come in the form of taxes or duties levied on importers, and they're eventually passed on to consumers. They're commonly used in international trade as a protectionist measure. As a protectionist tool, a tariff increases the prices of imports. Due to that, consumers may choose to buy other, relatively less expensive domestic goods instead.
- The US-based think tank Peterson Institute for International Economics (PIIE) said that Trump's tariffs on Canada, Mexico, and China would cost the typical US household over \$1,200 a year.
- In its report, PIIE stated that US producers competing with newly tariffed imports will raise their prices in line with import price increases, further burdening US consumers.



## TRUMP PAUSES TARIFFS ON MEXICO FOR A MONTH AFTER 'FRIENDLY' TALKS, BORDER DEAL

President Donald Trump on Monday agreed to a 30-day pause on his tariff threats against Mexico and Canada as America's two largest trading partners took steps to appease his concerns about border security and drug trafficking.

- The pauses provide a cool-down period after a tumultuous few days that put North America on the cusp of a trade war that risked crushing economic growth, causing prices to soar and ending two of the United States' most critical partnerships.
- Canadian Prime Minister Justin Trudeau posted Monday afternoon on X that the pause would occur "while we work together," saying that his government would name a fentanyl czar, list Mexican cartels as terrorist groups and launch a "Canada-U.S. Joint Strike Force to combat organized crime, fentanyl and money laundering."
- The pause followed a similar move with Mexico that allows for a period of negotiations over drug smuggling and illegal immigration. The 10% tariff that Trump ordered on China is still set to go into effect as scheduled on Tuesday, though Trump planned to talk with Chinese President Xi Jinping in the next few days.
- While the trade war feared by investors, companies and political leaders now seems less likely to erupt, that doesn't mean the drama over Trump's tariff threats has ended. Canada and Mexico bought some additional time, but Trump could easily renew his tariffs and already plans to announce taxes on imports from the European Union.
- All of that leaves the global economy uncertain about whether a crisis has been averted or if a possible catastrophe could still be coming in the weeks ahead.
- Trump on Saturday had directed 25% tariffs on imports from Mexico and Canada, with another 10% tariff on Canadian oil, natural gas and electricity. The U.S. president had repeatedly previewed these moves, yet they still managed to shock many investors, lawmakers, businesses and consumers.

### Do You Know:

- On February 1, Trump signed executive orders imposing 25 percent tariffs on Mexico and Canada, with a partial exemption for Canadian energy and oil exports, and a 10 percent tariff on China.

Trump has also spoken against the high trade deficit in goods with the three countries that together stands at more than \$480bn. China, Mexico, and Canada collectively made up more than 40 percent of US imports of goods last year at \$1.2 trillion.

- He said these tariffs would remain in place until the countries took steps to curb the flow of migrants and drugs, particularly fentanyl, into the US. The tariffs risked increasing the cost of online goods and prompted global market uncertainty over the risk of a sharp slowdown in global growth.
- According to experts, the primary objective of the tariffs was "to strategically meet the goals of Trump's foreign policy and domestic policy, and that was to stop the flow of the illegal drug fentanyl into the United States".





- According to the US Drug Enforcement Administration (DEA), “Fentanyl is a potent synthetic opioid drug approved by the Food and Drug Administration for use as an analgesic [for pain relief] and anesthetic. It is approximately 100 times more potent than morphine and 50 times more potent than heroin as an analgesic.” But overdoses can cause “stupor, changes in pupil size, clammy skin, cyanosis [blue skin], coma, and respiratory failure leading to death”.
- Opioids are essentially a type of drugs that “derive from, or mimic, natural substances found in the opium poppy plant”, according to the website of US-based Johns Hopkins Medicine. They produce a variety of effects, including pain relief and euphoria, and are highly addictive. Apart from fentanyl, some common opioids include oxycodone, morphine, codeine, and heroin.

## HOW BEGGAR-THY-NEIGHBOUR POLICIES CAN MAKE GLOBAL TRADE COME TO A STANDSTILL

Beggar-thy-neighbour policies refer to protectionist economic policies adopted by governments that are aimed at benefiting a country’s economy at the expense of other countries. A trade war in which a government imposes heavy tariffs and strict quotas on the import of foreign goods into the country is the most common example of beggar-thy-neighbour policies. Central banks of countries can also engage in beggar-thy-neighbour policies through currency wars wherein they depreciate the value of their domestic currencies against foreign currencies in an attempt to boost their domestic exports and to discourage the import of foreign goods.

### Origins of the idea

The term is attributed to Scottish economist Adam Smith who first used it in his well-known 1776 book *The Wealth of Nations*. He coined the term to criticise mercantilists of his time who advocated protectionist policies such as the imposition of tariffs and other forms of trade barriers in order to achieve a trade surplus with other countries. The mercantilists believed that a country can grow its wealth through international trade but at the cost of impoverishing other nations. Mr. Smith, on the other hand, believed that free trade in the long-run enriches all nations engaged in such trade.

Supporters of beggar-thy-neighbour policies argue that these policies help boost a country’s domestic economy by aiding certain important industries and protecting jobs. They usually point out that countries need to protect certain industries due to national security reasons and also in order to help protect them from foreign competition during their nascent development stages. Central banks engaged in beggar-thy-neighbour policies, on the other hand, argue that depreciating the national currency will make the country’s exports look cheaper to foreigners, thus boosting exports. They also argue that a depreciation in the value of a nation’s currency will make it more expensive for domestic citizens to purchase foreign goods, thus discouraging imports. Higher exports and lower imports, in turn, are expected to lead to a trade surplus which is said to be good for the domestic economy. It should be noted that supporters of beggar-thy-neighbour policies see exports as a good thing because exports are seen as boosting demand for the goods manufactured by domestic firms. At the same time, imports are considered bad because they are seen as boosting demand for foreign firms.

### Opposing voices

Critics, however, argue that beggar-thy-neighbour policies can make all countries poorer, particularly when countries begin to retaliate against each other by imposing tit-for-tat tariffs and



currency devaluations. Such tit-for-tat policies were implemented most notably during the interim period between the two major World Wars. Retaliatory tariffs and competitive currency devaluations during the period led to a significant drop in global trade and investment. In fact, economic historians consider such protectionist policies to be one of the major reasons behind the Great Depression that affected countries across the globe. In recent decades, countries such as China and Japan have been accused of devaluing their currencies to help their exporters, and to achieve a trade surplus with other major economies such as the United States. The rise of populist movements in recent years, particularly in the United States under Donald Trump's presidency, has led to renewed fears that we could see the return of tit-for-tat economic policies that caused global trade to come to a standstill.

It should be noted that beggar-thy-neighbour policies are generally targeted at benefiting domestic producers and their workers who possess significant political influence rather than consumers, who are in fact severely harmed by such policies. For example, U.S. President Trump's latest tariffs this week against Chinese imports are expected to help American producers who may now likely face lesser competition from Chinese firms. However, the same tariffs and other trade barriers are expected to affect American consumers who will now likely have to pay higher prices for goods due to reduced foreign supplies. Similarly, when a central bank depreciates the exchange value of its currency by flooding the forex market with its currency, it puts more domestic currency in the hands of foreigners, thus reducing the purchasing power of domestic consumers who will now be able to purchase fewer domestic goods.

Some critics of beggar-thy-neighbour policies also argue that countries should not retaliate when a foreign country imposes tariffs or other trade barriers on their exporters or devalues its currency in order to favour its own domestic exporters. They believe that countries that adopt unilateral free trade can avoid the damage caused by retaliatory tariffs, and in fact even benefit from the protectionist policies of other countries. Take the case of a country like China that is hit by tariffs imposed by the United States. While U.S. tariffs would make life hard for Chinese producers, imposing retaliatory tariffs against U.S. goods will only make things worse for China because Chinese consumers will then have to pay more for goods and services imported from the U.S. Retaliatory tariffs can thus turn out to be a double whammy for China. Similarly, according to this view, if the U.S. Federal Reserve depreciates its currency to boost its exports, it would be best for the Chinese central bank to avoid competitive devaluation because the U.S. Federal Reserve is actually subsidising Chinese consumers.

#### EUROPE'S STRONG GAS USE PACE MAY WILT SOON

Many of northern Europe's largest economies have sharply boosted gas-fired power generation so far in 2025, helping to lift regional gas prices to their highest since early 2023.

Gas-fired output during January in Germany, the United Kingdom, the Netherlands and Poland all jumped by well over 10% from January 2024's levels to their highest for that month since at least 2022, according to LSEG.

But the pace of gas consumption going forward may start to slow as regional gas prices have now climbed above the price of coal-fired generation, which may spur some power firms to cut gas output and raise coal-fired generation instead.

This switch-out of gas for coal is especially likely in Germany and Poland where coal-fired power is the mainstay.



Reduced gas consumption by those countries could help cap the recent rally in European gas prices, which are up by roughly 60% from where they were trading a year ago.

However, reduced gas use and more coal-fired generation will have significant emissions repercussions, as nearly twice as much carbon dioxide is discharged per unit of generated power from coal as from gas.

### Gas boom

Europe's main gas pricing hub—the TTF facility in the Netherlands—has reflected the robust consumption pace, with prices in January averaging 48.36 euros per megawatt hour, according to LSEG. That average is 40% above the TTF average for 2024 and 60% higher than where TTF averaged in January 2024, and is the highest price the region has registered since February 2023.

The steep ascent in TTF gas values has squeezed margins for power producers, who are under pressure to limit price increases for consumers.

Consumer energy costs across Europe climbed more steeply than in the United States and Asia in 2022 and 2023, and as a result European power suppliers are under intense governmental and societal pressure to avert any further cost increases.

One means of doing so is to switch out pricey gas for cheaper generation sources wherever possible.

## TRUMP ORDERS CREATION OF U.S. SOVEREIGN WEALTH FUND

President Donald Trump on Monday signed an executive order directing the U.S. to take steps to start developing a government-owned investment fund that he said could be used to profit from TikTok if he's successful at finding it an American buyer.

Mr. Trump signed an order on his first day office to grant TikTok until early April to find an approved partner or buyer, but he's said he's looking for the U.S. to take a 50% stake in the massive social media platform. He said on Monday in the Oval Office that TikTok, which is owned by China-based ByteDance, was an example of what he could put in a new U.S. sovereign wealth fund.

"We might put that in the sovereign wealth fund, whatever we make or we do a partnership with very wealthy people, a lot of options," he said of TikTok. "But we could put that as an example in the fund. We have a lot of other things that we could put in the fund," he said.

Sovereign wealth funds invest in assets, such as stocks, bonds and real estate. They are typically funded by a country's Budgetary surpluses, which the U.S. currently does not have.

Mr. Trump noted the U.S. could eventually top Saudi Arabia's fund size.

"Eventually we'll catch [up with] it," he promised.

There are over 90 sovereign wealth funds around the world that manage over \$8 trillion in assets, according to The International Forum of Sovereign Wealth Funds, a London-based organisation. In the U.S., more than 20 sovereign wealth funds exist at the state level, according to the Center for Global Development, a Washington-based nonpartisan think-tank.



## GROWTH OVER INFLATION

For the first time in nearly five years, the Monetary Policy Committee (MPC) of the Reserve Bank of India (RBI) pivoted on interest rates, unanimously deciding to cut the benchmark repo rate from 6.50% to 6.25%. This move, while maintaining a neutral stance, marks a significant departure from the previous bi-monthly review, where the committee had opted for the status quo with a 4:2 vote. At the time, the MPC was contending with inflation at a 15-month high of 6.2% in October and a sluggish second-quarter GDP growth of 5.4%. Now, with inflation moderating to 5.2% in December, still above the RBI's 4% target, and growth projections for 2024-25 slipping to a four-year low of 6.4%, the central bank appears to be prioritising economic expansion over inflation control. RBI Governor Sanjay Malhotra, in his first policy review, highlighted the challenges posed by global economic uncertainties, including stalled disinflation, diminishing prospects of rate cuts in the U.S., and a stronger dollar pressuring emerging markets and their currencies, including the rupee. These factors have complicated policy trade-offs for India, making the case for supporting growth even stronger. The MPC justified its decision to look past current inflationary concerns, citing expectations that price pressures will ease further, with inflation projected to average 4.2% in 2025-26 from 4.8% this year. This outlook hinges on assumptions of a favourable food inflation trajectory, a normal monsoon, and a bumper harvest of key vegetables such as tomato, onion, and potato, which are, historically, major contributors to price spikes. While inflation remains a concern, the panel has signalled that weak economic growth is more pressing, especially given the second-quarter slump and limited signs of recovery since then. The RBI's post-Budget policy stance also suggests closer alignment with fiscal policy, apparently heeding the government's call for monetary and fiscal measures to work in tandem rather than at cross-purposes. Whether the Budget's stimulus measures, combined with the rate cut, will revive consumption, attract private investment, and boost growth remains uncertain.

Interestingly, had the MPC met a week later, it might have had additional justification for the rate cut, given expectations that inflation in January could have cooled to around 4.5%. With a new Governor at the helm and an upcoming appointment for the Deputy Governor overseeing monetary policy, the RBI could consider adjusting the MPC's review schedule to incorporate the latest inflation data. A slight shift in the timing of its bi-monthly meetings could make monetary policy more responsive and data-driven, enhancing the committee's ability to justify its stance with real-time economic indicators.

## DELHI'S GENDER BUDGET: ITS DECLINE AND IMPACT

There are 71 lakh women voters in Delhi, which is nearly half of the total electorate. Further, women have a high turnout rate as well. So, it is no surprise that all contesting parties provide incentives tailored towards women. These incentives then come to light through the budget. Over the last decade, the overall budget for Delhi has increased from ₹271 billion to ₹760 billion. But, how much of this budget is reserved for women?

### Investing in women

Overall, the gender budget of Delhi has witnessed a seven-fold increase from ₹10 billion in 2011-12 to ₹71 billion in 2024-25 (Figure 1). While providing financial assistance to women and child development is essential to reduce the gender gap, it is equally important to invest in other components like, education and health. Investments in education have multiplier effects and lead to long term benefits by generating a highly literate and skilled workforce for the country.





Education of women, particularly, can bridge the gender gap in employment and achieve wage parity. What is needed is not freebies but concrete steps that can enable systematic growth in the economic and social empowerment of women.

The neglect towards the education of women by Delhi is concerning. The spending on women's education in the gender budget stood at ₹2 billion in 2011-12, which increased to ₹18 billion in 2024-25. This budget reached its peak in 2017-18 touching ₹24 billion. Since then, the budget allocated for women's education has steadily declined. For the last five years, the education budget has reported a negative growth, with exceptions for 2019-20 and 2023-24 (Figure 2). Another surprising fact is that the education budget made up 54% of the gender budget in 2017-18, but steadily declined to a mere 27% in 2024-25 (Figure 3). Concerningly, there was a massive decline of 9% in the education budget in just the past one year. The decrease is not just in the share, but also in the amount allocated to education (see figure 1), indicating that cash transfers and freebies have become the focus of gender budgets.

### Priority for women's education

Education and technical training are major pillars for sustainable long-term growth. A lack of investment in the education sector can have negative spillovers into the labour market. According to the Periodic Labour Force Survey (PLFS, 2023-24), compared to the national average of 45.2%, Delhi's female labour force participation stands at 21%, the lowest in India. While most people in Delhi hold regular salaried jobs according to PLFS (2023-24), most women are working as house helps or cleaners, and men as shopkeepers or salespeople. Clearly, women are working in the lowest end of the skill spectrum. These jobs offer poor pay and low standard of living. Thus, low investments in female education lead to a relatively smaller female workforce, lower skill levels and low paying jobs. Secondly, the lack of a skilled women workforce can also lead to high gender inequalities in the labour force. As of 2023-24, the gender gap in labour force participation for Delhi stands at 51.6 percentage points. Moreover, the gender gap in top roles — legislators, senior managers, and CEOs — is stark, with 94% of these positions being held by men. Women are also under-represented in high skilled jobs, such as technicians and associate professionals. Only 3.8% of the female labour force are in these jobs compared to 10.34% of the male labour force. This points to the fact that investments in education are needed to bridge the gap in the high skilled workforce.

Third, the lack of technical and professional education of women has led to the concentration of women in certain fields. Most women professionals are in the teaching and health sector. It is crucial, therefore, to promote technical education training and professional courses among women to close the gender gaps in various sectors.

Cash transfers are necessary for relief but for empowerment of women, education and training are of utmost importance. Improving the budget for women's education would greatly reduce the gap in the long run.

## CESS AND SURCHARGE CONTINUE TO SHRINK STATES' TAX SHARE

Of every ₹100 that the Union government collects as tax, ₹10-11 is collected as cesses and surcharges, a trend unchanged since the pandemic year 2020-21. Also, the government spends ₹1-2 in collecting every ₹100 of tax; this is called the cost of collection. The amount collected as cesses and surcharges, along with the cost of collection, is not included in the divisible pool of taxes, a portion of which is meant to be shared with the States.



The share of cesses and surcharges, along with the cost of collection, reached a high of ₹13.5 for every ₹100 collected as taxes by the Centre in 2021-22 — the highest ratio in at least over a decade. Since then, it has gradually declined and is expected to be around ₹10.97 according to the latest Budget Estimates (BE) for 2025-26. In contrast, in many years before the pandemic, this figure ranged only between ₹5 and ₹7.

### **Divisible pool has shrunk**

Let us now look at these figures from the perspective of the divisible pool. Given that the share of cesses and surcharges has increased over the years, the divisible pool has shrunk. Since the pandemic year 2020-21, the divisible pool has fallen to less than ₹90 for every ₹100 that the Centre collects. It is expected to remain below ₹90, according to BE for 2025-26, presented on February 1. In contrast, in many years before the pandemic, this figure ranged between ₹91 and ₹95.

Chart 1 shows the share (in %) of the divisible pool in the Centre's gross tax collection over the years (left axis). It also shows cesses, surcharges, and the cost of collection of taxes as a share of the Centre's gross tax collection over the years (right axis).

Currently, all the States put together get 41% of the divisible pool, a figure arrived at as per the recommendations of the 15th Finance Commission for the FY 21-26 period. Before that, the share was pegged at 42% of the divisible pool between FY16 and FY20, a massive increase from the 32% share before FY16.

However, the consistent rise in the share of cesses and surcharges has meant that the Finance Commissions' recommendations have been rendered less effective, as the divisible pool itself is shrinking. Many experts have previously pointed out that despite a formula in place, in practice the actual devolution to the States falls short of the agreed recommendations. In fact, many non-BJP ruling States now want this share to increase to 50% from 41%.

GST compensation cess was not included in the list of cesses considered, as it was collected to compensate the States for revenue loss due to implementation of GST.

### **Usage of cess**

While the rise in cesses and surcharges is one part of the problem, they are often not used for the specific purposes for which they were collected.

Many Comptroller and Auditor General of India (CAG) audit reports have pointed out that these cesses are not being completely transferred to the reserve funds or adequately utilised for the intended purposes. For instance, the crude oil cess is meant to be transferred to the oil industry development body, which is not followed. In the latest three such reports, the CAG pointed out that about ₹2.19 lakh crore in cesses meant for transfer to the designated Reserve Funds between FY20 to FY22 did not happen.

While all the States put together get 41% of the divisible pool, the share of each State in that is calculated based on a formula, which is decided by the Finance Commission. Predominantly, it is decided by income distance, which measures how far a State is from the State with the highest per capita income. Other factors such as population, demographic performance (population control), forest cover, area and efficiency in tax collection are also given weightage.



