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INTERNATIONAL

BEYOND AMERICA

Arab states can no longer depend on the U.S. for their security needs

Donald Trump's threat to bomb Oman, a long-standing American ally in the Persian Gulf, reflects both his administration's deepening frustration with the war against Iran and Washington's declining influence in the region. This is the second time that the U.S. leader has threatened to attack Oman, which hosted talks between Washington and Tehran before he launched the war on February 28. When Mr. Trump backed down from a threatened escalation after 13 days of bombing on Iran in July, he said the U.S. and Iran were close to a deal on reopening the Strait of Hormuz, which was closed by Iran after it was attacked. But Iran never said that it had agreed to a deal with the U.S. over the Strait and instead issued several demands, including releasing frozen funds and issuing sanctions relief, as preconditions for any agreement. Ever since, Oman, under U.S. influence, has been talking to Iran seeking a settlement. As Iran, which survived two rounds of U.S. bombings, refused to offer major concessions, the U.S.'s frustration with Oman has deepened. Mr. Trump has repeatedly claimed that the Strait of Hormuz was open, but traffic through the waterway, through which one-fifth of the world's seaborne oil passed before the war, is nowhere near its pre-war levels.

The war has raised questions about America's regional security strategy and its commitment to the security of its allies. Over the years the U.S. had built military bases across the Persian Gulf. However, Tehran has turned these bases into a liability by repeatedly striking them and their host countries. At least 15 American bases, including the Fifth Fleet Headquarters in Bahrain, are either damaged or destroyed, which has substantially reduced the U.S.'s strategic presence. But Mr. Trump does not seem to grasp the seriousness of the situation. Instead of reassuring the allies, he is now threatening to bomb them because they are not able to deliver on his push for a face-saving deal with Iran. From day one of the war, his threats and rhetoric did little to advance America's strategic goals or deter Iran. But Mr. Trump, stuck deep in the Persian sands, appears unable to change tack. Whether he acknowledges America's growing limitations in West Asia or not, countries in the region confront a new strategic reality: the foundations of the old security architecture have been shaken. In their hour of need, American bases have turned out to be a liability. They should also recognise that the decades-old policy of containing Iran has failed. To ensure their own security and regional stability, the Persian Gulf countries need to look beyond the American security umbrella and lay the foundations for a new regional order, shaped by a cold peace between the Arab states and Iran.

TRUMP'S SNUB OF SOUTH KOREA IN FAVOUR OF KIM RAISES SECURITY CONCERNS IN ASIA

U.S. President Donald Trump's decision to scale back joint military exercises with South Korea does not just slight a long-time ally but raises broader concerns about the security interests of the United States in Asia and elsewhere.

Mr. Trump explained his decision by citing South Korea's refusal to join his war against Iran and pointing to what he said was his good relationship with North Korea's reclusive dictator, a transactional and personal approach to foreign policy that has defined the Republican's presidency.



It undermines the South Koreans, undermines the Japanese, frightens the Taiwanese, unnerves NATO and emboldens the Chinese, not to mention the North Koreans.

Downsizing of exercises

Mr. Trump on Sunday ordered the U.S. military to downsize the 11-day **Ulchi Freedom Shield exercises**, which began Monday as scheduled. It was not known which parts of the training were being scaled back.

South Korea has been closely allied with the U.S. for decades and national security is its top priority due to threats from nuclear-armed North Korea.

It also drew instant criticism from many Democrats in Congress. "Treating one of America's closest allies like an adversary weakens our alliances and benefits China and North Korea,"

Retired U.S. Ambassador Robert Wood, who served under Republican and Democratic presidents, said the joint military exercises are critical to deterring North Korea, which has shunned any talks with the United States over its nuclear programme and has accelerated weapons testing.

CHINA COMPLETES FIRST STAGE OF 'MILITARY BASE' AT DISPUTED SOUTH CHINA SEA REEF

China has completed the first phase of land reclamation on **Antelope Reef within the disputed Paracel Islands**, transforming the maritime feature into **a six-kilometre-long artificial outpost**. Satellite imagery indicates significant groundwork, including a deep-water harbour, a dedicated wharf, a helipad, and land excavation capable of supporting an airstrip. While Beijing officially maintains that the outpost will serve civilian objectives such as maritime safety and meteorological research, security analysts assess that the facility is designed to become a critical military installation in the northern South China Sea.