Certain States have also raised an issue with the way their share in the divisible pool is being calculated as they feel that the formula is subject to political bias and they are losing out on account of economic and social progress.

#### Share of States in divisible pool

The share of various States in the divisible pool has undergone significant changes since FY02, as shown in Table 2. The share of all the southern States has fallen. Kerala's share fell from 3.08% in FY02 to 2.5% in FY17 and is estimated to fall even further to 1.9% in FY26 (BE). Tamil Nadu's share shrunk from 5.46% in FY02 to 4.02% in FY17 and is expected to remain at the same level in FY26. Karnataka's has come down from 4.98% in FY02 to 3.6% in FY26 BE. The share of Andhra Pradesh and Telangana together declined from 7.7% in FY02 to 6.75% in FY17 and is expected to drop to 6.1% in FY26. West Bengal and Odisha's shares have also come down consistently in the period. In contrast, the shares of Madhya Pradesh, Maharashtra, Rajasthan, and Gujarat have increased in this period.

States such as Uttar Pradesh and Bihar continue to receive the bulk of the share. Bihar is expected to get 10.1% in FY26, slightly lower than 11.49% in FY02; and Uttar Pradesh is expected to get 17.9% in FY26, slightly lower than 19.15% in FY02.

As the data show, not only is the divisible pool shrinking, but the share allocated to certain States — most of which are in south India and parts of the east — is also dwindling. This imbalance explains why many of these States now feel short changed.

### ODISHA JOINS KERALA, TAMIL NADU AND GUJARAT TO SEEK 50% SHARE IN CENTRAL TAXES

Odisha Thursday demanded an increase in states' share of central taxes to 50 per cent from the existing 41 per cent. Odisha, which has sought Rs 12.59 lakh crore in central taxes for the period 2026-31, joins states such as Gujarat and Tamil Nadu in making the demand.

- CM Mohan Charan Majhi, along with senior officers, met the finance commission headed by Arvind Panagariya to seek an increase in its share in central taxes to 4.96 percent from the current 4.52 percent recommended by the previous finance commission. It also demanded inclusion of cess and surcharge in divisible pool so states can have their share in it.
- "Overuse of cess and surcharges need to be contained, and the 16th Finance Commission may consider suggesting stricter tests for the cess and surcharges to qualify for exclusion from the divisible pool, through a constitutional amendment, if necessary," a memorandum presented by the state government before the commission said.
- The finance commission headed by Panagariya is currently on a four-day visit to Odisha as part of its visit to various states. According to Panagariya, states such as Kerala, Gujarat, Tamil Nadu, Punjab and Goa have suggested an increase in the states' share in central taxes to 50%.
- According to the memorandum, Odisha suggested that a modified population variable – such as the share of vulnerable population including SC and ST, and those requiring special attention like people above 80 years of age and widows without any support — should be used in the tax devolution formula instead of the entire population.

**Do You Know:**

- The Finance Commission (FC) is a constitutional body set up under Article 280 of the Constitution to make recommendations on the distribution of resources between the Union and the states. The First FC was constituted in 1951 and its recommendations covered the five-year period 1952-57. Since then, we have had 15 FCs.
- Currently the 16th Finance Commission is in office which was constituted in December 2023. The Commission is required to submit its report by October 31, 2025 and would make recommendations for the five-year period starting April 1, 2026.
- The FC addresses the vertical imbalance arising out of asymmetric assignment of revenues and expenditure between the Union and the states in the Constitution by recommending sharing a proportion of all taxes collected by the Union government with the states (also called devolution).
- The 13th FC recommended sharing 32% of the divisible pool of resources with the states. The 14th FC increased this proportion to 42% while the 15th FC recommended sharing 41% with the states.
- A number of criteria (with weights) is used for distribution of the shareable tax revenue among states. These are classified under four heads: need (population, area, demographic change), equity (income distance), efficiency/ performance (tax-effort, fiscal discipline, demographic performance), and fiscal disability (forest cover).
- The 15th FC used 2011 population (with 15% weight), area (15%), forest and ecology (10%), income distance (45%), tax and fiscal efforts (2.5%) and demographic performance (12.5%) for determining inter se shares of states. FCs also recommend grants to states. However, devolution is the dominant component, accounting for 80-85% of total FC transfers.

**8,000 CANDIDATES JOIN PM INTERNSHIP SCHEME IN 4 MONTHS SINCE ITS LAUNCH**

JUST ABOUT 8,000 candidates have taken up offers in the pilot project of the Prime Minister's Internship Scheme till the middle of January, sources involved in the process said. The pilot phase was launched in October, while the scheme itself was announced in the Union Budget for 2024-25 last July.

- Of the 1.27 lakh internship opportunities listed by 280 companies in the first phase, partner companies made 82,077 internship offers to 60,866 candidates. Of these, 28,141 candidates accepted offers to join the internship as on January 29, 2025, according to a Lok Sabha reply by the Ministry of Corporate Affairs on February 3.
- Sources told The Indian Express that only about 8,000 candidates have joined the internship programme in the first phase.
- The second round of the scheme started less than a month ago — on January 9. Partner companies are posting new as well as editing unfilled internship opportunities.
- To improve the acceptability of the scheme, sources said the government is now planning to give details of the company, the internship opportunity and the exact location (along with geotagging) so that candidates know a priori how far they have to travel.





- Earlier, such details were not provided upfront to candidates. These changes may be introduced in the next phase of the scheme. Earlier, these details were kept anonymous, with only the internship's description made visible to the candidate, without specifying the company's name at the application stage.
- Further, the age limit is also likely to be relaxed (at present, youth in the 21-24 age group are eligible) at both ends. Further around 49 companies from sectors such as hospitality, tourism, healthcare have also been added to the list as they were considered to be labour intensive.

**Do You Know:**

- The scheme aims to provide internships to one crore youth in top 500 companies over five years. Under the scheme, an amount of Rs 4,500 will be provided per month by the Government of India through Direct Benefit Transfer (DBT) with an additional Rs 500 offset to be provided by the company's CSR (corporate social responsibility) funds.
- The government will also provide a one-time grant of Rs 6,000 per annum for incidentals to cover miscellaneous expenses incurred by the selected candidate during the internship.
- The internship scheme was a part of the Prime Minister's Package for Employment and Skilling announced in FY25 Budget with an overall outlay of Rs 2 lakh crore.
- The package was allocated Rs 12,000 crore for this financial year, out of which Rs 10,000 crore was allocated to the Ministry of Labour and Employment for the three Employment Linked-Incentive schemes and Rs 2,000 crore was provided to the Ministry of Corporate Affairs for the internship programme.
- In the revised estimates for 2024-25, the amount allocated for the internship scheme was scaled down to Rs 380 crore. For 2025-26, an amount of Rs 10,831 crore has been provided for the internship scheme in the Budget, including Rs 59.77 crore of capital outlay.

## UNION BUDGET: UNDERSTANDING ITS FORMULATION AND IMPLICATIONS

The Budget, tabled in Parliament by Finance Minister Nirmala Sitharaman, is the Government's blueprint on expenditure, taxes it plans to levy, and other transactions which affect the economy and lives of citizens.

### What are the major components of the Budget?

There are three major components — expenditure, receipts and deficit indicators. Depending on the manner in which they are defined, there can be many classifications and indicators of expenditure, receipts and deficits.

Based on their impact on assets and liabilities, total expenditure can be divided into capital and revenue expenditure. Capital expenditure is incurred with the purpose of increasing assets of a durable nature or of reducing recurring liabilities. Consider the expenditure incurred for constructing new schools or new hospitals. All these are classified as capital expenditure as they lead to creation of new assets. Revenue expenditure involves any expenditure that does not add to assets or reduce liabilities. Expenditure on the payment of wages and salaries, subsidies or interest payments would be typically classified as revenue expenditure.



Depending on the manner in which it affects different sectors, expenditure is also classified into (i) general services (ii) economic services, (iii) social services and (iv) grants-in-aid and contribution. The sum of expenditure on economic and social services together form the development expenditure. Economic services include expenditure on transport, communication, rural development, agricultural and allied sectors. Expenditure on the social sector including education or health is categorised as social services. Again, depending on its effect on asset creation or liability reduction, development expenditure can be further classified as revenue and capital expenditure.

The receipts of the Government have three components — revenue receipts, non-debt capital receipts and debt-creating capital receipts. Revenue receipts involve receipts that are not associated with increase in liabilities and comprise revenue from taxes and non-tax sources. Non-debt receipts are part of capital receipts that do not generate additional liabilities. Recovery of loans and proceeds from disinvestments would be regarded as non-debt receipts since generating revenue from these sources does not directly increase liabilities, or future payment commitments. Debt-creating capital receipts are ones that involves higher liabilities and future payment commitments of the Government. Fiscal deficit by definition is the difference between total expenditure and the sum of revenue receipts and non-debt receipts. It indicates how much the Government is spending in net terms. Since positive fiscal deficits indicate the amount of expenditure over and above revenue and non-debt receipts, it needs to be financed by a debt-creating capital receipt. Primary deficit is the difference between fiscal deficit and interest payments. Revenue deficit is derived by deducting capital expenditure from fiscal deficits.

#### **What are the implications of the Budget on the economy?**

The Budget has an implication for aggregate demand of an economy. All Government expenditure generates aggregate demand in the economy since it involves purchase of private goods and services by the Government sector. All tax and non-tax revenue reduces net income of the private sector and thereby leads to reduction in private and aggregate demand. But except for exceptional circumstances, the GDP, revenue receipt and expenditure typically show a tendency to rise over time. Thus, the trend in absolute value of expenditure and receipts in themselves have little use for meaningful analysis of the Budget. The trend in expenditures and revenue is analysed either by the GDP or as growth rates after accounting for the inflation rate.

Reduction in expenditure GDP ratio or increase in revenue receipt-GDP ratio indicates the Government's policy to reduce aggregate demand and vice-versa. For similar reasons, reduction in fiscal deficit-GDP ratio and primary deficit-GDP ratios indicate Government policy of reducing demand and vice versa.

Since different components of expenditure and revenue can have different effects on income of different classes and social groups, the Budget also has implications for income distribution. For example, revenue expenditure such as employment guarantee schemes or food subsidies can directly boost the income of the poor. Concession in corporate tax may directly and positively affect corporate incomes. Though both a rise in expenditure for employment guarantee schemes or reduction in the corporate tax would widen the fiscal deficit, its implications for income distribution would be different.

#### **What are fiscal rules and how do they affect policy?**

Fiscal rules provide specific policy targets on the basis of which fiscal policy is formed. Policy targets can be met by using different policy instruments. There exists no unique fiscal rule that is



applied to all countries. Rather, policy targets are sensitive to the nature of economic theory and depend on the specificity of an economy.

In India's case, its present fiscal rule is guided by the recommendations of the N.K. Singh Committee Report. Allowing for some deviations under exceptional times, it has three policy targets — maintaining a specific level of debt-GDP ratio (stock target), fiscal deficit-GDP ratio (flow target) and revenue deficit-GDP ratio (composition target).

Though both expenditure and revenue receipts can potentially act as policy instruments to meet specific set of fiscal rules, tax-rates within the existing policy framework happen to be determined independent of the expenditure requirement of the economy. Accordingly, in the present institutional framework in India, it is primarily the expenditure which is adjusted to meet the fiscal rules at given tax-ratios.

Such an adjustment mechanism has at least two related, but analytically distinct implications for fiscal policy. First, independent of the extent of expenditure needed to stimulate the economy or boost labour income, existing fiscal rules provide a cap on expenditure by imposing the three policy targets. Second, under any situation when the debt-ratio or deficit ratio is greater than the targeted level, expenditure is adjusted in order to meet the policy targets. By implication, independent of the state of the economy and the need for expansionary fiscal policy, existing policy targets may lead the Government to reduce expenditure.

In the midst of the inadequacies of fiscal policy to address the contemporary challenges of unemployment and low output growth rate, the nature and objective of fiscal rules in India would have to be re-examined.

## UNION BUDGET 2025

Union Finance Minister Nirmala Sitharaman presented the Union Budget 2025 on Saturday. If Union Finance Minister Nirmala Sitharaman's seventh Budget after the BJP returned to power was about coalition politics, the Budget for 2025-26 seems to bet big on an unprecedented tax bonanza to push flagging consumption alongside a continuing thrust on capital expenditure to maintain a 6-per cent plus growth momentum.

### INCOME UP TO RS 12 LAKH TAX-FREE; CONSUMPTION, CAPEX KEY DRIVERS

- The fiscal deficit for this year is now estimated at 4.8 per cent of the GDP, and that for 2025-26 at 4.4 per cent of GDP. This is lower than the glide path which required her to bring down the deficit to under 4.5 per cent.
- The growth realism gives the government some fiscal space should there be a consumption boost leading to a consequent increase in growth. It is estimated that the change in tax slabs and the hike in tax rebate limit to Rs 12 lakh a year from Rs 7 lakh a year will benefit at least 1.75 crore citizens, and buoy the sentiments of the middle class.
- The Budget didn't lose sight of the Assembly elections in Bihar later this year. From a Makhana (fox nuts) Board in Bihar to a National Institute for Food Technology, the Entrepreneurship and Management, the largesse for the state also included a brownfield airport in Bihta, expansion of IIT Patna, and a Western Kosi canal project for farmers in the Mithilanchal region.



- Taking forward the initiatives of last year, Sitharaman identified four engines of growth: agriculture, exports, MSMEs and investment. At the heart of these initiatives is an effort to focus on sectors that are labour intensive and also generate more employment.
- In the backdrop of the Red Sea crisis, the government also announced a ship-building financial assistance policy and made a provision for ship building clusters.

#### EXTERNAL AFFAIRS MINISTRY GETS RS 20,516 CRORE, EMPHASIS ON 'NEIGHBOURHOOD FIRST' POLICY

- The Ministry of External Affairs (MEA) has allocated Rs 5,483 crore for aid to foreign nations, higher than last year's budget estimate of Rs 4883 crore, but lower than last year's revised estimate of Rs 5,806 crore.
- The MEA budget has placed an emphasis on India's 'Neighbourhood First' policy. Rs 4,320 crore — 64 per cent of the total scheme portfolio — has been earmarked for the country's immediate neighbours for initiatives like large infrastructure projects such as hydroelectric plants, power transmission lines, housing, roads, bridges and integrated check-posts.
- Bhutan continues to be India's largest foreign aid recipient, receiving Rs 2,150 crore in 2025-26, which is an increase from last year's budget estimate of Rs 2,068 crore.

#### DEFENCE GETS 13% OF BUDGET, OUTLAY UP 10% TO RS 6.81 LAKH CRORE

- In the wake of challenges of modern warfare and to modernise the military to counter rival China, the Union Budget has allocated Rs 6.81 lakh crore to the Defence Ministry, which is 9.5% higher than the allocation last year, if compared to budget estimate.
- The defence allocation is 13.45% of the Union Budget, which is highest among the ministries. Of the total allocation, Rs 1.8 lakh crore will be for capital expenditure underlining the importance the government accords to modernising the Armed Forces and procuring new weapons.
- The budgetary allocation to Defence Research and Development Organisation (DRDO) has been increased to Rs 26,817 crore in FY 2025-26 from Rs 23,856 crore last year. Of this, a major share of around Rs 15,000 crore has been allocated for capital expenditure and to fund the R&D projects.

In Budget's allocation to Home Ministry, focus on borders and security

- The 2025-26 Union Budget's allocation for the Ministry of Home Affairs reflected a focus on security, both internal and at the borders, while also indicating that the census exercise would likely be delayed again.
- This magnified focus on the borders come after an increase over the last year in cross-border infiltration and terror attacks in Jammu and Kashmir, especially in the once-relatively peaceful Jammu division.
- The total allocation of Rs 2,33,211 crore is a Rs 12,840 crore increase from the outlay for 2024-25 (revised estimate). The major chunk — Rs 1,09,037.05 crore — has gone to the central armed police forces (CAPFs) that are responsible for internal security, guarding borders and securing vital installations.





- The allocation for border infrastructure, meanwhile, saw a sharp 87% rise — from Rs 2,794.57 crore to Rs 5,237.93 crore. This will be spent on the check posts along the international border and setting up surveillance infrastructure.
- The Budget also allocated just Rs 574.80 crore (Rs 572 crore in 2024-25) towards work related to the census — a clear indication that the decadal exercise will be delayed. The census was supposed to be carried out in 2020-21 but was postponed owing to the Covid-19 pandemic.

#### MARKING NEW FISCAL ANCHOR: DEBT-GDP RATIO

- IN A significant shift from having fiscal deficit as the only operational target for fiscal consolidation, the central government has detailed the shift towards “debt-GDP ratio” as the fiscal anchor beginning 2026-27 financial year. It has targeted a declining debt-GDP ratio to 50±1 per cent by March 31, 2031.
- The debt-GDP ratio for the central government is estimated to be 57.1 per cent in 2024-25 (revised estimate) and 56.1 per cent in 2025-26. “The choice of debt to GDP ratio as the fiscal anchor is in line with current global thinking. It encourages a shift from rigid annual fiscal targets towards more transparent and operationally flexible fiscal standards,” the government said in its ‘Statements of fiscal policy as required under the Fiscal Responsibility and Budget Management (FRBM) Act, 2003’.
- A debt-GDP ratio as a fiscal target is a “more reliable measure of fiscal performance as it captures the cumulative effects of past and current fiscal decisions”, it said. “It is expected that the debt to GDP based fiscal consolidation strategy would help rebuild buffers and provide requisite space for growth-enhancing expenditures,” the government said.
- Debt to GDP ratio refers to the share of a country’s national debt to its gross domestic product. Rating agencies usually track total debt to GDP ratio that includes debt levels of both states and the central government.

#### HIGH-LEVEL COMMITTEE TO REVIEW NON-FINANCIAL SECTOR REGULATIONS

- Finance Minister Nirmala Sitharaman on Saturday announced that a high-level committee for regulatory reforms will be set up for a review of all non-financial sector regulations, certifications, licenses, and permissions.
- The objective of the high-level committee will be to strengthen trust-based economic governance and take transformational measures to enhance ease of doing business, especially in matters of inspections and compliances. The committee is expected to make recommendations within a year. States will also be encouraged to join in this initiative.

#### CAPEX STAYS STRONG EVEN AS IT FALLS SHORT OF FY25 TARGET

- The government has projected a capital expenditure target of Rs 11.21 lakh crore for the next financial year 2025-26, a growth of 10 per cent over the revised estimate for FY25 and just around 1 per cent higher than the budget estimate for the current financial year.
- This came on the back of the government undershooting its target for capital expenditure for FY25, meeting only 92 per cent of its target of Rs 11.11 lakh crore at Rs 10.18 lakh crore.



#### SUBSIDY BILL SET TO FALL TO 6-YEAR LOW

- The Centre's spending on subsidies for 2025-26 is budgeted to fall to a six-year-low in absolute terms and a seven-year-low relative to the country's gross domestic product (GDP). Also, much of the outgo pressure is now coming from fertilisers, as opposed to food subsidy.
- Finance Minister Nirmala Sitharaman has provided a total of Rs 426,216 crore towards all Central subsidies for the coming financial year, the lowest since the Rs 262,304 crore of 2019-20. The reduced subsidy spend — from the peak of Rs 758,165 crore and 3.82 per cent of GDP in 2020-21 — are mainly on account of two factors.
  - First, the discontinuation of the free, additional 5-kg per month extra foodgrains allocation to the 813.5 million public distribution system (PDS) beneficiaries. The extra rice or wheat — over and above the regular 5 kg/person/month PDS quota under the National Food Security Act, 2013 — was given during the post-Covid period from April 2020 to December 2022. That ended from January 2023.
  - The second major reason for the Centre's lower subsidy provision is fertiliser. The fertiliser subsidy peaked at Rs 251,339 crore in 2022-23, which resulted from high global prices following Russia's invasion of Ukraine.