The geopolitical implications of this development are twofold. Located **far closer to mainland China than the contested Spratly archipelago to the south**, **Antelope Reef significantly enhances the operational reach of the People's Liberation Army's Southern Theatre Command in any future contingency involving the Taiwan Strait**. Basing long-range strategic bombers and surveillance assets in the Paracels offers Beijing greater defensive depth and survivability against potential adversaries.

Beyond air and surface denial, the reef fortifies China's nuclear bastion strategy. By deploying surveillance infrastructure and anti-submarine capabilities across the northern waterway, Beijing seeks to create a protected sanctuary for its ballistic missile submarines operating out of Hainan Island. This setup complicates American and allied reconnaissance in vital sea lanes and raises maritime friction with Vietnam, which claims sovereignty over the Paracels and has strongly protested China's unilateral militarisation of the archipelago.

WHY HAS BASHAR AL-ASSAD BEEN SENTENCED TO DEATH?

The story so far:

On August 11, the Fourth Criminal Court in Damascus sentenced Bashar al-Assad, who ruled Syria for more than two decades before being forced to flee amid a civil war in 2024, to death. Along with him, his brother Maher al-Assad, who commanded the notorious Fourth Division of the Army



and was considered the regime's top security official, cousin Atef Najib, and six others have also been sentenced.

While Najib is currently being held in Syria and was present for the trials and ruling, the other eight were sentenced in absentia. The Assad brothers are currently under Russian asylum. The extradition of those sentenced in absentia, and the enforcement of their sentences, might be an arduous task for the present government under Ahmad al-Shaara, the former al-Qaeda operative with links to the Islamic State who, as Abu Muhammad al-Jolani, led the swift movement against the Assad regime in 2024 before taking over. However, the sentencing could serve as a tool for political transition in the country.

What are the concerns against in-absentia trials?

Amnesty International has expressed concerns over the judicial proceedings, stressing shortly after the verdict was issued that trials and death sentences in absentia are incompatible with international standards of fair-trial guarantees. The sentencing of the Assad brothers and others followed the recent precedent set by Bangladesh, where ousted Prime Minister Sheikh Hasina was similarly sentenced to death in absentia for crimes against humanity, by the country's International Crimes Tribunal in November last year.

Reacting to the proceedings in Syria, Amnesty noted that prosecuting those responsible for grave violations of human rights was key to achieving justice, but said that trials in absentia should be abolished if the Sharaa government wanted to "truly turn the page on the horrors of the past". However, Syria's Justice Ministry pushed back against the criticism, saying its statement "does not accurately reflect the nature of the judicial procedures followed in these cases or the safeguards guaranteed to litigants under Syrian law".

THE CEUTA CRISIS: EUROPE'S AFRICAN FRONTIER UNDER STRAIN

Late in July 2026, the world's television screens filled with images of **thousands of migrants emerging from the sea and pouring onto the streets of Ceuta** — a **small Spanish enclave perched on Africa's northern shoulder**. Within a matter of days, tens of thousands had attempted the crossing from Morocco, in what has become one of the largest and most sudden border crises Europe has witnessed in recent years.

Why Ceuta Matters

Ceuta is a geographical oddity with outsized strategic weight. **Though it sits on African soil, it is politically and administratively part of Spain and, by extension, the European Union.** Along with Melilla and a scattering of smaller Spanish possessions on the Moroccan coast, Ceuta forms the only **land frontier the EU shares with Africa**. Barely **18.5 square kilometres in area and home to roughly 85,000 people**, it overlooks the **Strait of Gibraltar** — one of the world's most consequential maritime chokepoints linking the Atlantic to the Mediterranean. **Spain has administered the territory since 1580, but Morocco has never relinquished its claim, regarding Ceuta and Melilla as vestiges of colonial occupation that rightfully belong to it.**

Anatomy of the 2026 Surge

What made this crisis extraordinary was both its scale and its method. Migrants did not merely attempt the well-guarded land fence separating Ceuta from Morocco; instead, most swam around coastal barriers or used inflatable devices to bypass the fortified perimeter altogether. Spanish

reception facilities and the Civil Guard were quickly overwhelmed, prompting Madrid to deploy the military in support. **Spain subsequently reached an understanding with Rabat to facilitate the return of those who had entered irregularly.**

The roots of the surge are, as with most migration crises, layered. Persistent poverty and unemployment across parts of Africa continue to push people toward Europe's doorstep, compounded by conflict and instability in several source countries. Smuggling networks are reported to have actively facilitated and even encouraged the crossings, treating desperation as a business opportunity.



The Legal Trigger

What distinguishes this episode from earlier Ceuta crises, such as the one in 2021, is a specific legal development. **In June 2026, Spain's Supreme Court clarified that the country's long-standing practice of summarily returning migrants caught crossing the land fence could not be extended to those arriving by sea.** Sea arrivals, the court held, must go through a full legal process — identification, legal assistance, and examination of any asylum claims. Since Spain's existing surveillance architecture of fences and cameras was built to stop land crossings and was ill-equipped to prevent sea arrivals, this ruling inadvertently opened a new, more permissive route. Analysts believe awareness of this gap, whether spread deliberately or informally, encouraged many more people to attempt the swim.

As Spain now works to recalibrate its coastal surveillance and Rabat manages its own domestic pressures, Ceuta is likely to remain what it has long been: a small, contested foothold where Europe's migration anxieties and Africa's economic realities collide.



NATIONAL

THE MYTH CALLED 'PERFECT VICTIM'

On August 6, the Goa Division Bench of the Bombay High Court set aside the 2021 judgment of the trial court that had acquitted Tarun Tejpal. The High Court convicted Tejpal, the former editor of Tehelka magazine, and sentenced him to 10 years of rigorous imprisonment for raping a former colleague.

While terming the trial court's ruling "perverse", the High Court also said that it had fallen for the notion that a sexual assault complainant must be a 'perfect victim' and conduct herself in a certain way to appear credible.

Nils Christie's concept

What is the idea of a 'perfect victim' or an 'ideal victim'? It was theorised by Norwegian criminologist Nils Christie in a chapter of the same name, in the book *From Crime Policy to Victim Policy*, in 1986.

Christie said the 'ideal victim' or 'perfect victim' possesses five main attributes. First, they are often female, disabled, very young, or very old, and are therefore weak in relation to the offender. Second, they are involved in "respectable activities". Third, they cannot reasonably be blamed for being where they were during the crime. Fourth, they do not know the offender personally. Fifth, they are attacked by a perpetrator who is "big and bad". Christie also noted that while being weak, the victim must have enough social power to influence sympathy and have their victim status recognised.

This one-size-fits-all idea of victimhood is propagated widely — by the media, social media, films, and by the larger society. Race, class, gender and other factors are involved in these dramatic portrayals where the most "innocent" and "deserving" become the 'ideal victim' while others are viewed as "undeserving" of sympathy, Christie argued.

In contrast to the idea of the 'ideal victim' is the idea of the 'ideal offender'. According to Christie, such an individual must be framed as purely bad, dangerous, and a stranger to the victim so that it becomes easy for society not to like him. When the offender is a familiar person with a "good background story", the 'ideal' dynamic breaks down.

In the case of Tejpal, his social status and his image as a liberal intellectual complicated this stereotype of the 'ideal offender'. As per Christie's argument, when there is no 'ideal offender' to hate, it becomes hard to perceive an 'ideal victim' to sympathise with.

Hierarchy of victimisation

This narrow perception of an 'ideal victim' creates a hierarchy of victimisation. Those who are thought of as "undeserving" are even perceived as contributing to the situation and receive less sympathy or none at all.

For instance, in the 1979 Mathura custodial rape case of a teenager, the Sessions Court had relied on the survivor's previous sexual experience to reason that she had likely consented, and described her as "habituated to sexual intercourse". The Supreme Court, while acquitting the



accused policemen, noted the absence of any alarm or resistance from the survivor or injuries on her body.

Similarly, in the gang-rape case of social worker Bhanwari Devi (1992) that became a catalyst for the formulation of the Vishakha guidelines and later, the enactment of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, the Jaipur District and Sessions Court in 1995 acquitted the accused of gang rape. The court reasoned that it was unlikely that upper caste men would “pollute” themselves by having sexual relations with a Dalit woman. In short, in the eyes of the court, Devi’s caste status made her an unlikely ‘ideal victim’.