#### SMALL REACTORS, BIG NUCLEAR LEAP: 20,000-CRORE R&D MISSION

- In one of the biggest moves to expand the nuclear energy sector, the government on Saturday set up a new mission to develop small modular nuclear reactors, and set a target of operationalising at least five such reactors in the next eight years.
- In her budget speech, Finance Minister Nirmala Sitharaman also promised to amend the Atomic Energy Act and the Civil Liability for Nuclear Damage Act to accelerate private sector participation in building and operating nuclear power plants.
- She said the government would set up a Nuclear Energy Mission worth ₹20,000 crore for research and development of small modular reactors (SMRs), and promised that at least five such indigenously developed SMRs would be operationalised by 2033.
- SMRs, as the name suggests, are small nuclear reactors that typically produce less than 300 MW of electricity. Conventional nuclear reactors, the kind which are currently installed in India and elsewhere, usually have capacities to produce 500 MW of electricity or more.
- However, it is their relatively simpler and modular design — enabling their components to be assembled in a factory instead of being constructed on-site — lower costs, and flexible deployment that has made SMRs a much more attractive proposition in recent years.
- The government is pushing for indigenous development of SMRs — sometimes even referring to them as Bharat SMRs — and this is where the new ₹20,000 crore mission is supposed to make a difference.
- Unlike renewables like solar or wind, nuclear energy offers a reliable source of on demand electricity generation, and is not susceptible to weather-related interruptions.



### RS 1 LAKH CRORE TO BOOST URBAN INFRA, CITIES TO COVER COST OF PROJECTS VIA BONDS, PPPS

- Finance Minister Nirmala Sitharaman Saturday announced the establishment of an Urban Challenge Fund in the Union Budget 2025 to mobilise Rs 1 lakh crore, which will incentivise cities to raise funds through municipal bonds, public-private partnerships (PPPs) and loans.
- Under the fund, while the government plans to give Rs 10,000 crore, cities are expected to get the remaining Rs 40,000 crore from floating municipal bonds, entering into private-public partnerships, and taking loans, according to a Ministry of Housing and Urban Affairs source. Cities would be asked to submit their proposals for the three kinds of projects.
- To boost incomes for the urban poor, Sitharaman announced a revamp of Prime Minister Street Vendors AtmaNirbhar Nidhi (PM SVANidhi), the existing small working capital loan scheme for street vendors, in her Union Budget 2025 speech.
- PM SVANidhi was launched in 2020 when the Covid-19 pandemic and the lockdowns hit street vendors. Under the scheme, vendors can avail themselves of loans of Rs 10,000, Rs 20,000, and Rs 50,000. As many as 95.84 lakh loans worth Rs 13,741 crore have been disbursed so far.

### NO HIKE IN BUDGET, BUT ROAD AND RAIL AMONG GOVT'S TOP CAPEX DRIVERS

- Railways and Road Transport continue to be among the ministries for which the government has allocated the highest share of capital expenditure in the Budget even though the allocated amount is the same as last year's.
- In the Union government's Budget for the financial year 2025-26, presented on Saturday by Finance Minister Nirmala Sitharaman, the Ministry of Railways was allocated Rs 2.65 lakh crore for capital expenditure.
- The Budget also allocated Rs 2.72 lakh crore to the Ministry of Road Transport and Highways for capital expenditure.

### HOW SWEET IS THE SWEETENED NEW TAX REGIME

- Finance Minister Nirmala Sitharaman announced several changes that brought cheer to the middle class. Starting from raising the limit of rebate from Rs 7 lakh to Rs 12 lakh under the New Tax Regime (NTR), Sitharaman also tweaked the tax slabs in a manner that would benefit taxpayers in higher salary brackets as well, effectively leaving more money in their hands.
- A rebate means that income up to that limit will not lead to any tax liability, which effectively means that anyone with an annual taxable income of up to Rs 12 lakh, or a monthly income of up to Rs 1 lakh, will not be required to pay any income tax under the NTR.
- However, if the annual taxable income breaches Rs 12 lakh, it will be subject to tax as per the prevailing tax slabs for the entire income. All taxpayers who have persisted with the OTR due to heavy deductions would do well to revisit their tax computations under both tax systems and make an informed choice.



### FDI IN INSURANCE HIKED TO 100%, PAVING WAY FOR ENTRY OF FOREIGN GIANTS

- Union Finance Minister Nirmala Sitharaman Saturday announced a significant hike in foreign direct investment (FDI) in the insurance sector — from 74% to 100% — paving the way for the entry of global insurance giants, substantial foreign investments and tough competition in the Indian market.
- The government will hopes this major reform boosts insurance penetration in the country, which, as per an IRDAI report, was at 3.7% in 2023-24. The global insurance penetration at the same time was 7%.
- With the 100% FDI, foreign insurers will have full autonomy to operate in India, bringing in sophisticated risk management practices, advanced technology and innovative products, say experts.
- Foreign investments will also provide much-needed capital to the Indian insurance sector, enabling insurers to offer better products and services. Of the world's top 25 insurance firms, as many as 20 are not present in India now. This move is expected to attract them to the country.

### BATTLING CANCER CLOSER HOME: DAYCARE CENTRES IN ALL DISTRICT HOSPITALS IN 3 YEARS

- Union Finance Minister Nirmala Sitharaman announced on Saturday a major upgrade to the country's medical infrastructure— the establishment of day-care centers for cancer treatment at district hospitals. This initiative aims to improve access to essential cancer treatments at the district level while also easing the heavy patient burden on large tertiary care hospitals in metropolitan cities.
- Saturday's Union Budget announcement is significant, as India has a vast network of at least 759 district hospitals, which serve as crucial access points for tertiary healthcare at the district level.
- The decision also carries significant public health implications. First, cancer cases are on the rise in India, with one in nine people likely to develop the disease in their lifetime.
- Second, as cancer cases continue to increase, these day-care centers— which typically provide chemotherapy, administer essential medications, perform minor procedures such as biopsies, and manage complications— will enhance access to critical treatments at the district level. This is particularly beneficial for rural populations, who will no longer have to travel to large cities where treatment costs are significantly higher, once the day care centres are set up.
- Challenges in setting up these Centres are: Infrastructure limitations, challenges related to patient trust and demand.

### ₹9K CR BOOSTER FOR HEALTH, GIG WORKERS TO GET PMJAY COVER

- The total outlay for health in this year's budget has increased by over ₹9,000 crore, with the increase going to several of the government's key programmes such as its mission to increase infrastructure, Ayushman Bharat, as well as allocation for All India Institute of Medical Sciences-Delhi.





- The total outlay for the ministry of health has increased to ₹95,957.8 crore from the previous year's revised estimate of ₹86,582.5 crore. Meanwhile, Union Finance Minister Nirmala Sitharaman announced Ayushman Bharat coverage for one crore gig workers. Last year, the government expanded the coverage of the flagship health scheme to all citizens over the age of 70 years, irrespective of their economic status.
- Saturday's budget also saw an increase of ₹1,000 crore allocation under the PM Ayushman Bharat Health Infrastructure Mission (PM-ABHIM), increasing from ₹3,200 crore to ₹4,200 crore.

#### WITH HIKE IN OUTLAY OF SCHEMES, TRIBAL AFFAIRS BUDGET UP 45%

- The central government on Saturday increased the budget allocation for the Ministry of Tribal Affairs by 45.79% compared to last year, allocating more funds to bridge infrastructure gaps in tribal-dominated areas across the country.
- The Union Budget 2025-26 has allocated Rs 14,925.81 crore for the Ministry of Tribal Affairs, up from Rs 10,237.33 crore (revised estimate) in 2024-25.
- Three crucial initiatives of the ministry — Eklavya Model Residential Schools (EMRS), Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) and Dharti Aaba Janjatiya Gram Utkarsh Utkarsh Abhiyan (DA-JGUA) — saw increase in outlay in the Union Budget.
- The government has set a target of making 728 Eklavya Model Residential Schools functional by March 2026 for 3.5 lakh tribal students.
- The Dharti Aaba Janjatiya Gram Utkarsh Utkarsh Abhiyan scheme, targeted towards saturation coverage of government schemes in health, infrastructure, education and livelihood, saw its allocation quadruple — increasing from Rs 500 crore to Rs 2,000 crore.
- The Budget for Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan, aimed to improve the socio-economic conditions of the Particularly Vulnerable Tribal Groups has been doubled from Rs 150 crore (revised estimate) to Rs 300 crore for 2025.

#### 5 IITS SET UP AFTER 2014 TO ADD 6,500 SEATS OVER 5 YRS

- The Union Government on Saturday announced a significant increase in student intake across five Indian Institutes of Technology (IITs) over the next five years and an additional 10,000 seats in medical colleges and hospitals over the next year.
- The government will develop infrastructure to facilitate the education of another 6,500 students across five third-generation IITs (set up after 2014) – IIT Palakkad, Dharwad, Jammu, Bhilai, and Tirupati. Permanent campuses have been established for these IITs over the past couple of years.

#### BIG PICTURE: CONTEXT OF HISTORIC TAX CUT, IMPACT IT MAY HAVE ON THE ECONOMY

- The Union Budget 2025-26 has been presented at a time when India's economic situation faces some formidable challenges.
- Notwithstanding the structural reforms carried out over the past few years — such as the introduction of Goods and Services Tax (intended to simplify the indirect tax regime), several



ease-of-doing-business measures (such as the Insolvency and Bankruptcy Code), and a historic tax cut for companies in 2019 — the Indian economy has lost momentum over the past few years.

- The biggest representation of this loss of momentum has been a slowdown in personal consumption by the average Indian. That, in turn, has been a representation of the tepid job creation in the economy.
- The poor job creation was a consequence of the government’s policy focus that concentrated too closely on capital-intensive production, with very little attention paid to employment generation. For instance, labour intensive sectors such as textiles and leather industries or MSMEs continued to suffer while the government heavily subsidised big companies through Production-linked incentive (PLI) schemes.
- In 2019, the year before the pandemic hit, India’s GDP grew by less than 4%. The government reacted by cutting corporate tax, the tax that companies pay on their income. The hope was that this cut would incentivise companies to make new investments with the extra money in their hands, thus creating new jobs and prosperity. To “crowd in” such investments, the government also ramped up its capital expenditure to historically high levels.
- Saturday’s Budget announcement of a massive income tax break is an acceptance by the government that more than anything else, the private sector investments require robust consumer demand.
- Almost everything else — corporate income tax and interest rates and the condition of roads — is secondary.
- A tax cut will have a positive effect on the overall economy, said Prof N R Bhanumurthy, head of the Madras School of Economics and author of an academic paper on “multipliers” — or how government decisions affect the overall GDP. The multiplier for a personal income tax cut is 1.01. That is, a Re-1 cut in personal income tax grows the GDP by Rs 1.01 as people spend the money.
- “Of course, that multiplier is for normal periods. Given that the consumption cycle is down, it will perhaps have an even higher effect,” Bhanumurthy said.
- It is quite possible though, that some of the money will not be spent. Even then, the move will have a positive impact. Here’s how: More savings will allow the financial system to bring down the cost of new loans (that is, the interest rate). Lower interest rates will incentivise more loans and economic activity.

#### MAKHANANOMICS: BUDGET DIVES TO HARNESS POTENTIAL OF A BIHAR INDUSTRY

- Union Finance Minister Nirmala Sitharaman while presenting the Union Budget on Saturday (February 1) said that a “Makhana Board” will be set up in Bihar.
- In recent years, the once humble makhana has skyrocketed in popularity around the world as a “superfood” of choice among fitness enthusiasts. This has prompted the government to focus on marketing makhana in order to commercially harness its popularity.
- In 2022, ‘Mithila Makhana’ was conferred a Geographical Indication (GI) tag, a certification that signifies that a product can only be grown in a particular geographical location, and as a result, has unique characteristics (like Darjeeling’s tea or Mysore sandal soap).



- The state of Bihar contributes to roughly 90% of India's makhana production. However, low productivity, absence of food processing units, and slow growth of efficient marketing chains has meant that Bihar, which is the largest producer of makhana in India, has been unable to take advantage of the growing demand in both the domestic and the international market.
- Low productivity is another major problem in makhana cultivation in Bihar. Currently, cultivating makhana is an extremely arduous and labour heavy process, which pushes up the overall input cost.

#### RS 25,000 CRORE PUSH FOR MARITIME DEVELOPMENT

- Finance Minister Nirmala Sitharaman on Saturday announced a Rs 25,000 crore maritime development fund for the shipping industry among other incentives. This follows complaints from Indian exporters against alleged "arm-twisting" by foreign shipping lines over freight rates amid the ongoing Red Sea crisis.
- A fresh push for the shipping industry, however, comes after the Union Cabinet in 2019 approved the disinvestment of Shipping Corporation of India (SCI), India's largest shipping company operating around one-third of the Indian tonnage.

National Manufacturing Mission for small, medium, large industries soon

- The Central government will set up a National Manufacturing Mission for small, medium and large industries with a focus on clean tech manufacturing, Union Finance Minister Nirmala Sitharaman said in her Budget speech on Saturday.
- The mission's mandate will include five focus areas – ease and cost of doing business, upskilling for in-demand jobs, MSMEs, availability of technology, and quality products.
- Under the mission, clean tech manufacturing will be supported to improve domestic value addition in solar PV cells, electric vehicle (EV) and grid-scale batteries, electrolyzers, wind turbines, and high voltage transmission equipment.

#### PRESUMPTIVE TAXATION FOR NON-RESIDENTS MAY GIVE A BOOST TO CHIP MANUFACTURING

- In her budget speech Saturday, Finance Minister Nirmala Sitharaman announced a new presumptive taxation regime for non-residents providing services in India's electronics manufacturing sector that experts said could significantly slash the tax burden on their income in India.
- The move could give a fillip to foreign technicians and entities working in the electronics sector in India, and help the country's aspirations of becoming a semiconductor manufacturing base. As companies move to set up manufacturing operations in the country, including in sectors like chips, it would require foreign companies and their technicians to stay in India for a prolonged period in order to install and run capital goods, like machinery.

Definition of MSMEs widened, credit guarantee limit increased



- Giving new definitions for micro, small and medium enterprises (MSMEs) and announcing a slew of initiatives to help such businesses, Finance Minister Nirmala Sitharaman on Saturday termed them the second power engine for development.
- In her Budget speech, she said the investment and turnover limits for classification of all MSMEs will be increased 2.5 and two times respectively.
- This means the investment limit to be classified as a micro enterprise goes up to Rs 2.5 crore. For small enterprises, this limit goes up to Rs 25 crore, and for medium ones, it becomes Rs 125 crore. Similarly, the turnover limit for these classifications goes up to Rs 10 crore for micro enterprises, Rs 100 crore for small ones, and Rs 500 crore for medium enterprises.
- Sitharaman also announced the launch of a new scheme that will provide term loans up to Rs 2 crore during the next five years for first-time entrepreneurs who are women or belong to the Scheduled Castes and Scheduled Tribes.
- She also announced the enhancement of the credit guarantee cover from Rs 5 crore to Rs 10 crore for micro and small enterprises, and from Rs 10 crore to Rs 20 crore for startups. As part of the initiatives for MSMEs, she announced that a National Institute of Food Technology, Entrepreneurship and Management will be established in Bihar.

#### TO FUEL AI AMBITIONS, GOVT SANCTIONS A FIFTH OF INDIAAI MISSION'S FUNDS

- Finance Minister Nirmala Sitharaman has sanctioned Rs 2,000 crore for the IndiaAI Mission for 2025-26, which is nearly a fifth of the scheme's total outlay of Rs 10,370 crore.
- The fresh allotment for the next fiscal year comes as the government has shortlisted 10 companies that will provide nearly 19,000 graphics processing units (GPUs) for setting up artificial intelligence (AI) data centres in the country, and fund building foundational models.
- The government will set up a new centre of excellence for AI for education with an outlay of Rs 500 crore, Sitharaman said during speech.

#### GOVT TARGETS CREATION OF 21 LAKH DIRECT AND INDIRECT JOBS IN FY26

- With the allocation earmarked to various government schemes under the 2025-26 Budget, the Union government is targeting the creation of more than 21 lakh direct and indirect employment opportunities in sectors such as fisheries, tourism, food processing, textiles, and electronics manufacturing, among others.
- Under the PM Vishwakarma Yojana, a scheme that provides support to artisans and craftspeople in India, the government is targeting that more than 61 lakh artisans including women, and those from the SC, ST and OBC communities, will attain self-employment.
- As per the Outcome Budget document, the maximum jobs target is for the Pradhan Mantri Matsya Sampada Yojana, which is aiming to employ 11 lakh people.
- Under the Modified Special Incentive Package Scheme (M-SIPS), the government is targeting to create 30,000 jobs. The scheme was first announced in 2012 to offset disability and attract investments in Electronics System Design and Manufacturing (ESDM) Industries.





#### IMPORT DUTY TINKERING TO SEE STATES RECEIVING LESS

- The Union government on Saturday lowered the basic customs duty (BCD) on 37 tariff lines with no change in effective rates. This could effectively mean, states' share in the taxes collected on a number of imported items such as certain motor cars and motorcycles could come down as cesses like the Agriculture Infrastructure and Development Cess (AIDC) have increased.
- The AIDC is collected at the time of import or sale of goods by the central government to fund agricultural infrastructure in India. But basic customs duty is shared between the states and the centre.
- In Budget 2025, for many products, while the overall duty remains the same, the government has reduced BCD and transferred the difference to AIDC.

#### LONG-TERM CAPITAL GAINS TAX ON ALL FII INCOME HIKED TO 12.5%

- After raising the long-term capital gains (LTCG) tax on listed equity shares, equity-oriented mutual funds and units of business trusts sold by foreign institutional investors (FIIs) to 12.5 per cent in the previous year's Budget, the Finance Bill 2025 has proposed to hike the LTCG tax on income from certain remaining securities from 10 per cent to 12.5 per cent from April 1, 2026.
- Section 112A was inserted by the Finance Act 2018 to tax long-term capital gains from the sale of listed equity shares, units of equity-oriented mutual funds and units of business trust.

#### RECYCLING BOOST: DUTY ON WASTE EV BATTERIES REMOVED

- In a major fillip to domestic recyclers of critical minerals, the Union government has removed customs duty on the import of waste lithium-ion batteries and the scraps of 12 critical minerals including copper, tin, and molybdenum. In her Budget speech, Finance Minister Nirmala Sitharaman announced that a policy for recovery of critical minerals from mining waste will also be brought out.
- The decision to remove customs duty on critical minerals scrap, a long-standing demand of the recycling industry, comes after the Ministry of Mines announced a Rs 1,500 crore incentive scheme for recycling under the National Critical Minerals Mission (NCMM) on Thursday.
- Now, with customs duty waived off on the scraps of critical minerals recyclers will be incentivised to import scrap and increase the domestic availability of such minerals.

#### PM DHAN-DHAANYA, MISSIONS FOR PULSES, SEEDS: WHAT AGRI GOT

- Finance Minister Nirmala Sitharaman Saturday said that agriculture was one of the four engines driving India's development journey and announced several new initiatives for the sector, including the Prime Minister Dhan-Dhaanya Krishi Yojana, in the Union Budget 2025-26.
- The scheme aims to increase agricultural productivity, adopt crop diversification and sustainable agriculture practices, improve post-harvest storage after harvest at the panchayat and block levels, improve irrigation facilities, and provide short-term and long-term credit, she explained, adding that it was likely to help 1.7 crore farmers. Sitharaman also announced an initiative for building rural prosperity and resilience.



- While no separate allocation has been made for the Prime Minister Dhan-Dhaanya Krishi Yojana, Rs 1,000 crore has been allocated for the mission for pulses, Rs 500 crore for the mission for vegetables and fruits, Rs 100 crore support for the Makhana Board, Rs 100 crore for the mission on hybrid seeds, and Rs 500 crore for the cotton technology mission.
- Sitharaman said a National Mission on High Yielding Seeds will be launched. This mission aims to enhance the research ecosystem, focus on developing and promoting seeds with high yields, pest resistance, and climate resilience, and make more than 100 seed varieties, released since July 2024, commercially available, she added.

#### JAL JEEVAN MISSION GETS EXTENSION TILL 2028 WITH OUTLAY OF RS 67K CRORE

- Union Finance Minister Nirmala Sitharaman announced an extension of the Jal Jeevan Mission (JJM) till 2028, with an outlay of Rs 67,000 crore in the Union Budget 2025-26. However, the scheme saw a massive cut in allocation at the revised estimate (RE) stage during the current fiscal year 2024-25.

#### GRAMEEN CREDIT SCORE TO SERVE CREDIT NEEDS OF SELF HELP GROUPS

- Finance Minister Nirmala Sitharaman Saturday announced Grameen Credit Score, a framework to be developed by the public sector banks for the credit needs of the members of Self Help Groups (SHGs) and people in rural areas. The announcement is significant in view of property cards being distributed under the Centre's SVAMITVA Scheme, which are expected to spur credit demand in rural areas.
- On January 18, Prime Minister Modi had said that these cards, once issued in all the villages of the country, will unlock economic activity worth over `100 lakh crore.

#### JOB GUARANTEE SCHEME OUTLAY FLAT AT RS 86K CRORE, RURAL HOUSING GETS RS 54K CRORE, LITTLE OVER FY25

- The Mahatma Gandhi National Rural Employment Guarantee Scheme (MG-NREGS) did not see any change in its budget, with the government keeping the rural job scheme outlay at Rs 86,000 crore in the Union Budget 2025-26.
- The Pradhan Mantri Awaas Yojana-Gramin (PMAY-G), which saw a drastic cut at the revised estimates (RE) stage, has also been allocated almost the same amount as the last year. This year, the allocation of MG-NREGS is lower as compared to the actual expenditure of Rs 89,153 crore during financial year 2023-24.

#### NEW UREA PLANT TO COME UP IN ASSAM

- Finance Minister Nirmala Sitharaman on Saturday announced the setting up of a new urea plant with an annual production capacity of 12.7 lakh tonnes (lt) at Namrup in Assam. If this proposal in the latest Union Budget fructifies into investment, it would be the eighth new urea plant to come up in India since 2019.
- Six of these — with similar 12.7 lt capacity at Gapepan (Rajasthan), Ramagundam (Telangana), Panagarh (West Bengal), Gorakhpur (Uttar Pradesh), Barauni (Bihar) and Sindri (Jharkhand) — were commissioned between January 2019 and November 2022. The seventh 12.7 lt unit, at **3<sup>RD</sup> FLOOR AND 4<sup>TH</sup> FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR**



Talcher (Odisha), is about 65% completed. The total investment in the seven plants works out to over Rs 61,500 crore.

**Do you Know:**

- Capital expenditure goes towards building assets that have long-term benefits and can potentially generate revenue. Revenue expenditure, on the other hand, refers to expenses incurred in maintaining daily operations and includes salaries, wages, rent, office expenses, and so on.
- PM Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) was launched during the Covid-19 pandemic to strengthen health infrastructure at all levels, construction of health and wellness centres, diagnostic laboratories, and critical care blocks.
- Launched in 2018, the objective of the Eklavya Model Residential Schools is to set up residential schools for students from the Scheduled Tribes community with an aim to provide them quality education.

## UNION BUDGET 2025

Union Finance Minister Nirmala Sitharaman presented the Union Budget 2025 on Saturday. Finance Minister Nirmala Sitharaman lists four engines of development in the Union Budget 2025-26. These are agriculture, MSMEs, investments, and exports. "The fuel in the journey is provided by reforms, the guiding spirit is inclusivity and the destination is Viksit Bharat," said the Finance Minister.

She added that the Budget aims to initiate transformative reforms across 6 domains: Taxation, power sector, urban development, mining, financial sector, and regulatory reforms.

### 1. AGRICULTURE

— The government will promote self-sufficiency in pulses, focusing on the production and procurement of toor, urad, and masur. Bihar will get a Makhana board, to boost the cultivation and marketing of fox nuts. The people engaged in Makhana cultivation will be organized in FPOs. About 10 lakh people are directly or indirectly involved in Makhana cultivation and production process in Bihar, with the state accounting for about 85 per cent of the total Makhana production of the country. The Bihar government has been demanding measures from the Central government to promote Makhana cultivation. The state government had also demanded a declaration of the minimum support price of Makhana.

— A holistic, multi-sectoral 'Rural Prosperity and Resilience' program will be launched in collaboration with states. This initiative aims to tackle under-employment in agriculture by promoting skill development, investment, technology adoption, and revitalization of the rural economy. The objective is to create abundant opportunities in rural areas, ensuring migration remains a choice rather than a necessity. The program will prioritize rural women, young farmers, rural youth, marginal and small farmers, and landless families.

— A National Mission on High Yielding Seeds will be launched, aimed at (1) strengthening the research ecosystem, (2) targeted development and propagation of seeds with high yield, pest resistance and climate resilience, and (3) commercial availability of more than 100 seed varieties released since July 2024.



- For the benefit of cotton growing farmers a 5-year 'Mission for Cotton Productivity' is announced.
- The government will bring in an enabling framework for sustainable harnessing of fisheries from Indian Exclusive Economic Zone and High Seas, with a special focus on the Andaman & Nicobar and Lakshadweep Islands.
- India Post, along with India Post Payments bank, will be repositioned to be a catalyst for the rural economy. India Post will also be transformed into a large public logistics organization.
- The loan limit under the Modified Interest Subvention Scheme will be enhanced from Rs. 3 lakh to 5 lakh for loans taken through the KCC.
- A new scheme for the agriculture sector—Prime Minister Dhan Dhanya Krishi Yojana (PMDDKY). This scheme will be implemented in partnership with states, across 100 districts in its first phase. The scheme will be on the lines of Aspirational Districts Programme (ADP), which was launched by Prime Minister Narendra Modi in 2018. The ADP is implemented across 112 districts. The PMDDKY will be implemented across agriculture districts.
- Finance Minister has announced the setting up of a new urea plant at Namrup (Assam) with an annual production capacity of 12.70 lakh tonnes. If it takes off, that would be the 7th new urea plant to come up in India since 2019. These include plants in Gadepan (Rajasthan), Ramagundam (Telangana), Panagarh (West Bengal), Gorakhpur (Uttar Pradesh), Barauni (Bihar), Sindri (Jharkhand) and Talcher (Odisha). The last plant is yet to be commissioned (about 65% completed), while the other six are up and running.
- The Government will provide support to NCDC for its lending operations for the cooperative sector.

## 2. MSMEs

- To help them achieve higher efficiencies of scale, technological upgradation and better access to capital, the investment and turnover limits for classification of all MSMEs will be enhanced to 2.5 and 2 times respectively.

According to Finance Minister,

“To improve access to credit, the credit guarantee cover will be enhanced:

1. For Micro and Small Enterprises, from Rs. 5 crore to 10 crore, leading to additional credit of Rs 1.5 lakh crore in the next 5 years;
2. For Startups, from Rs. 10 crore to 20 crore, with the guarantee fee being moderated to 1 per cent for loans in 27 focus sectors important for Atmanirbhar Bharat; and
3. For well-run exporter MSMEs, for term loans up to Rs. 20 crore.”

- In a boost to credit to Micro industries, the government will provide customised credit cards with limit of Rs 5 lakh under Udyam portal. In the first year, 10 lakh such cards will be issued.

- A new Fund of Funds for startups, with expanded scope and a fresh contribution of another Rs. 10,000 crore will be set up. It should be noted that the Alternate Investment Funds (AIFs) for





startups have received commitments of more than Rs. 91,000 crore. These are supported by the Fund of Funds set up with a Government contribution of Rs. 10,000 crore.

— The government will launch a new scheme offering term loans of up to Rs 2 crore to first-time entrepreneurs among women, Scheduled Castes, and Scheduled Tribes.

— Building on the National Action Plan for Toys, the government will implement a scheme to make India a global hub for toys – promoting ‘Make in India’ brand.

— As part of the government’s commitment to ‘Purvodaya,’ it will set up a National Institute of Food Technology, Entrepreneurship, and Management in Bihar.

— The government will launch the National Manufacturing Mission covering small, medium, and large enterprises for furthering Make in India. Under this Mission, the government will assist with policy support, execution roadmaps, and governance and monitoring frameworks for central ministries and states. The National Manufacturing Mission will also support clean tech manufacturing, given India’s commitment to climate-friendly development. Focus segments will include solar PV cells, EV batteries, motors and controllers, electrolysers, wind turbines, very high voltage transmission equipment, and grid-scale batteries.

### 3. INVESTMENTS

— Extension of Jal Jeevan Mission until 2028 to obtain 100 percent coverage.

— The Government will establish a ₹1 lakh crore Urban Challenge Fund to support initiatives like ‘Cities as Growth Hubs,’ ‘Creative Redevelopment,’ and ‘Water & Sanitation’. The fund will cover up to 25% of viable project costs, requiring at least 50% funding from bonds, bank loans, or PPPs. ₹10,000 crore is allocated for 2025-26.

— The Shipbuilding Financial Assistance Policy will be revised to offset cost disadvantages, including Credit Notes for shipbreaking in Indian yards to support the circular economy. Large ships above a set size will be added to the infrastructure harmonized master list (HML). Shipbuilding Clusters will be developed with enhanced infrastructure, skilling, and technology to expand ship categories and capacity.

— A Maritime Development Fund with a corpus of Rs.25,000 crore will be set up.

#### — Bihar Specific:

**Greenfield Airports:** New greenfield airports will be developed in Bihar to cater to future demands, complementing the expansion of Patna airport and the development of a brownfield airport at Bihta.

**Western Koshi Canal Project:** Financial support will be provided for the Western Koshi Canal ERM Project, which will benefit farmers in the Mithilanchal region, helping with irrigation across over 50,000 hectares of land.

— SWAMIH Fund 2 will be established as a blended finance facility with contribution from the Government, banks and private investors. This fund of 1 completion of 1 lakh units.

— The plan focuses on developing the top 50 tourist destinations in partnership with states, with states providing land for key infrastructure. Key initiatives include:



Skill development programs, including in Institutes of Hospitality Management.

MUDRA loans for homestays.

Improved travel connectivity to tourist sites.

Performance-linked incentives for states to manage destinations, amenities, cleanliness, and marketing.

Streamlined e-visa facilities and visa-fee waivers for some tourist groups.

Additionally, there will be special attention on destinations tied to Lord Buddha's life and promoting medical tourism with easier visa norms and private sector collaboration.

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#### **4. EXPORTS**

— Establish an Export Promotion Mission to enhance export credit access and support MSMEs in global markets.

— BharatTradeNet: Develop a unified digital platform for international trade documentation and financing solutions.

— Global Supply Chain Integration: Support domestic manufacturing to integrate India's economy into global supply chains, focusing on Industry 4.0 and youth talent.

— National Framework for GCC: Create a framework to promote Global Capability Centres in tier 2 cities, focusing on talent and infrastructure.

— Improve air cargo infrastructure and streamline customs for perishable goods.

What are the major financial sector reforms announced in the Budget?

FDI in Insurance Sector:

FDI limit increased from 74% to 100% for companies investing entirely in India.

Review and simplification of foreign investment guardrails.

Expanding India Post Payment Bank Services:

Deepening and expanding services in rural areas.



Credit Enhancement Facility by NaBFID:

Introduction of a 'Partial Credit Enhancement Facility' for corporate bonds in infrastructure.

Grameen Credit Score:

Public Sector Banks to develop a framework for serving rural areas and SHG members.

Pension Sector:

A forum will be set up for regulatory coordination and pension product development.

KYC Simplification:

Rollout of revamped Central KYC Registry in 2025 and implementation of streamlined periodic updates.

Merger of Companies:

Rationalization of approval procedures for company mergers and expansion of fast-track mergers.

Bilateral Investment Treaties:

Signed BITs with two countries in 2024 and revamping the BIT model to be more investor-friendly.

Regulatory Reforms:

Commitment to 'Ease of Doing Business' through light-touch regulatory frameworks.

Updating old regulations to keep up with technological and global policy changes.

High-Level Committee for Regulatory Reforms:

Review of non-financial sector regulations, licenses, and compliance procedures.

Recommendations within a year to improve governance and ease of doing business.

Investment Friendliness Index of States:

Launch of an index in 2025 to promote competitive cooperative federalism.

FSDC Mechanism:

Evaluation of financial regulations under the Financial Stability and Development Council.

Framework to improve the responsiveness and development of the financial sector.

Jan Vishwas Bill 2.0:

Decriminalization of over 100 provisions in various laws through the new Bill.

What about the Fiscal Consolidation mentioned in the Budget?

Revised Estimates 2024-25



The Revised Estimate of the total receipts other than borrowings is Rs. 47 lakh crore, of which the net tax receipts are ` 25.57 lakh crore. The Revised Estimate of the total expenditure is Rs. 47.16 lakh crore, of which the capital expenditure is about ` 10.18 lakh crore. The Revised Estimate of the fiscal deficit is 4.8 per cent of GDP.

### **Budget Estimates 2025-26**

The total receipts other than borrowings and the total expenditure are estimated at Rs. 96 lakh crore and Rs. 50.65 lakh crore respectively. The net tax receipts are estimated at Rs. 28.37 lakh crore. The fiscal deficit is estimated to be 4 per cent of GDP. To finance the fiscal deficit, the net market borrowings from dated securities are estimated at ` 54 lakh crore. The balance financing is expected to come from small savings and other sources. The gross market borrowings are estimated at ` 14.82 lakh crore.

### **What does the Budget say about Indirect Taxes?**

1. Customs Tariff Structure: Proposes to remove 7 tariff rates, reduce duty incidence on some items, and apply only one cess or surcharge on certain goods.
2. Relief on Drugs/Medicines: 36 lifesaving medicines to be exempted from Basic Customs Duty (BCD), and 6 more will attract concessional duty of 5%.
3. Support for Domestic Manufacturing: Proposes to exempt critical minerals like cobalt powder, lithium-ion battery scrap, and others to support manufacturing and job creation.
4. Textile Sector: Aims to boost domestic production by exempting certain textile machinery and revising BCD rates on knitted fabrics.
5. Electronics: Plans to increase BCD on Interactive Flat Panel Displays, reduce BCD on Open Cells for TVs, and exempt parts of Open Cells for LCD/LED TVs.
6. Lithium-ion Batteries: Proposes to add 35 capital goods for EV battery manufacturing and 28 for mobile phone battery production.
7. Shipping Sector: Proposes to extend the exemption of BCD on shipbuilding materials and shipbreaking for another 10 years.
8. Export Promotion: Extends export time for handicrafts, exempts export duty on crust leather, and reduces BCD on seafood products.
9. Trade Facilitation – Provisional Assessment: Introduces a 2-year time limit for provisional assessments, extendable by 1 year, to reduce uncertainty.
10. Voluntary Compliance: Proposes a new provision for importers/exporters to voluntarily declare facts and pay duties with interest, without penalty, unless audit/investigation is initiated.

### **And finally, 'Direct Taxes' including Income Tax**

1. TDS/TCS Rationalization: The number of TDS rates and thresholds will be reduced, and limits for senior citizens and rent will be increased. TCS on remittances for education loans and transactions for the sale of goods will be removed. Higher TDS deductions will only apply in non-PAN cases, and TCS will also be decriminalized.





2. Voluntary Compliance: The time limit for filing updated returns will be extended from 2 years to 4 years, encouraging more voluntary compliance from taxpayers.

3. Reduced Compliance Burden: Charitable trusts will have an extended registration period of 10 years, and taxpayers can claim two self-occupied properties without conditions.

4. Ease of Doing Business: A scheme for determining arm's length prices for international transactions will be introduced, and the scope of safe harbour rules will be expanded to reduce litigation. The digitalization of processes, including appellate orders, is now operational.

5. Promoting Investment and Employment: Proposals include tax certainty for electronics manufacturing schemes, extending the tonnage tax scheme to inland vessels, supporting start-ups with a 5-year extension for incorporation, and providing incentives for the International Financial Services Centre (IFSC) and Alternate Investment Funds (AIFs).

The government will forgo Rs 1 lakh crore in direct taxes, Rs 2,600 crore in indirect taxes on account of changes in tax rates.

The annual limit for TDS on rent has been raised from Rs 2.40 lakh to Rs 6 lakh, benefiting small taxpayers receiving smaller payments.

**Brush up the basics:**

**What is the Union Budget?**

The Union Budget (technically called the Annual Financial Statement under Article 112 of the Constitution of India) lays out an account of the government's financial health. It tells the citizens not only how much money the government raised last year, where it spent it, and how much it had to borrow to meet the gap, but also gives an estimate of what it expects to earn in the next financial year (in the present case, the current financial year), how much and where it plans to spend it, and how much it would likely have to borrow to bridge the gap. The Revenue and the Capital sections together, make the Union Budget.

**What are the important Budget Documents?**

Besides the Union Finance Minister's Budget Speech, various Budget documents are presented to the Parliament.

**A. Documents mandated under the constitution of India:**

1. Annual Financial Statement (AFS) – Under Art. 112
2. Demands for Grants (DG) — Under Art. 113
3. Finance Bill— Under Art. 110

**B. Documents presented as per the provisions of the Fiscal Responsibility and Budget Management Act, 2003:**

1. Macro-Economic Framework Statement
2. Medium-Term Fiscal Policy cum Fiscal Policy Strategy Statement



### What are some important terms related to Budget?

1. **Revenue Budget:** The revenue budget consists of the government's revenue receipts (Tax revenues and non-tax revenues) and revenue expenditures. Tax revenues comprise proceeds of taxes and other duties levied by the Union.
2. **Revenue Expenditure:** Revenue expenditure is for the normal running of Government Departments and for rendering of various services, making interest payments on debt, meeting subsidies, 11 grants in aid, etc. Broadly, the expenditure which does not result in the creation of assets for the Government of India is treated as revenue expenditure.
3. **Capital Budget:** Capital receipts and capital expenditures together constitute the Capital Budget. The capital receipts are loans raised by the Government. Capital expenditure consists of the acquisition of assets like land, buildings, machinery, equipment, as well as investments in shares, etc., and loans and advances granted by the Central Government to the State and the Union Territory Governments, Government companies, Corporations, and other parties.
4. **Fiscal Deficit:** Fiscal Deficit is the difference between the Revenue Receipts plus Non-debt Capital Receipts (NDCR) and the total expenditure. In other words, fiscal deficit is "reflective of the total borrowing requirements of Government".
5. **Demands for Grants:** Article 113 of the Constitution mandates that the estimates of expenditure from the Consolidated Fund of India included in the Annual Financial Statement and required to be voted by the Lok Sabha, be submitted in the form of Demands for Grants.
6. **Money Bill:** Article 110 defines a "Money Bill" as one containing provisions dealing with taxes, regulation of the government's borrowing of money, and expenditure or receipt of money from the Consolidated Fund of India, among others.
7. **Finance Bill:** At the time of presentation of the Annual Financial Statement before the Parliament, a Finance Bill is also presented in fulfillment of the requirement of Article 110 (1)(a) of the Constitution, detailing the imposition, abolition, remission, alteration or regulation of taxes proposed in the Budget. A major difference between money and Financial Bills is that while the latter has the provision of including the Rajya Sabha's (Upper House) recommendations, the former does not make their inclusion mandatory. The Lok Sabha has the right to reject the Rajya Sabha's recommendations when it comes to Money Bills.