In 2017, in an interim order, a Punjab and Haryana High Court division bench suspended the sentences and granted bail to three former Jindal Global Law School students convicted of gang-raping and blackmailing a classmate. It described the survivor’s behaviour as having a “perverse streak”.

The court said, “...We are conscious of the fact that allegations of the victim regarding her being threatened into submission and blackmail lend sufficient diabolism to the offence, but a careful examination of her statement again offers an alternate conclusion of misadventure stemming from a promiscuous attitude and a voyeuristic mind.” This remark placed the survivor’s sexual behaviour at the centre of the court’s assessment, effectively questioning her status as an ‘ideal victim’.

These rulings have demanded a ‘performance’ of trauma from survivors. Any digression from that expected behaviour has cast doubts on the survivors’ credibility and status as legitimate. The rulings reflect Christie’s theory that victimhood is not an objective state, but a deeply gendered moral status that can be granted or denied by society.

The Tejpal case

In 2021, in the Tejpal case, the Goa Sessions Court noted that there were several discrepancies in the survivor’s versions. It also said that while the victim had claimed to be in shock and trauma after exiting the lift on November 7, 2013, the CCTV footage showed that she was composed and smiling.

The High Court criticised the Sessions Court for focusing on the complainant’s conduct, reactions, and personal background instead of the evidence on record. It also noted that a survivor has already faced trauma and might feel too ashamed, nervous, or confused to respond clearly when questioned repeatedly in an unfamiliar environment.

The Supreme Court has questioned this idea in some of its judgments. In 2025, former Chief Justice B.R. Gavai had apologised on behalf of the judiciary for the Supreme Court judgment in the Mathura case, calling it a “moment of institutional embarrassment”.

Recently, on August 3, the Supreme Court issued a report recommending greater gender sensitivity in judicial writing. It cautioned judges against drawing adverse conclusions from delayed reporting, lack of physical injuries, inconsistencies in testimony or a survivor’s demeanour, noting that trauma affects people differently.



WHY IS THE SUPREME COURT EXAMINING POLYGAMY AGAIN?

The story so far:

The Muslim men's supposed right to have multiple wives is once again before the Supreme Court. Following a petition challenging the constitutional status of polygamy, the court sought the Centre's response last week. It also asked the Centre to consider taking suitable legislative steps to abolish the practice for all citizens, irrespective of religion. The petition was filed by five activists, who sought to have polygamy treated as a criminal offence under Section 82 of the Bharatiya Nyaya Sanhita.

Incidentally, Section 82 applies to non-Muslims and provides for a punishment of up to seven years for marrying another person during the subsistence of an existing marriage. The petitioners also sought annulment of the exemptions granted under Muslim Personal Law.

What are the petitioners seeking?

The five petitioners challenged the constitutional validity of Section 2 of the Muslim Personal Law (Shariat) Application Act, 1937, which permits polygamy. They claimed that the said Act is against the Constitution's Articles 14, 15, and 16, which provide equality to all citizens irrespective of their religion or gender. They also requested the court to direct the Union government to take steps towards the codification of Muslim Personal Law to ensure that its provisions run parallel to Constitutional provisions of gender equality.

They sought compulsory registration of Muslim marriages and divorces with State authorities to prevent any second or subsequent marriage of a man with a subsisting marriage. In case this was flouted, the first wife and children should have the first and lasting right to the matrimonial home.

The petitioners also sought the court to direct the Law Commission of India or the Union government to prepare a draft for the codification of Muslim Personal Law that aligns marriage, divorce, and succession with constitutional principles of gender equality. Incidentally, two of the activists had reached out to the Supreme Court to prohibit instant triple talaq in the famous Shayara Bano and others case. Then too, they argued that the practice of triple talaq violates fundamental rights of women. Following their petition, the apex court had invalidated instant triple talaq in August 2017. The court had then refrained from giving its verdict on polygamy and nikah halala, which too had been sought. Following the verdict, the Centre framed the Muslim Women (Protection of Rights on Marriage) Act in 2019. The Act made instant triple talaq a punishable offence.

What has the court ruled before?