### HOPE IN THE TIME OF DESPERATION

The Union Budget 2025-26 seeks to address specific issues plaguing the Indian economy — flagging domestic demand, sluggish private investment and tepid wage growth leading to a slowdown in meaningful GDP growth. A closer look at the priorities and allocations would reveal that the approach is cautious, without the assurance that they would indeed address the underlying problems. The government has seized upon a double-edged sword — substantial tax breaks — to boost consumption and to drive growth, leaving it with little room to spend on capital expenditure, which could have been another useful lever to achieve the same end. While putting more money in the hands of the middle class seems the right thing to do in a time of unrelenting inflation, the focus continues to be on fiscal consolidation with a targeted fiscal

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



deficit of 4.4% of GDP in FY26, coming down from 4.8% in FY25. It has sought to project augmented direct tax receipts despite providing tax rebate incentives for a large segment of the salaried direct tax-payers. The expectation is that there would be better compliance with a greater use of technology, which was useful in increasing the direct tax revenue from a budgeted estimate of ₹11,87,000 crore to ₹12,57,000 crore (revised estimates) in FY25. The highlight of the Budget remains the move to ensure that taxpayers earning up to ₹12 lakh (excluding special rate income such as capital gains) have no tax liability due to the rebate provided. This is meant to boost demand among the salaried middle and lower middle-class sections, who get substantial benefits in the form of tax savings and could be expected to spur consumption. The Economic Survey had pointed to mixed trends in urban demand unlike sustained consumption growth in rural areas through this year, and this move clearly targets the problem. Also, there has been a clamour for relief from among direct tax-paying middle-class sections, who have had to cope with both rising inflation and indirect goods and service tax payments that squeezed their incomes; the Budget addresses this issue in good measure with tax incentives. In a way, this is also a response to resentment among the government's own sympathisers, and can be read as a way to mitigate any loss of political support.

While the salaried middle-class sections would indeed benefit and welcome the move, it is not clear if this measure alone will stimulate demand to the extent of creating a strong virtuous economic growth cycle. This is because private investment in the economy has been stagnant, with the corporate sector showing little inclination to step it up. The Budget continues the trend of incentivising the corporate sector to do so — revenues from corporate tax as a share of gross tax collections are estimated to fall slightly from 25.4% in FY25 to 25.3% in FY26. But considering that corporates have shown little inclination to increase investment despite low corporate tax rates and increased profitability, the government should have adopted an alternative approach, perhaps gradually phasing out the tax incentives.

The Budget continues the trend of a high allocation on capex — albeit with a reduced share compared to the previous Budgets since the COVID-19 pandemic. Allocations in road transport (the Ministry) and telecom fell from 5.95% and 2.64% in RE for FY25 to 5.67% and 1.6% in BE26. Budgetary support for the Railways has also remained stagnant compared to FY25 RE. This is curious considering that the Railways have suffered a series of accidents in recent years and require a strong infrastructural boost. However, the government has done well to emphasise support for MSMEs with enhanced credit (guarantee cover increased from ₹5 crore to ₹10 crore) and startups (from ₹10 crore to ₹20 crore) besides schemes for the footwear and leather industry, toy sector and food processing MSMEs. The attention devoted to expanding clean energy generation is evident in the incentives provided to the electric vehicle and battery technology sectors in the form of duty exemptions on capital goods among others. In terms of allocations, expenditure is budgeted to increase by 0.24 points from 1.36% in FY25 to 1.6% in FY26 in the energy sector. This is indeed welcome, considering the strategic importance of this sector as the country transits to a climate-friendly economy. While allocations for rural development increased from 4.08% in FY25 RE to 5.24% in FY26 BE, those for major schemes such as MGNREGS fell — from 1.82% in FY25 RE to 1.7% in FY26 BE. Allocations have been increased in other schemes such as the PM Awas Yojana and the National Rural Livelihoods Mission. The MGNREGS is tested as a scheme that enhances rural incomes and allows the rural poor to spend more on consumer goods, and any effort to stifle it would be counterproductive to the goal of stimulating demand. With employment remaining a major issue in the economy, the Budget's emphasis on social security for gig workers by arranging for identity cards for them and registration in the e-Shram portal, besides health care under the PM Jan Arogya Yojana, is welcome. While the Budget speech



focused on skilling initiatives that would aid in youth gaining employment in an industrial world that is increasingly relying upon automation, the Employment Linked Incentive scheme, ambitiously launched last year, curiously did not find any mention in the Budget.

While the Budget has come up with measures that address the needs of the economy, there is too much left to hope built on imponderables, and too little riding on pragmatism.

## INDIA'S REPOSITIONING ON CLIMATE

In the last year or so, India has signalled a subtle but important shift in the way it views the climate crisis and how it wants to deal with it. The country has questioned the “excessive preoccupation” of the international climate regime to achieve a specific temperature goal and argued that for developing countries like itself, adaptation must take precedence over reducing emissions.

- India has also emphasised that rapid economic growth is the best defence against climate change for developing countries. Therefore, restrictions that constrain economic growth, such as curbs on the use of coal to generate electricity, are unacceptable.

- These arguments themselves are not new. However, they are being made emphatically and with far greater clarity than before. This indicates an attempt by India to create space for greater flexibility in exercising its options on climate actions. It also provides the intellectual framework for the choices the country wants to make in this regard.

- The shift in India's emphasis seems to be prompted by a reassessment of ground realities. The world is nowhere close to meeting its emissions reduction targets for 2030 or 2035 due to inaction largely on the part of the developed countries. In fact, global emissions are still on the rise.

- There is, thus, very little incentive for a developing country such as India to allocate resources for mitigation efforts. Appreciable benefits of mitigation accrue only when the world as a whole reduces emissions by a significant amount. Also, these benefits are not witnessed immediately as global warming is caused not by the amount of greenhouse gases being emitted, but by their concentration in the atmosphere over time.

- Adaptation, on the other hand, offers immediate and local benefits. Building up resilience against the impacts of climate change can be a better utilisation of limited resources. To a large extent, resilience is often a factor of prosperity. This is why India has argued that development is the best shield against the climate crisis.

### Do You Know:

- The Economic Survey for 2024-25, released last week, asserted that India must first strive to attain developed country parameters by 2047 using available resources, and only then focus on achieving the net zero goal by 2070. This is significant as it can liberate India from the dilemma of carrying out aggressive decarbonisation while pursuing rapid economic growth.

- In a sense, the Economic Survey is recommending that India follow the Chinese example. China has unreservedly prioritised economic growth and industrialisation without bothering about its emissions, which have grown four times from the mid-1990s. This was also when the international climate regime was established.

- The recalibration of India's position comes at a time when the international attention on climate action has tapered off a bit, despite 2023 and 2024 setting back-to-back temperature records.

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





Major events such as armed conflicts and technology wars have diverted the focus away from the climate crisis.

- Currently, India only seems to be asserting that the choices of low-carbon development, and the pace of energy transition, should be decided by itself and not dictated by others. While that is a fair and reasonable ask, it is more on India than the rest of the world to make this happen.
- That is why the policy push to develop indigenous small modular nuclear reactors (SMRs), for example, is so critical. India has been rather slow in ramping up its nuclear energy capacities. The India-US civil nuclear deal and the special waiver at the Nuclear Suppliers Group should have enabled a rapid expansion of the nuclear power sector. That did not happen for a variety of reasons. Now, the SMRs offer a fresh opportunity to do so.

#### INDIA MAY NOT RAMP UP CLIMATE TARGETS FOR 2035, SET TO MISS SUBMISSION DEADLINE

India is likely to skip the February deadline for submitting the next round of climate action plans under the Paris Agreement requirements, The Indian Express has learnt. These plans, called Nationally Determined Contributions or NDCs, are supposed to provide details of the climate actions countries intend to take up to the year 2035.

- The Paris Agreement requires its member countries to refresh their NDCs in five-year cycles. The existing NDCs, submitted in 2020, pertain to the 2030 period.
- At a meeting of Paris Agreement Implementation and Compliance Committee last year, it was decided to ask countries to submit their 2035 NDCs by February 10 this year, about nine months ahead of the year-ending annual climate conference. Advance submissions allow for adequate time to compile, seek clarifications, and produce synthesis reports.
- India, however, is not yet ready with its 2035 action plan, and in no hurry to meet the deadline. In fact, the Indian NDC might be submitted only in the second half of the year, closer to the annual climate meeting, being held in Brazil in November this year, official sources said.
- There are no penalties for late submissions. Not many countries have submitted their 2035 NDCs. Even many developed country parties are yet to make their submissions. The United States, incidentally, is among those that have submitted. The Joe Biden administration had approved and submitted the 2035 submissions in December, well before Donald Trump assumed charge.
- India has also skipped the December 31, 2024 deadline for the submission of the first Biennial Transparency Report (BTR), the new format in which a country has to report its detailed inventory of emissions. This report is expected to be submitted around the middle of the year.

#### Do You Know:

- India had made an uncharacteristically strong criticism of the Baku agreement, calling the final agreed amount “abysmally poor” and “paltry”. It has been saying that the lack of adequate finance was not just an abdication of responsibility by the developed countries, but also a major setback to global climate action.
- In the absence of international financial support, developing countries would be forced to lower the ambition of their climate actions, taking up only those that they can finance through their own resources, it said.



- The Economic Survey presented last week also made a similar argument, and clearly hinted at a readjustment of climate targets by India.
- For the 2030 period, India has made three commitments. It has said it would reduce the emissions intensity of its economy (emissions per unit of GDP) by 45 per cent from 2005 levels, and would ensure that at least 50 per cent of its installed electricity generation capacity comes from non-fossil fuel sources.
- It has also promised to increase its forest and tree cover so that they can absorb an additional 2.5 to 3 billion tonnes of carbon dioxide every year. India is on course to achieve all these three targets well ahead of 2030.
- The 2035 NDC has to be a progression over the 2030 targets. But the scale of this progression is to be decided by the countries themselves, in keeping with their capabilities and resources.
- There is another reason why India is unlikely to stretch itself right now while making commitments for 2035. It is planning to host the COP33 climate conference in 2028.
- Prime Minister Narendra Modi had announced this intention at COP28 in Dubai in 2023. Host countries usually announce some new climate initiatives ahead of the conference to demonstrate their leadership and create a momentum for a more meaningful outcome. India would like to leave some room for enhancing its NDC commitments during that time.
- It had enhanced its 2030 NDCs also mid-way through the five-year cycle, having achieved two of its three initial targets well in advance of the 2030 deadline.

#### MISSED OPPORTUNITY TO MAKE PUBLIC HEALTH BOOST ECONOMY

To make our economy grow, we need to push private consumption. To increase private consumption, people need more disposable income. For that, one route is to reduce the money an ordinary person spends on basics such as health and education. The Union Budget 2025-26 seems to have missed this opportunity.

The Department of Health and Family Welfare (DoHFW), which runs most of the critical public health programmes, saw a meagre 11% increase in its annual Budget Estimates (BE) from last fiscal year's (FY25) Revised Estimates (RE). This year's increase has been the lowest in three years.

When we compare what has been allocated in a given year versus what was fully spent by the department in the previous year, the limited financial envelop of the department becomes even more stark.

We have data on actual spends by the DoHFW till 2023. In 2023, the actual spend was ₹80,292 crore and in 2024 the RE to the DoHFW was a mere 7.8% higher at ₹86,582 crore. Since 2021, a rise in allocations when compared with actual spends in the previous years has been between 6% and 8% only. This excludes the year 2022-23 when the money available to DoHFW fell by 7% from the actual spending the previous year in 2021-22.

Within health, the focus remains on the national level insurance programme- PMJAY, for which allocations have risen by 24% from last year's RE. And a 41% higher allocation this year from actual usage in 2023, which is the latest data available. For the National Health Mission (NHM), the increase in allocations from 2024 (RE) to this year's Budget is a meagre 3.4%. The urban



component within NHM has increased allocation from last year (2024) Budget (RE) by a mere 4.3%.

This is particularly worrying for NHM. It's a national level programme covering rural and urban health. With slowing economic growth, its implications for jobs and wages, under financed and weak health system for rural and urban poor creates perfect conditions for a health crisis, and could further pull-down economic growth.

But the NHM is a programme that has been spending more than what has been estimated every year since 2015, except in 2021- the pandemic year, when allocations were higher than the spends.

Insurance programmes increase the availability of hospital options by roping in private facilities. But in an insurance-led health system, the focus remains on secondary and tertiary care and curative services.

A public health system, on the other hand, provides primary care — basic illnesses, routine health check-ups, etc. and also preventive and proactive services which are not covered by insurance. Private hospitals can become options for eye surgery and with insurance, they become easily accessible to the poor but all other ailments need primary care, which isn't in the ambit of insurance.

The Budget does not reveal numbers for primary care services, but the NHM and NUHM estimates reveal that there haven't been any meaningful rise in allocations.

Low allocations to health with a focus on insurance means the exclusion of the 'middle classes', the ones whose consumption can fuel growth and those who need the extra spending capacity.

## BEYOND TAX CUTS, A CLOSER READ OF THE UNION BUDGET

The Union Finance Minister, Nirmala Sitharaman's presentation of the Union Budget on Saturday, February 1, was against the backdrop of pressing macroeconomic challenges — persistently high taxes and unemployment squeezing the middle-income class, subdued private investment, mounting external vulnerabilities that threaten to derail the growth story, and a looming fiscal overhang. While the Finance Minister laid out an ambitious road map for Viksit Bharat, spanning agriculture, manufacturing, micro, small and medium enterprises (MSME), social welfare, and infrastructure, the Budget's policy announcements and fiscal plans need closer scrutiny.

### Targets that raise questions

First, the fiscal consolidation target of 4.4% of GDP in FY26 is a key highlight of the Budget. However, achieving this target hinges on ambitious revenue projections, including a 11.2% growth in total tax revenues and a 14.4% increase in income tax revenues compared to FY25 estimates. These assumptions appear overly optimistic given the significant tax cuts announced in the Budget and the prevailing economic headwinds such as softening domestic consumption and weakening external demand. Much will also depend on the success of the second asset monetisation plan (2025-30), announced in the Budget. The underperformance of the previous asset monetisation programme raises valid concerns. Furthermore, the estimated ₹11.54 lakh crore in net market borrowings risks crowding out private capital at a critical juncture when credit demand remains tepid. Achieving the ambitious revenue targets will require improved tax



buoyancy, more efficient tax administration, and realistic asset monetisation strategies to ensure that the fiscal consolidation plan remains on track.

Second, the revisions in personal income-tax rates and slabs under the new tax regime, exempting incomes up to ₹12 lakh from tax (after factoring in the rebate benefit), and significantly reducing tax liabilities across various income brackets, offer welcome relief to middle-income taxpayers.

However, while these changes are likely to boost disposable income, they shall come at a cost — of ₹1 lakh crore in foregone direct tax revenue, which, in turn, could constrain the government's ability to fund critical developmental initiatives. The tax-base erosion also comes when household savings have shown a structural decline over the past decade, dropping to 18.4% of GDP in FY23 (Economic Survey 2024-25). This raises pressing questions about the long-term sustainability of these tax cuts, particularly when public investments in infrastructure and social welfare remain critical to drive inclusive economic growth.

Third, on the manufacturing front, the Budget reiterates India's ambition to emerge as a global manufacturing powerhouse. The Economic Survey 2024-25 flagged India's underperformance in manufacturing, which accounts for a mere 17% of GDP. While production-linked incentives (PLIs) have shown moderate success in sectors such as electronics, their scalability and long-term impact remain uncertain. In that light, the Budget announcements on enhanced credit facilities for MSMEs and the launch of a National Manufacturing Mission aimed at improving ease of doing business, to foster a future-ready workforce, and promote clean-tech manufacturing, are important steps. The revision of MSME classification criteria — increasing investment limits by 2.5x and doubling turnover thresholds— may improve scale economies. However, the measures fall short of addressing core competitiveness issues such as regulatory inefficiencies, infrastructure gaps, and low innovation capacity. The absence of concrete measures to boost industrial research and development — currently at a dismal 0.64% of GDP — undermines India's ability to compete with innovation-driven economies such as China and Germany. While the Budget's focus on manufacturing is a step in the right direction, achieving global competitiveness will require deeper structural reforms and sustained investment in innovation and infrastructure.

#### **The gaps remain in agriculture**

Fourth, agriculture, a key pillar of the economy, received significant attention through initiatives such as the Prime Minister Dhan-Dhaanya Krishi Yojana and the National Mission on High-Yielding Seeds. These measures are with the aim of enhancing productivity and climate resilience, which are critical for food security. The increase in the Kisan Credit Card (KCC) loan limit from ₹3 lakh to ₹5 lakh, along with targeted interventions in 100 low-productivity districts, signals a strategic pivot from blanket subsidies to precision support, empowering farmers with greater financial flexibility. However, the measures fall short of addressing systemic inefficiencies in agricultural markets. The Budget lays an emphasis on credit enhancements, yet the focus on short-term loans perpetuates the dependency of farmers on debt without addressing the issues of price volatility or market access. Moreover, the absence of concrete measures to promote agricultural exports — particularly as India eyes leadership in millets and natural farming — represents a missed opportunity.

Fifth, while the Budget introduces some promising measures for the external sector, significant gaps remain unaddressed. Services exports, particularly in IT and business process outsourcing, continue to grow at a robust 10.5% CAGR, but budgetary efforts to diversify the export portfolio remain insufficient. Trade facilitation initiatives such as Bharat Trade Net (BTN) and export credit





support for MSMEs, which were announced in the Budget, are positive steps but lack the scale required to tackle India's persistent trade deficits. Moreover, the challenges posed by the depreciation of the rupee and declining forex reserves require a more ambitious export strategy. The fiscal push to value-added sectors such as pharmaceuticals, electronics, renewable energy, and high-value agricultural products could have strengthened India's position in global supply chains and enhanced export competitiveness.

### **Not a transformative push**

Finally, while the Budget signals intent on climate action and clean energy, its financial commitments reveal a cautious, incremental approach rather than a transformative push. The Budget's focus on supply-chain resilience — through incentives for lithium-ion battery recycling, duty exemptions on critical minerals, and support for domestic solar photovoltaic and battery manufacturing — is a pragmatic move to reduce import dependence. However, without a parallel investment in grid modernisation, energy storage, and industrial decarbonisation, the transition to a low-carbon economy will remain fragmented.

The Budget's fiscal outlays will eventually be judged by how effectively they address the fundamental trade-offs of Indian growth: how to unleash private enterprise while ensuring inclusive development; how to boost consumption without compromising savings, and how to accelerate growth while maintaining macroeconomic stability. Ultimately, the credibility of execution and the government's willingness to course-correct where necessary will matter.

## LEARNING STEPS

Besides some high-profile announcements, such as an AI Centre of Excellence for education with an allocation of ₹500 crore, broadband connectivity for schools, the expansion of five third-generation IITs, and increased funding for Indian knowledge systems, Budget 2025 has promised higher allocations for education compared to last year's revised estimates. There was a 7% increase for higher education, although the actual expenditure for 2023-24 was 10% more than the 2025-26 Budget estimates. A key challenge in higher education is that the ambitious UGC reforms, modelled on advanced nations, require significant funding. For instance, introducing four-year degree programmes, allowing students to take courses across multiple institutions, implementing bi-annual admissions, and other structural changes demand substantial finances, which will inevitably fall upon State governments. However, Budget 2025 does not appear to adequately address these financial concerns. The release of the ASER 2024 report in the same week as the Union Budget highlighted gaps in India's school education system, particularly in foundational literacy and numeracy (FLN). While the report indicated that learning losses from the COVID-19 pandemic have been recovered, and, in some cases, FLN levels are at their highest ever, India still has some way to go before achieving full FLN, the 2026-27 target under the NIPUN Bharat scheme.

Compared to the 2024-25 revised estimates (RE), school education has been allocated an additional ₹11,000 crore, a 16% increase. However, as a percentage of the total Budget, this increase is only 0.12 percentage points, bringing the allocation to 1.55%. In higher education, the Budget fraction remains unchanged at 0.99%. While institutions such as Kendriya Vidyalaya Sangathan continue to receive significant funding, the increase does reflect higher inflows to States, which are the primary implementers of school education programmes. The Centre has been keen on fully implementing the National Education Policy (NEP), which proposes a 5+3+3+4 system that includes five years of early education up to Class 3. Early education is being prioritised



as the key to achieving full FLN, but a critical gap remains: the two years before Class 1 are managed by underpaid anganwadi workers, who are already overburdened and often lack adequate training to deliver on FLN goals. A focused FLN drive is pivotal to achieving full FLN, a prerequisite for building a highly skilled workforce and leveraging India's demographic dividend. Over the next few years, depending on the progress made, the government must further strengthen school education investments to ensure India meets its full FLN target. Time is of the essence.

## BUDGET 2025 OVERLOOKS JOBLESSNESS

The previous Budget, presented in July 2024 after the Lok Sabha election, had accorded priority to employment and skill development, given the nature of the election mandate. The Finance Minister had announced a Prime Minister's Package of five schemes and initiatives to facilitate job and internship opportunities for 4.1 crore youth over a five-year period with a central outlay of ₹2 lakh crore. However, the Budget speech delivered in Parliament on February 1, 2025, did not refer to the Prime Minister's Package even once. The document on implementation of Budget 2024-25 announcements states that a "draft Cabinet note on Employment Linked Incentive scheme is under finalisation" and "several meetings have been held with the Ministry of Labour and CII to discuss the relationship between capital expenditure and employment generation". In other words, the future of the scheme looks bleak.

### Deflationary budget

The September 2024 report of the Periodic Labour Force Survey (PLFS) revealed that in 2023-24, the youth unemployment rate (for those aged 15-29 years) had increased to 10.2% and the unemployment rate among graduates was 13%. Time series data from the PLFS show that the share of the workforce engaged in regular or salaried employment in the post-pandemic period has shrunk, while the share engaged in agriculture and informal self-employment has risen.

The latest Economic Survey also shows that average real earnings of self-employed male workers in India fell from ₹9,454 in 2017-18 to ₹8,591 in 2023-24. The monthly real wages of regular/salaried male workers also fell from an average of ₹12,665 in 2017-18 to ₹11,858 in 2023-24. Surplus labour inundating the job market, combined with high food inflation, have severely squeezed the real incomes and livelihoods of an overwhelming majority of India's workforce. For a Finance Minister to overlook this is disingenuous.

The advanced estimates of GDP have already projected a decline of the real GDP growth rate to 6.4% in 2024-25 from 8.2% last year. In keeping with this, there is a slowdown in the Centre's net tax revenues in 2024-25. With the Finance Minister keen on adhering to the fiscal consolidation path, the axe has fallen on government expenditure. Total expenditure is now likely to be over ₹1 lakh crore short of Budget Estimates (BE), with capital expenditure falling short of the target by over ₹92,000 crore.

Public expenditure on rural and urban development, agriculture, education, food subsidy, energy, transport, and health are all being axed. Among centrally sponsored schemes, the Revised Estimates (RE) for the Jal Jeevan Mission and Pradhan Mantri Awas Yojana (both rural and urban) show declines of ₹47,469 crore and ₹38,575 crore, respectively, from their BE. The expenditure on MGNREGA was cut in the BE itself by ₹3,654 crore from the previous year. Such deep cuts in budgeted capital and welfare expenditures would have a dampening effect on investment and consumption, especially in rural areas.



The Finance Minister has sought to counterbalance the deflationary impact of these expenditure cuts by enhancing the annual rebate for income tax payers from ₹7 lakh to ₹12 lakh from 2025-26. Data from the Income Tax Department show that only around 2.8 crore individuals had paid positive taxes in the assessment year 2023-24, out of the 7.54 crore filing income tax returns. The income tax relief for next year would therefore go to 2.8 crore individuals, who form only around 22% of India's salaried workforce. For the rest who are faced with dwindling real incomes, there is nothing on offer.

The Finance Minister has estimated the revenue foregone on account of the income tax rebate to be ₹1 lakh crore. Instead, a cut of a similar magnitude in indirect taxes, such as the exorbitant excise duties on fuel or the central GST rates on mass consumption goods, could have provided relief to the entire class of working people. It is well known that the consumption propensity of wage earners is higher than that of the profit earners.

The average daily wage rate actually received by a MGNREGA worker (as per data provided by Ministry of Rural Development dashboard) has increased from ₹200.71 in 2019-20 to ₹252.31 in 2024-25. The national floor level minimum wage for unskilled workers in agriculture, in contrast, has been set at ₹452 in 2024-25. A well deserved, substantial hike in the MGNREGA wages in the Union Budget alongside an increase in rural development outlays would have led to increased consumption demand in the rural areas. The consumption effect of income tax breaks, in contrast, would be far more limited and concentrated in urban areas.

#### **Running out of ideas**

The latest Economic Survey cites a private sector research report to show how the after tax profit-to-GDP ratio of Nifty 500 companies surged from 2.1% in 2020-21 to 4.8% in 2023-24. While the deep corporate tax cut of September 2019 played a vital role in this profit surge, it has neither translated into higher levels of private corporate investment, nor employment generation.

Yet, the 2025 Union Budget has relied upon another tax break, this time for income tax payers, to inject demand into the economy, even while cutting capital and welfare expenditures to compress the fiscal deficit. This is unlikely to generate higher levels of economic growth and employment and raise the living standards of the vast majority of the working people. It is evident that the government has run out of ideas on the economic front.

### **WHY THE TAX CUTS ARE A ONE WAY GAMBLE**

It would not be an exaggeration to say that this is the biggest tax cut that the middle class has ever got in any Union Budget. To be sure, the tax-paying middle class in India is nowhere near "middle" of the income spectrum and, hence, those who would directly benefit from these cuts are a minuscule minority (between 2-3% of the population). Nevertheless, it is indeed a significant cut in tax rates for every class of taxpayer. For those earning between ₹7-₹12 lakh a year, it is a complete tax rebate, which was earlier applicable to only those below ₹7 lakh. For others earning more than ₹12 lakh, the exemption limit has increased from ₹3 to ₹4 lakh. The rest of the tax slabs have also changed favourably along with a cut in the marginal tax rates. So, everyone earning more than ₹7 lakh stands to gain in taxes payable. No wonder this step, as noted by the Finance Minister, will lead to a fall in tax revenue to the tune of ₹1 lakh crore. This is 8% of the direct income tax collection of ₹12.57 lakh crore in the current year.



Budgets are an exercise in both a redistribution of income (through differential variation in tax rates) and affecting the level of economic activity through its expenditure decisions.

Since the tax rebate has implications for both, and a lot of the plans of the 2025 Budget ride on it, this piece primarily focuses on this unprecedented fall in income tax rates.

### **The logic behind the tax rebates**

Despite the fall of 8% in the effective tax rate as a result of this policy, the Budget has estimated direct tax collection to go up by 14%. A simple arithmetic calculation would tell us that this requires the rise of income to be around 24% (see Box 1). With a projected growth of 10.1% in nominal GDP, this means more than double the growth in taxpayers' income. This may or may not happen. Let's discuss each of the two scenarios.

First, the optimistic scenario. In the backdrop of higher tax exemption limits (from ₹7 to ₹12 lakh for zero tax and ₹3 to ₹4 lakh for those earning more than 12 lakh), this would require either a significant rise in the number of people earning more than ₹12 lakh and/or a significant rise in the income of the current taxpayers, that is, what economists would call higher tax buoyancy. If it's the latter, this means further concentration of income in the hands of the upper classes. This may just further the K-shaped growth that the country has witnessed since the pandemic. And if it's the former, this may reflect some upward mobility at the upper end of the income spectrum.

### **Worst-case scenario**

Now, the pessimistic scenario. If the tax buoyancy does not quite work out, the implication of it is going to fall on the poor and disadvantaged of this country.

In a world where expenditure by the government is directly linked to tax revenue, any shortfall on the tax side will show up on the expenditure side as well. With the Fiscal Responsibility Budgetary Management Act (FRBM) in place, governments are bound by how much they can spend over and above their tax revenue and that deficit limit is set in the Budget every year (see Box 2). The state effectively loses control over how much it can spend, and the fiscal policy becomes pro-cyclical (it increases or decreases with GDP) instead of countercyclical as it is supposed to be. The idea of fiscal policy arose in economics from the assumption that it could be expanded in conditions of slowdown and contracted during booms. Adherence to FRBM does the exact opposite.

This government's track record on strictly adhering to its deficit targets is quite telling. In a year, when the government was worried about a four-year low in economic growth, it has dared to revise its deficit target down from 5% as announced in the 2024 Budget to 4.8%. No wonder this fall in deficit has been managed through an almost across the board cut in expenditures compared to the figures announced in Budget 2024 (Chart 1 shows categories of expenses where there has been a fall). The left column in the chart shows the difference between what the Finance Minister announced last year and what the revised expenses actually were. As is evident, there has been a fall of ₹1 lakh crore in total expenditure. So, the government fell way short of its 2024 promises in terms of its commitments. The promises made in Budget 2025 (the right column of chart 1) are a significant jump from the revised figures of the last Budget. These promises can only be fulfilled if revenue plans turn out to be correct otherwise there would have to be similar (or more) cuts in the actual expenses made in 2025-26.





That the government is extremely serious about managing its deficit becomes clearer if one looks at some of the schemes that have been associated with the Prime Minister. Chart 2 presents the difference between the Budget and Revised Estimates for some of these important schemes. It can be seen that the cut has been across most of the flagship schemes. So, when this government promises fiscal consolidation, it really means it, no matter what the underlying economic circumstances are. The only exception to this rule is perhaps the pandemic where fiscal consolidation was paused for a brief while.

#### **Fiscal consolidation or contraction?**

What is additionally worrying on this count is that the Finance Minister has announced an even lower deficit target this Budget, down from 4.8% (RE 2024) to 4.4% (BE 2025). It's not fiscal consolidation alone, it's fiscal contraction. If a 4.8% couldn't deliver a turnaround in growth, a 4.4% is less likely to. Even if you were a fiscal hawk, now is not the time to be one. With growth slowing down, the economy requires exogenous stimuli (exogenous to the current level of activity), which propels the economy. Such an exogenous stimulus usually comes from exports, corporate investment or government expenditure. With the last lever gone (as expenditure becomes pro-cyclical), the government is effectively banking on exports and corporate investment to bring about a turnaround in growth. If we go by the 2025 Economic Survey, policymakers are not very optimistic about global demand, so it is clear they are expecting the corporate sector to take up the slack.

If corporate investment has not picked up despite tax cuts or aggressive capex spending over the last four years, there has to be the expectation that the income tax cuts would increase consumption demand, which would require an increase in investment, thereby setting a virtuous cycle of growth begetting growth. Yet again, we are back to income tax cuts. Does putting all your eggs in one basket make sense when things are not going your way? And yet, this is what the government seems to have done. It's a one way gamble.

#### **EXTRA LONG STAPLE (COTTON)**

Union Finance Minister Nirmala Sitharaman, while presenting the Union Budget on Saturday, announced a five-year mission to “facilitate significant improvements in productivity and sustainability of cotton farming, and promote extra-long staple (ELS) cotton varieties”.

- Cotton is classified, based on the length of its fibres, as long, medium, or short staple. *Gossypium hirsutum*, which constitutes roughly 96% of the cotton grown in India, falls in the medium staple category, with fibre lengths ranging from 25 to 28.6 mm.
- On the other hand, ELS varieties boast fibre lengths of 30 mm and above. Most ELS cotton comes from the species *Gossypium barbadense*, commonly known as Egyptian or Pima cotton. Having originated in South America, ELS cotton today is mainly grown in China, Egypt, Australia, and Peru.
- “In India, some ELS cotton is grown along rain fed parts of Atpadi taluka in Maharashtra’s Sangli district, and around Coimbatore in Tamil Nadu,” Bhausahab Pawar, a senior research assistant with the Mahatma Phule Krishi Mahavidyalay in Ahmednagar, told The Indian Express.
- This is why brands producing top-of-the-line fabrics mix a small quantity of ELS with medium staple cotton to improve quality, said Pradeep Jain, founder-president of the Khandesh Gin Press Factory Owners and Traders Development Association. “More than 90% of the 20-25 lakh bales



— each bale contains 170 kg of de-seeded ginned and pressed cotton — of the fibre that we annually import constitutes ELS cotton,” Jain said.

**Do You Know:**

- For the 2024-25 season, the Minimum Support Price (MSP) of medium staple cotton was Rs 7,121 (per quintal) while that of long staple cotton was Rs 7,521.
- Nonetheless, cotton farmers in India have thus far been reluctant to adopt ELS cotton. This is mainly due to lower than average per acre yields, experts say. While the medium staple variety yields between 10 and 12 quintals per acre, ELS cotton has a yield of only 7-8 quintals. Additionally, farmers growing ELS cotton are often unable to market their premium produce at premium prices. “The market linkages necessary are not available easily,” said one trader.
- “The best science & technology support will be provided to farmers,” Sitharaman said in her Budget speech. With the cotton ecosystem plagued by low per-acre yields, and increased pest attacks, adoption of the latest technologies would be a welcome step, Jain said. “What we need is the farmer to access the latest in GM [genetic modification] technology,” he said.
- Farmers in Maharashtra have long demanded that they be allowed to cultivate the herbicide-resistant HtBT cotton, which is illegal at present. This would significantly help with weed management.
- Currently, India’s per acre yields are significantly lower than other countries. For instance, Brazil boasts an average yield of 20 quintals per acre, while China boasts a yield of 15 quintals. Better seeds, timely agronomic advice, and adoption of technology would help India improve in this regard, and grow premium varieties such as ELS cotton.

**INDIA NEEDS 39 LAKH CHARGING STATIONS BY 2030 TO MEET THE DEMAND, SAYS REPORT**

India’s EV charging market is at an inflection point, with more than \$450 million (₹30,000 crores approximately) already invested in start-ups operating charging networks and battery-swapping models. Yet, with only one public charger per 135 EVs — far below the global average of one per 6-20 EVs — urgent expansion is needed to meet India’s goal of 3.9 million charging stations by 2030, says a new report by GameChanger Law Advisors and venture capital firm Speciale Invest.

“The Indian government has also set a goal for EVs to constitute 30% of new private vehicle registrations, totalling to 80 million EVs by the year 2030. To accommodate this substantial increase in EV adoption, India will require a total of 3.9 million public and semi-public charging stations, maintaining a ratio of 1 station for every 20 vehicles,” notes the report titled Charging Ahead II.

According to the report, the EV charging infrastructure sector has grown to gain investor confidence over the years. Over the past five years (2020-24), around 50 Indian start-ups have raised close to USD \$511 million of capital cumulatively, it points out citing data from Traxcn.



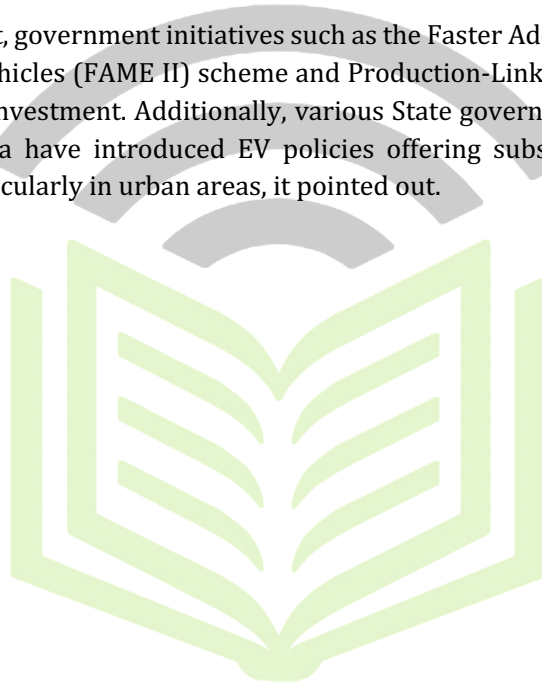
### Innovative business

It notes that the sector has witnessed a rise in innovative business models, including pay-per-use public charging and subscription-based services for fleets. Battery-swapping networks gained traction for two- and three-wheelers, further expanding the ecosystem.

Between March 21, 2023, and February 2024, the number of operational public EV charging stations throughout the country has almost doubled from 6,586 to 12,146, as per the data from the Ministry of Power.

Maharashtra tops the list with approximately 3,079 stations located across the State. Karnataka has around 1,041 charging stations.

According to the report, government initiatives such as the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME II) scheme and Production-Linked Incentives (PLI) played a key role in attracting investment. Additionally, various State governments such as Maharashtra, Gujarat, and Karnataka have introduced EV policies offering subsidies and land support for charging stations, particularly in urban areas, it pointed out.



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## LIFE & SCIENCE

### LIFE'S BUILDING BLOCKS FOUND IN ASTEROID SAMPLES

Rock and dust samples retrieved by NASA from the asteroid Bennu exhibit some of the chemical building blocks of life, according to research that provides some of the best evidence to date that such space rocks may have seeded early earth with the raw ingredients that fostered the emergence of living organisms.

The US space agency's robotic OSIRIS-REx spacecraft in 2020 collected samples from a near-earth asteroid, a rocky remnant of a larger celestial body that had formed near the dawn of the solar system roughly 4.5 billion years ago. The samples were delivered to earth in 2023 by a parachute inside a capsule released by OSIRIS-REx that landed in the Utah desert.

Two analyses of the samples were published on January 29.

One, in the journal *Nature Astronomy*, found the samples contained a diverse mixture of organic compounds. And the other, in the journal *Nature*, reported the samples contained minerals formed when salty water evaporated on Bennu's parent body, the type of wet environment where prebiotic organic chemistry may have brewed.

Present in the samples were 14 of the 20 amino acids, which make proteins, and all five nucleobases, the genetic components of DNA and RNA in all life on the earth.

"The detection of these key building blocks of life in the Bennu samples supports the theory that asteroids and their fragments seeded the early earth with the raw ingredients that led to the emergence of life," said astrobiologist Danny Glavin of NASA's Goddard Space Flight Center in Maryland, lead author of one of the studies. "The fact that these chemical building blocks of life can be formed in space and are widespread throughout the solar system increases the chances that life could have started beyond the earth," Glavin added.

A nucleobase is a nitrogen-containing compound that stores genetic information. DNA (deoxyribonucleic acid) and RNA (ribonucleic acid) are biomolecular cousins that are fundamental molecules in cell biology. DNA contains an organism's genetic code. RNA carries genetic information it receives from the DNA, putting this information into practice.

The Bennu organic compounds all have been identified previously in meteorites that have landed on the earth. But there have been lingering questions because these meteorites could have been contaminated by terrestrial sources. The Bennu samples were obtained directly from an asteroid and were kept pristine.

Bennu's icy parent body, perhaps about 100 km in diameter, appears to have formed in the outer solar system and was later destroyed, possibly 1-2 billion years ago. The fragments then formed Bennu and other rocky pieces.

Early in its history, some of the ice inside the parent body apparently melted and formed brine. The minerals formed in the evaporation of this brine had never previously been detected in meteorites that landed on the earth.

The researchers did not find evidence of actual DNA or RNA in the samples.





## SCANS OF SEEMINGLY EMPTY SPACE REVEAL BLACK HOLES NOT FAR FROM EARTH

Astronomers have discovered a gigantic black hole named Gaia BH3 hiding close to the earth, the third of its kind. All three were discovered by the European Space Agency's Gaia telescope, which has been constantly monitoring the motions of billions of stars in our galaxy since 2013.

Black holes are fascinating to non-scientists and astronomers alike. They warp spacetime around them such that anything that gets close enough to the centre, even light, cannot escape back to the universe. Yet black holes are still "visible" because of the unique effects they have on their surroundings. As matter swirls around a black hole, it is compressed, heated up, and emits X-rays.

In the Milky Way, there are around a thousand black holes accompanied by X-ray emissions. Cygnus X-1 is probably the most well known.

### Cosmic geometry

Of late, the Gaia spacecraft has also been spotting the quiet ones not associated with X-ray emissions.

If a (light-emitting) star orbits a black hole, it will appear from a distance to be orbiting empty space. Gaia projects the star's orbit on a plane in the sky. Ground-based telescopes meanwhile track how light from the star is shifted by the Doppler effect to reveal its motion along our line of sight, which is perpendicular to the plane of the sky.

Putting these observations together, astronomers can determine the orientation of the star's orbit in space and based on that estimate its mass and then the mass inside the 'blank' space.

When a sufficiently massive star dies, a black hole forms.

The star's death may happen as a violent supernova explosion or a more prosaic collapse. Most supernova explosions leave behind neutron stars rather than black holes, but neutron stars can have no more than about three solar masses.

If Gaia and Kepler's third law together reveal a luminous star orbiting a dark object whose mass exceeds this threshold, it must be a black hole.

## WHY SCIENTISTS ARE MONITORING ASTEROID WITH ONLY 1% CHANCE OF HITTING EARTH

A newly discovered asteroid — called 2024 YR4 — has slightly more than 1% chance of crashing into Earth in 2032, National Aeronautics and Space Administration (NASA) officials said last week.

- According to a BBC report, the probability of the asteroid named 2024 YR4 hitting the Earth on 22 December 2032 is currently estimated to be 1.3%. The European Space Agency (ESA) has stated that the asteroid will safely pass through the Earth with 99% chance of not having any collision, however a possible impact "cannot yet be entirely ruled out".
- The Royal Astronomical Society's Dr Robert Massey said that he is "not panicking or losing sleep over it" due to the news of an asteroid's possibility of hitting Earth in 2032.
- "There is no need for alarm. The thing about this kind of event is that historically they tend to go away when the calculations are refined," Dr Massey said, as quoted by BBC.



- The YR4 asteroid, detected in December 2024, may create an impact similar to that of a nuclear bomb if it were to hit a populated area and astronomers have predicted it to be between 40m and 90m across.

**Do You Know:**

- The 2024 YR4 was first discovered in December last year by a telescope in Chile. The near-Earth asteroid is as big as a football field, measuring 40 to 100 metres across. It came closest to Earth on Christmas Day — passing within roughly 800,000 kilometres of Earth, about twice the distance of the moon, according to a report by the Associated Press.
- It will eventually fade from view over the next few months, and will not be visible again until it passes Earth's way again in 2028. That is why scientists across the world are currently busy using some of the most powerful telescopes to determine 2024 YR4's path and size before it gets out of sight. To do so, scientists have until mid-April when the asteroid will become too faint to detect.
- Experts said the 2024 YR4 is big but not as big as the asteroid that wiped out dinosaurs and most other extant life some 66 million years ago. The 2024 YR4, however, can cause considerable localised damage in case it hits a populated area.
- Astronomers use something called the Torino Scale to categorise an object's destruction potential. The NASA JPL Center for Near-Earth Object Studies (CNEOS) has currently rated the 2024 YR4 a 3 on a scale from 0 to 10. Apophis asteroid, which was discovered in 2004, was initially rated 4 on the scale but was later downgraded as observations showed that it posed no threat for at least 100 years.
- Thousands of asteroids enter the Earth's atmosphere every day. Most are very small and burn up in the atmosphere due to friction — some of the larger ones burn spectacularly, and show up as fireballs in the sky. Sometimes unburnt fragments hit the surface but they are not big enough to cause much damage.
- Large asteroids, which can cause global disasters, hit Earth much less often. Those bigger than a kilometre in diameter, such as the Chicxulub asteroid that sent the dinosaurs into extinction might hit in 260 million years, according to a report by DW. That is because our Solar System is huge compared to the size of Earth, which means that the chance that the Earth will be hit by an object such as an asteroid is very small.

## A PIERCING EYE IN THE DESERT

**Q: What is the Extremely Large Telescope?**

A: The Extremely Large Telescope is planned to be one of the most capable astronomical observatories ever assembled. The telescope, currently about 60% complete, is intended to search for evidence of potential life on exoplanets and peer back in time to look for the universe's earliest stars and galaxies. Its first scientific observations are expected by the end of 2028.

It is a \$1.51 billion project of the European Southern Observatory (ESO) intergovernmental research organisation and is under construction in northern Chile.

"It is going to impact practically all areas of astronomy. We are going to be able to see how the first galaxies were formed at the beginning of the universe," said astrophysicist Itziar de Gregorio, the ESO representative in Chile.

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



He added that researchers plan to use it to “characterise stars in other galaxies” and advance their understanding of exoplanets. In particular, we are going to be studying the atmospheres” of exoplanets for signs of life, he added.

The telescope’s giant primary mirror will be made of 798 small mirrors and collectively be about 39.3 metres wide.

It is situated in the middle of the arid Atacama Desert, considered one of the best places on the earth for astronomy. The telescope is located on Armazones Hill, about 3 km above sea level and about 1,000 km north of Chile’s capital.

The telescope is expected to be the largest optical-infrared facility in the world for decades. The mirrors are ready and awaiting installation. — Reuters

## PROMISE OF NUCLEAR FUSION

An experimental nuclear fusion reactor in China last week triggered a lot of excitement by keeping its operational state maintained for more than 1,000 seconds, or over 17 minutes, which is a new record. Nuclear fusion is what produces the energy in the Sun, or any other star.

- Fusion reactions require very high temperatures, hundreds of millions of degrees Celsius — higher than the temperatures in the Sun’s core.
- At such high temperatures, matter exists only in the plasma state, in which atoms get split into positively and negatively charged particles. But such hot plasma cannot be handled by or contained in any material.
- Within the reactor, this plasma needs to be kept suspended in a confined space, surrounded by very strong magnetic fields acting as walls.
- Charged particles respond to magnetic fields, and this property is used to guide the flow of plasma within an enclosed space, separated from any matter. This condition, necessary for facilitating fusion reactions, is extremely delicate and unstable, with the tiniest of changes in the magnetic field disturbing the whole set-up. Scientists have not been able to maintain these conditions for longer than a few seconds.
- That is why the achievement of the Experimental Advanced Superconducting Tokamak (EAST) reactor, located at the Institute of Plasma Physics in Anhui province in eastern China, is being seen as so important. It is a significant improvement on this reactor’s previous record of a little over 400 seconds achieved in 2023.
- Real-life electricity-generating reactors would require this state to be maintained for hours, even days, at a stretch. Only then would continuous operations be possible, like current nuclear reactors which are based on fission technology.

### Do You Know:

- Fusion technology has been under development for more than 70 years but progress has been slow. Even the optimistic forecasts, at least till a few years ago, suggested a functional fusion reactor, producing electricity at a commercial scale, would not be realised before 2050. For this reason, none of the global energy transition pathways for a net-zero world in 2050, or 2070, factor in the potential of fusion electricity. Each one of those pathways, incidentally, is



heavily dependent on the success of several other uncertain technologies such as carbon sequestration and carbon removal, whose technical and economic viability remain under doubt.

- The nuclear energy currently in use across the world comes from the fission process, in which the nucleus of a heavier element is split into those of lighter elements in a controlled manner.
- In fusion, nuclei of two lighter elements are made to fuse together to form the nucleus of a heavier atom. A large amount of energy is released in both these processes, but substantially more in fusion than fission. For example, the fusion of two nuclei of a heavier isotope of hydrogen, called tritium, produces at least four times as much energy as the fission of a uranium atom which is the normal process of generating electricity in a nuclear reactor. Besides greater energy yield, fusion is also a carbon-free source of energy, and has negligible radiation risks.
- In the last few years, fusion research has produced a string of breakthroughs. In December 2021, the United Kingdom-based JET laboratory set a new record in the amount of energy produced through fusion. It produced about 12 MW of electricity for five seconds, enough to cater to the demands of about 10,000 homes for that period of time.

## SMALL MODULAR REACTORS: POCKET N-PLANTS

### WHAT IS IT?

In her 2024-2025 and 2025-2026 budget speeches, Finance Minister Nirmala Sitharaman emphasised contributions from nuclear power for India to meet its renewable energy targets.

A new mode of nuclear power generation soon expected to enter this mix is small modular reactors (SMRs). SMRs are reactors designed to be smaller, more flexible, and easier to build than traditional nuclear setups. Each SMR will produce less than 300 MW of power.

(Scientists are also exploring an even smaller design, called microreactors, to produce 1-20 MW of nuclear power each.)

The larger a conventional nuclear power facility, the more commercially viable it will be; SMRs aim to buck this trend by being cheaper to build and safeguard. Its proponents say different parts of an SMR can be machined separately, then assembled in a factory and transported to the site rather than having to be built on site.

A reactor with such a design can also be scaled up more easily than a conventional reactor.

SMRs have some downsides, too. For one, they are still experimental and need considerable capital investments without a guarantee that they will be profitable.

For another, the first generation of SMR designs require low-grade uranium as nuclear fuel to operate and thus will need to be refuelled more often, which is not desirable.

In this year's budget speech, Ms. Sitharaman announced a new 'Nuclear Energy Mission' with a ₹20,000 crore outlay to study SMRs and operationalise five indigenous units by 2033.





## TRUMP TO SIGN ORDER BARRING TRANSGENDER WOMEN ATHLETES FROM COMPETING IN SPORTS

U.S. President Donald Trump will sign an executive order on Wednesday designed to prevent people who were biologically assigned male at birth from participating in women's or girls' sporting events.

The order, which Mr. Trump is expected to sign at an afternoon ceremony, marks another aggressive shift by the President's second administration in the way the federal government deals with transgender people and their rights.

The President put out a sweeping order on his first day in office last month that called for the federal government to define sex as only male or female and for that to be reflected on official documents such as passports and in policies such as federal prison assignments.

Mr. Trump found during the campaign that his pledge to "keep men out of women's sports" resonated beyond the usual party lines. More than half the voters surveyed by AP VoteCast said support for transgender rights in government and society has gone too far. He leaned into the rhetoric before the election, pledging to get rid of the "transgender insanity," though his campaign offered little in the way of details.

Wednesday's order — which coincides with National Girls and Women in Sports Day — will involve how his administration will interpret Title IX, the law best known for its role in pursuing gender equity in athletics and preventing sexual harassment on campuses.

Every administration has the authority to issue its own interpretations of the landmark legislation. The last two presidential administrations — including Mr. Trump's first — offer a glimpse at the push-pull involved.

The Biden administration rolled back in last April a policy set by the previous Trump administration, with one of its own that stipulated the rights of LGBTQ+ students would be protected by federal law and provided new safeguards for victims of campus sexual assault. The policy stopped short of explicitly addressing transgender athletes. Still, more than a half-dozen Republican-led states immediately challenged the new rule in court.

## HOW THE CLIMATE CRISIS IS INTENSIFYING MARINE HEATWAVES

The marine heatwaves (MHWs) linked to the death of more than 30,000 fish off the coastal Western Australia in January were made up to 100 times more likely to occur due to climate change, according to a new analysis. The MHWs began in September 2024 and are still ongoing in the region.

- The analysis was carried out by the non-profit group Climate Central. It also said the severity of the MHWs is still intensifying as sea surface temperatures (SST) in some areas touched 2 degrees Celsius or more above average for this time of year.
- The current MHWs are the second-worst in Western Australia's recorded history. The region saw its most intense MHWs during the 2010–11 summer, when temperatures soared to 5 degrees Celsius above average, peaking in February and March, according to a report by the University of Western Australia.



- In the past few decades, MHWs have become longer-lasting, more frequent, and intense, according to a 2018 study, 'Marine heatwaves under global warming', published in the journal Nature. "Between 1982 and 2016, we detected a doubling in the number of MHW days," the analysis said.
- A 2021 report by the International Union for Conservation of Nature (IUCN) said MHWs have increased by 50% over the past decade and now last longer and are more severe. "MHWs can last for weeks or even years. They can affect small areas of coastline or span multiple oceans. MHWs have been recorded in surface and deep waters, across all latitudes, and in all types of marine ecosystems," the report said.

**Do You Know:**

- A marine heatwave is an extreme weather event. It occurs when the surface temperature of a particular region of the sea rises to 3 or 4 degrees Celsius above the average temperature for at least five days. MHWs can last for weeks, months or even years, according to the US government's agency National Oceanic and Atmospheric Administration (NOAA).
- MHWs can be devastating for marine life. For example, the 2010-11 MHWs in Western Australia caused large-scale fish kills — the sudden and unexpected death of many fish or other aquatic animals over a short period and mainly within a particular area. It also destroyed kelp forests and fundamentally altered the ecosystem of the coast. Kelps usually grow in cooler waters, providing habitat and food for many marine animals.
- These heatwaves contribute to coral bleaching, which reduces the reproductivity of corals and makes them more vulnerable to life-threatening diseases. Thousands of marine animals depend on coral reefs for survival and damage to corals could, in turn, threaten their existence.

#### WHY TEMPERATURES AT NORTH POLE REACHED 20° CELSIUS ABOVE AVERAGE

Temperatures increased by more than 20 degrees Celsius above average at the north pole, crossing the threshold for ice to melt, on February 2.

- Mika Rantanen, a scientist at the Finnish Meteorological Institute (Finland), told The Guardian, "This was a very extreme winter warming event... Probably not the most extreme ever observed, but still at the upper edge of what can happen in the Arctic."
- Since 1979, the Arctic has warmed four times faster than the global average. This is an issue because the region acts as a refrigerator for the rest of the world — it helps cool the planet. If temperatures continue to soar at this rate, it can lead to severe global impacts including rising sea levels and disruption of weather patterns.

**Do You Know:**

- The current unusually mild temperatures in the region during the depths of the polar winter (it is from November to February) were due to a deep low-pressure system — a region where the atmospheric pressure is lower than that of surrounding locations — over Iceland. The system opened gates for the arrival of warmer air from lower latitudes, effectively bringing heat to the region.
- Another factor was really hot sea surface temperatures in the north-east Atlantic, which further intensified the wind-driven warming.



- As a result, the daily average temperatures at the north pole were more than 20 degrees Celsius above average on February 2, with absolute temperatures being more than -1 degrees Celsius.
- The global temperatures have increased by around 1.3 degrees Celsius compared to the 1850-1900 baseline. However, this rise in temperatures is not uniform across the planet. For instance, the Arctic has warmed 3.8 times faster than the global average since the late 1970s, according to a 2022 study.
- There are multiple factors behind the Arctic's rapid warming. One of the most prominent factors is the albedo effect or how much sunlight a surface reflects.
- Sea ice keeps temperatures down in the polar regions, as its bright, white surface reflects more sunlight back to space than liquid water. As the ice cover in the Arctic is melting, more land or water is getting exposed to the Sun and more heat is getting absorbed, leading to a rise in temperatures.

### HOW MUCH IN SUBSIDIES DO FOSSIL FUELS RECEIVE?

If we want to tackle climate change, we need to move away from fossil fuels to low-carbon energy sources. This transition is a lot easier if these sources are cheaper than fossil fuels. However, fossil fuels are often subsidised, reducing the short-term economic incentives to switch.

Because subsidies can be defined in different ways — production, consumption, explicit, implicit — people can quote different numbers to this question, ranging from hundreds of billions of U.S. dollars to as much as \$7 trillion.

Let's start with explicit subsidies: government payments to make fossil fuels cheaper. These payments can either go towards fossil fuel producers so that the extraction and refining cost is lower (called 'production subsidies') or to consumers so they can buy fossil fuels cheaper than the market price (called 'consumption subsidies'). Global explicit subsidies for fossil fuels amounted to around \$1.5 trillion in 2022. That is equivalent to the entire GDP of countries like Russia or Australia.

Around 80% of these explicit subsidies went to consumers and the rest into fossil fuel production. Global subsidies ramped up in 2022 because the price of energy spiked due to Russia's invasion of Ukraine. Consumption subsidies roughly doubled from 2021 to 2022 and fell back to their previous level in 2023.

In 2022, the price of gas increased by as much as 400%. Many countries implemented mechanisms to support consumers, such as putting a price cap on gas and electricity. Now, this money was going towards subsidising fossil fuels. But it's perhaps not quite as 'explicit' a subsidy as the name might infer; the focus of governments was to make energy affordable for households and businesses, not specifically fossil fuels. Taking these subsidies away without cheap and available alternative energy sources would push some households into fuel poverty.

Unsurprisingly, the countries that gave the largest subsidies are large fossil fuel producers. Major oil producers, such as Saudi Arabia, Turkmenistan, Libya, and Algeria, spent more than \$500 per person (sometimes over \$1,000) to support fossil fuel production. These subsidies can represent more than 10% of GDP. Countries across Europe, North and South America, and East Asia typically gave less than \$100 per person, and in Africa and South Asia, it's even less than \$20 — and sometimes close to zero. For India, the amount was around \$3 in 2021, down from \$9 in 2015.



## PREPARE FOR THE RAT-MAGEDDON

An asteroid with a 1.3 per cent chance of hitting Earth in 2032. Sci-fi fears of an AI apocalypse. But for the real menace of these times, check under the sofa. Rats — lots and lots of rats. Think *The Birds*, not *Armageddon*. A group of researchers have used public rat sighting and inspection data from 16 cities — mostly in the US, but also including Toronto, Amsterdam and Tokyo — over a period of between seven and 17 years to see how the numbers had changed. The result: 11 of those cities saw significant increases in the rat population.

Human population density and loss of vegetation correlated positively with multiplying rodents. More food waste and more holes to scurry into make for a happy and healthy rat population. But the strongest correlation was found with rising temperatures amid global warming, an issue that's exacerbated in cities due to the urban heat island effect. When it's warmer, rats have lower mortality, can stay above ground and forage for longer, and are more fertile. The collective noun for these pesky home invaders is a "mischief" of rats, and what mischief they can wreak, from carrying diseases to contaminating food and damaging infrastructure. That's not to mention, as the study says, the mental toll it takes on the people who have to put up with them.

But don't reach for the rat poison just yet. For one thing, the study found that trying to get rid of rats that are already there is much less effective than methods of making cities less hospitable to them. What is needed is modern waste management practices, building regulations, and more resources for public education and surveillance. There's a host of things that can and should be done at the municipal level, including in India; although there's no data from the country, the same conditions apply. In the meantime, hunker down, rodent-proof your houses and prepare for *Ratmageddon*. Not with a bang but with a squeak.

## QUESTION FOR THE AI AGE: DO MACHINES AND HUMANS LEARN THE SAME WAY?

The dramatic surge of artificial intelligence (AI) has also made visible the machines humming underneath to make its applications possible.

From their origins in being able to separate data into different groups, AI today excels at too many tasks to count. Just in 2024, smartphones have started to be sold with AI models built into them, while five of the seven men who won the 2024 science Nobel Prizes did so for work in AI.

As it happens, the age of AI also promises to be a time in which scientists will learn a lot about the human brain as well. Existing AI models are inspired mostly by the brains of animals. Since these brains haven't been easy to study, scientists have been looking to AI models as a proxy.

### How do humans learn?

Machines excel at things that are nearly impossible for most humans, including rapidly analysing large datasets, predicting complex patterns, and learning to play chess like a grandmaster within a day. Yet neuroscientists say they also struggle with tasks that human children find easy, like understanding motives.

"The paradox of today's AI stems from the fact that the human brain has an evolutionary, biological origin and AI does not," Celeste Kidd, associate professor of psychology at the University of California, Berkeley, said. "It is likely that [for] the type of intelligence that we have evolved for taking care of helpless offspring, we need to be able to read the intentions of a child that is running towards a cliff [or one] that's not yet able to feed themselves and say that they are hungry."

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According to Arjun Ramakrishnan, assistant professor in the department of biological sciences and bioengineering at IIT-Kanpur, “At the heart of what drives learning in humans and animals” is a “dual focus on both meeting immediate biological needs and adapting to a constantly shifting environment.”

“The need to secure resources and maintain balance in the face of an ever-changing environment,” he added, “likely spurred the evolution of sophisticated neural mechanisms, driving not just simple responses to immediate needs but also complex learning and strategic decision-making abilities.”

Learning is thus not just a process of acquiring static information but an ongoing, dynamic interaction between an organism and its environment.

“The brain, shaped by evolutionary pressures, must adapt not only to predictable stimuli but also to the unpredictability of environmental fluctuations,” he added. “This complexity is reflected in the ability of humans and animals to sense and respond to rapid changes in the environment and social interactions, a key advantage for survival.”

Learning is thus long-duration, interactive, and includes feedback loops between the organism’s internal state and external challenges.

#### **Humans’ upper hand**

According to biologists at the Heidelberg Laureate Forum, a meeting held in September 2024 in Germany, machines are not curious. “Unlike AI systems, children are naturally curious, exploring the world on their own while simultaneously learning within a social and cultural context,” Kidd said at the forum. “Our curiosity is driven by knowing what we don’t know.”

According to Kidd, the information children discover when they seek it is of a different type than the data fed into AI systems.

“The single experience of a child with an apple is very different from Google Photos labelling an apple in an image. A child’s experience with an apple is sensory. They’re feeling the apple, they’re seeing the apple, it’s multi-dimensional. The data people are getting is much, much richer. And there are tonnes of correlations you can pick up on in order to leverage things like learning and generalisation.”

The human brain and the body have been “trained” on such data over millennia.

Thus, human learning requires much less data to solve a problem with the same level of proficiency, according to Ashesh Dhawale, the DBT Wellcome Trust India Alliance Intermediate Fellow at the Centre for Neuroscience, Indian Institute of Science, Bengaluru.

For example, although the AlphaZero model developed by Google subsidiary DeepMind is better at chess than any human player, it reached this level of proficiency only after playing around 40 million games during its training, Dhawale said. “In contrast, it is estimated that humans need some tens of thousands of training games to reach grandmaster proficiency.”

“One of the key advantages humans have over machines lies in the speed and efficiency of learning,” Ramakrishnan said. “We can absorb new information rapidly, building on past experiences and knowledge in a flexible, adaptive way.”



This ability to continuously improve on prior lessons without extensive reprogramming gives humans a significant edge in dynamic environments where new information and challenges emerge constantly.

Humans are also remarkably good at “transfer learning.” “We can apply knowledge and skills from one context to entirely different, unfamiliar scenarios with relative ease,” Ramakrishnan said. This ability to generalise is still a significant challenge for machines and artificial networks, which are typically confined to narrow domains and struggle to adapt to new or unforeseen contexts without retraining.

The communication between neurons in the human brain takes the form of biochemical processes that operate more slowly than the channels between neurons in artificial neural networks, according to Brigitte Röder, professor of biological psychology and neuropsychology at the University of Hamburg. Yet the human brain makes decisions stunningly fast using abstractions and generalisation whereas machines still struggle to do this.

Dhawale used the example of chess. “If you are proficient at chess, this ability will likely extend to other board games like checkers. This means humans can learn the structure underlying a task and generalise it to quickly solve new tasks — that is, they can learn to learn,” he said.

Researchers are now attempting to bring this paradigm to machine learning, an approach called meta learning. It’s not unlikely that machines will catch up here as well.

Humans also excel at motor-skill learning. “Somehow humans and animals are very efficient at learning how to move,” according to Dhawale, “but we don’t know exactly why this is the case.”

Neural networks are great at navigating tasks involving discrete choices, but they stumble with movement. One reason is because being able to make a simple motion, such as reaching for a fruit on a table, requires a learning agent to optimise for many independent parameters varying continuously across many degrees of freedom.

Then there’s energy efficiency. According to Ramakrishnan, the human brain’s low power consumption becomes readily apparent when recognising patterns, making decisions, and conducting social interactions. Machines can operate very fast, but their energy consumption is also much higher, especially when they process large datasets.

#### **Where machines excel**

However, machines are more reliable.

Unlike machines, which are built for repeatability and can perform the same task again with consistent precision, humans contend with fatigue, emotional decision-making, and distractions.

“While we are designed to operate in volatile, ever-changing environments and our ability to explore and adapt is one of our greatest strengths, this flexibility often comes at the cost of consistency,” Ramakrishnan said.

In contrast to the brain, neural network models are often trained to search exhaustively for solutions to complex tasks, Dhawale explained. This means they are more likely to discover new, better solutions to problems than humans can. At games like chess and Go, AI models have been known to develop moves that surprise even expert players.



“One could argue that the strategies used by humans to learn may be more efficient but can’t discover the most optimal solutions because they are not designed to search exhaustively.”

#### **From artificial to human**

The differences between human and machine learning could elucidate where the neural network of each brain — artificial or biological — falls short.

“Neurons are often treated simplistically as point processes that communicate via electrical impulses, essentially operating in an on/off mode,” Ramakrishnan said. “This reductionist approach has nonetheless allowed us to uncover fundamental principles that underlie complex cognitive behaviours.”

At its core is the idea that feedback loops drive learning. Researchers used it to develop reinforcement learning, a training algorithm that has also been remarkably successful at explaining how organisms update their knowledge and adapt based on their experiences, according to Ramakrishnan.

The development of artificial neural networks has also expanded our understanding of how memories could be stored and accessed in the brain: as dynamic processes that can be activated and adjusted over time rather than remain preserved in particular areas.

Artificial neural networks with this ability can perform better. “The development of algorithms that handle short-term and long-term memory processes in artificial networks has provided us with a deeper understanding of how the brain may operate in these domains,” Ramakrishnan said.

More broadly, AI models’ successes in the real world have prompted neuroscientists and cognitive scientists to revisit ideas of how the human brain learns. For some time since the mid-20th century, scientists assumed the brain represented information about the world in a symbolic manner and that its many abilities — perception, planning, reasoning, etc. — were achieved through symbolic operations.

Many early attempts at building AI models thus used approaches. One well-known application was expert systems, models capable of complex reasoning as a series of if-then problems.

On the other hand, contemporary neural networks operate connectionist models, named for the weighted connections between the nodes in a network. These models begin with a blank slate and use pattern recognition techniques to achieve their primary goals: say, to accurately predict the next word in an unfinished sentence.

“The question, therefore, is what type of AI — symbolic or connectionist — is the better model for human learning,” Dhawale said. “Despite the success of neural network AI models, I still think they learn in a very different way from how humans learn.”

### HAS CHINA ACHIEVED A BREAKTHROUGH IN AI?

#### **The story so far:**

In April 2023, a Chinese hedge fund, High-Flyer, that used Artificial Intelligence (AI) for trading, set up its own AI lab, DeepSeek, to build Large Language Models (LLMs). In less than a year, the AI spin-off developed DeepSeek-v2 that performed well on several benchmarks. And when DeepSeek-v3 was launched in December, it stunned AI companies as it performed far better than



its predecessor and at a significantly lower cost than other Chinese LLMs. Subsequently, the start-up launched DeepSeek-R1, High-Flyer's most advanced reasoning AI model that was on par with OpenAI's o1 model on several metrics. R1's leading performance, at a much reduced cost for users, jolted the U.S. tech giants and spooked investors as they fretted that its emergence would threaten the dominance of current AI leaders like Nvidia.

### **Is this China's first foray into AI?**

For over two years, San Francisco-based OpenAI dominated AI with its Generative Pre-Trained (GPT) models. The startup's chatbot penned poems, wrote long-format stories, found bugs in code, and helped search the Internet (albeit with a cut off date). In March 2023, Baidu received the government's approval to launch its AI chatbot, Ernie bot. Ernie was touted as China's answer to ChatGPT after the bot received over 30 million user sign-ups within a day of its launch. But the initial euphoria around Ernie gradually ebbed as the bot fumbled and dodged questions about China's President Xi Jinping, the Tiananmen Square crackdown and alleged human rights violations against Uyghur Muslims. In response to questions on these topics, the bot replied: "Let's talk about something else."

As the hype around Ernie met the reality of Chinese censorship, several experts pointed out the difficulty of building LLMs in the country. Google's former CEO and chairman, Eric Schmidt, in a talk in October 2023, said: "They [China] were late to the party. They didn't get to this [LLM] AI space early enough."

### **Then how did DeepSeek enter AI?**

As Chinese tech giants trailed, the U.S. tech titans marched ahead with their advances in LLMs. Microsoft-backed OpenAI cultivated a new crop of reasoning bots with its 'O' series that were better than ChatGPT. These AI models were the first to introduce inference-time scaling — how an AI model handles increasing amounts of data when it is giving answers.

However, the Chinese quant fund High-Flyer's DeepSeek shook the tech world with its Mixture-of-Experts (MoE) model, DeepSeek-v3, that was pre-trained on 14.8 trillion tokens with 671 billion parameters of which 37 billion are activated for each token. A MoE model uses different "experts" or sub-models that specialise in different aspects of language or tasks. Each expert is activated when it's relevant to a particular task. This makes the model more efficient, saves resources and speeds up processing. According to the technical paper released on December 26, 2024, DeepSeek-v3 was trained for 2.78 million GPU hours using Nvidia's H800 GPUs. Compared to Meta's Llama 3.1 training, which used Nvidia's H100 chips, DeepSeek-v3 took 30.8 million GPU hours lesser.

### **What advantage does DeepSeek's R1 have?**

After seeing early success in DeepSeek-v3, High-Flyer built its most advanced reasoning models — DeepSeek-R1-Zero and DeepSeek-R1 — that have potentially disrupted the AI industry by becoming one of the most cost-efficient models in the market. Compared to OpenAI's o1, DeepSeek's R1 slashes costs by a staggering 93% per API call. This is a huge advantage for businesses and developers looking to integrate AI without breaking the bank.

The savings don't stop there. Unlike older models, R1 can run on high-end local computers — so, there's no need for costly cloud services or dealing with pesky rate limits. This gives users the freedom to run AI tasks faster and cheaper without relying on third-party infrastructure. Plus, R1





is designed to be memory efficient as it requires only a portion of RAM to operate, which is low for an AI of its calibre. Separately, by batching the processing of multiple tasks at once, and leveraging the cloud, this model further lowers costs and speeds up performance, making it even more accessible for a wide range of users.

#### **How do the two models compare?**

While DeepSeek's R1 may not be quite as advanced as OpenAI's o3, it is almost on par with o1 on several metrics. According to benchmark data on both models on LiveBench, when it comes to overall performance, the o1 edges out R1 with a global average score of 75.67 compared to the Chinese model's 71.38. OpenAI's o1 continues to perform well on reasoning tasks with a nearly nine-point lead against its competitor, making it a go-to choice for complex problem-solving, critical thinking and language-related tasks.

When it comes to coding, mathematics and data analysis, the competition is tighter. Specifically, in data analysis, R1 proves to be better in analysing large datasets. One important area where R1 fails miserably is on topics censored in China. These elicit the same response as the Ernie Bot.

Unlike Ernie, this time around, despite the reality of Chinese censorship, DeepSeek's R1 has soared in popularity globally. It has already surpassed major competitors like ChatGPT, Gemini, and Claude to become the number one downloaded app in the U.S. (In India, DeepSeek is at the third spot under productivity, followed by Gmail and ChatGPT apps).

#### **Will this see a rise in smaller models?**

While OpenAI's o4 continues to be the state-of-the-art AI model in the market, it is only a matter of time before other models could take the lead in building super intelligence.

DeepSeek, through its distillation process, shows that it can effectively transfer the reasoning patterns of larger models onto smaller models. This means, instead of training smaller models from scratch using Reinforcement Learning (RL), which can be expensive, the knowledge and reasoning abilities acquired by a larger model can be transferred to smaller models, resulting in better performance.

#### **What's the future of the AI race?**

While distillation could be a powerful method for enabling smaller models to achieve high performance, it has its limits. For instance, a distilled model, tied to the "teacher" model, will face the same limitations of the larger models. Also, distilled models may not be able to replicate the full range of capabilities or nuances of the larger model. While distillation is an effective tool for transferring existing knowledge, it may not be the path to a major paradigm shift in AI. That means, the need for GPUs will increase as companies build more powerful, intelligent models.

From here, more compute power will be needed for training, running experiments, and exploring advanced methods for creating agents.

### THE CAUSE AND EFFECTS OF THE U.S.'S WITHDRAWAL FROM WHO

Signing his first batch of executive orders following his return to the White House on January 20, 2025, Donald Trump announced the United States' withdrawal from the World Health Organization (WHO). Mr. Trump accused WHO of being biased towards China and mishandling the COVID-19 pandemic.

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This is not the first time Mr. Trump has chosen to withdraw from the WHO. He took steps to leave the organisation in 2020 for the same reason. However, the Joe Biden administration decided to continue the partnership.

Close to 45% of Americans agreed with Mr. Trump's assessment back in 2020, according to the Global Attitudes Survey conducted by the Pew Research Center. The share of people with a similar opinion in the U.K. was 10 points lower at 34% and even lower at 31% and 30% in Canada and Germany, respectively.

In a 2024 survey by Pew, close to 40% of U.S. citizens said the country was benefiting "not at all" or "not too much" from being a member of the WHO compared to the 34% who said so in 2021. Republicans were only half as likely as Democrats to say that the U.S. benefits from the WHO. While close to 80% of Democrats or Democratic-leaning people said in 2024 that the U.S. benefits from the WHO, only 38% of Republicans and Republican-leaning respondents said so. The figure declined even further if only conservative Republicans were considered. Such opinions could have potentially influenced Mr. Trump's decision.

As per the latest executive order, the U.S. will pause the future transfer of any funds, support, or resources to WHO. This is a massive blow to WHO as the U.S. is its largest contributor. The U.S. has consistently contributed close to 15% of WHO's total funding since at least 2016-17. Its share dipped to 8.9% during 2020-21, when COVID-19 was at its peak, but went back again to the usual levels in the post-pandemic years. It contributed a record \$1.2 billion in the biennium period for 2022-23.

WHO's other major contributors in the latest year (2024-25) include the Bill and Melinda Gates Foundation (12.9%), the GAVI Alliance (9.91%), the European Commission (8.06%) and the World Bank (5.34%). The share of contributions from China accounted for 3%. Those are big shoes to fill as no country's contribution has exceeded 5% of the total funding received by WHO. Among countries, Germany and the U.K. are in a distant second and third place, respectively, as per latest data.

In 2024-25, close to 26% of the funds were used to improve access to quality health services globally, 21% to respond rapidly to acute health emergencies, 20% for polio eradication, and close to 10% for prevention of epidemics and pandemics. Mr. Trump's decision to halt funding will have a cascading effect on these initiatives.

The President's order also calls for the recall and reassignment of U.S. personnel working in any capacity with the global public health body. This could potentially impact the staff in WHO collaboration centres in the U.S. These centres implement WHO's objectives and engage in collaborative research with the institutions it is a part of. The U.S. has the most number of WHO collaborating centres (79), followed by India and China.

#### AFTER US, ARGENTINA WITHDRAWS FROM WHO

Argentina's libertarian President, Milei, who considers Trump a close ally, ordered the country's exit in response to what he described as "deep differences" regarding the WHO's management of health issues.

- Argentina on Wednesday announced it will withdraw from the World Health Organization (WHO), following a similar move by the United States under President Donald Trump on his first day back in the White House in January.



- “President (Javier) Milei instructed (foreign minister) Gerardo Werthein to withdraw Argentina’s participation in the World Health Organization,” presidential spokesperson Manuel Adorni said at a news conference, as quoted by CNN.
- Argentina’s libertarian President, Milei, who considers Trump a close ally, ordered the country’s exit in response to what he described as “deep differences” regarding the WHO’s management of health issues, particularly its handling of the COVID-19 pandemic, news agency Reuters reported.
- Adorni, referenced Argentina’s extended lockdown under the previous left-wing government as a key factor in the decision. He also highlighted concerns about the WHO’s perceived lack of independence from the political influence of other states.
- This mirrors Trump criticism of the organisation over mishandling the COVID-19 crisis and other international health challenges, while demanding “unfairly onerous” payments from the United States, its largest financial contributor.

**Do You Know:**

- Founded in 1948, the World Health Organization (WHO) is the United Nations agency dedicated to global health and safety. The Organization connects nations, partners and communities to promote health and serve the vulnerable. WHO works with its Member States to achieve the highest level of health for all people by pursuing universal health coverage.
- WHO headquarters are located in Geneva, Switzerland. WHO is governed by 194 Member States grouped into 6 regions.
- WHO receives funding through membership dues paid by Member States and voluntary contributions from Member States and other partners. Calculated as a percentage of each country’s gross domestic product, membership dues are assessed every 2 years at the World Health Assembly. Less than 20% of WHO’s total budget comes from membership dues, while the remainder comes from voluntary contributions, largely from Member States as well as from other United Nations organizations, intergovernmental organizations, philanthropic foundations, the private sector and other sources.
- The most significant concern raised by Argentina’s decision to withdraw from the WHO is the impact this could have on the organisation’s credibility and financial stability.
- The United States is by far the largest contributor to the WHO, providing around \$950 million (£760 million) in 2024, making up nearly 15% of the total budget.
- The US pullout raises tough financial questions for the global health body, particularly in light of the growing health crises worldwide.
- On the other hand, Argentina’s annual contribution of around \$8 million is much smaller, and its exit is unlikely to make a material difference to the WHO’s financial position. However, the larger concern is whether other countries with leaders who share President Milei’s worldview will follow suit.
- If more nations, especially those with similar political ideologies, choose to leave the WHO, the organisation’s credibility as the primary global health body could be seriously undermined.