In the much-talked-about Sarla Mudgal case of 1995, the Supreme Court prohibited a Hindu man with a subsisting marriage from converting to Islam purely for the purpose of marrying for the second time. The court noted, "the second marriage of a Hindu husband after converting to Islam without having dissolved the first marriage is void."

The court ruled on similar lines in the Lily Thomas v. Union of India case in 2000. Here the Supreme Court reiterated its stand of the Sarla Mudgal case, holding that a second marriage contracted after a feigned conversion to Islam was illegal and punishable under Section 494 of the Indian Penal Code.



Does Islam sanction polygamy?

Contrary to the contention that the Quran encourages polygamy, the book encourages monogamy. It permits a man to have up to four wives in special circumstances, such as marrying a widow or an orphan. It, however, makes it incumbent upon him to grant them complete equality. This being a practical impossibility, it asks men to desist from multiple marriages.

Says verse 3 of Surah Nisa, "If you fear you might fail to give orphan women their due rights if you were to marry them, then marry other women of your choice — two, three, or four. But if you are afraid you will fail to maintain justice, then content yourselves with one." Pertinently, this verse was revealed at a time when many men used to have multiple spouses, their numbers often running into three figures.

PUNJAB'S DECADE-LONG JOURNEY TOWARDS A FORMAL SACRILEGE LAW

Punjab's journey towards a codified sacrilege law illustrates how these pressures play out at the State level. In 2016, the then Akali Dal-BJP government passed a bill imposing life imprisonment for sacrilege committed specifically against the Guru Granth Sahib. The Centre returned it, objecting that a law protecting only one religion's scripture could not sit easily with India's secular Constitution. In 2018, the succeeding Congress government tried again, this time extending the same life sentence to the Guru Granth Sahib, the Bhagavad Gita, the Quran, and the Bible through a new Section 295AA of the Penal Code. That Bill, too, was returned without Presidential assent.

A further attempt followed in July 2025, when the Aam Aadmi Party government introduced the Punjab Prevention of Offences Against Holy Scripture(s) Bill, again covering all four texts, with sentences ranging from ten years to life. That Bill was sent to a select committee and has since been effectively shelved. Instead, the State government found a narrower route: rather than amending the central Penal Code, it amended an existing State law concerned specifically with the ceremonial custody of the Guru Granth Sahib. Because this technically falls within the State's own legislative competence, the government argued that it requires no Presidential assent, and the Governor's signature was enough to bring it into force in April 2026.

The manoeuvre has not gone unchallenged. A petition before the Punjab and Haryana High Court argues that a life sentence is a matter of criminal law, which sits on the Concurrent List and therefore cannot simply bypass central scrutiny by dressing itself up as an amendment to a ceremonial statute. Critics have also pointed out that, in covering only the Sikh scripture, the current law revives precisely the objection that sank the 2016 attempt: a State cannot credibly claim to be protecting "communal harmony" while legislating in favour of one faith's sentiments and not another's. Whichever way the litigation goes, the sequence of events across a decade shows a State legislature persistently trying, by one route or another, to entrench a sacrilege code of ever-increasing severity, undeterred by repeated constitutional rebuffs.

The constitutional contradiction

Secularism was declared part of the Constitution's unamendable "basic structure" in S.R. Bommai versus Union of India, precisely so that the State could neither favour a religion nor punish disrespect towards one. Article 25 guarantees not just the right to practise religion but, implicitly, the space for social reformers, sceptics and atheists to challenge religious practise, since the same article subjects the right to religious freedom to "public order, morality and health" and permits the State to legislate for social welfare and reform even where this cuts against religious custom.



Article 19(1)(a) guarantees free speech in the same breath that Article 19(2) permits “reasonable restrictions” in the interests of public order, decency or morality.

A cartoon, a novel, a documentary, a stray remark on social media: all can be made to fit the language of “insult” without any accompanying threat of actual disorder, and Indian criminal procedure allows a First Information Report to be lodged, and an accused to be arrested, well before any court examines whether the constitutionally required “deliberate and malicious intent” was in fact present. The chilling effect happens at the point of complaint, not at the point of conviction.

The Supreme Court has, in a neighbouring context, already endorsed exactly this objection. In *Shreya Singhal versus Union of India* in 2015, it struck down Section 66A of the Information Technology Act in its entirety, holding that criminalising online messages using undefined terms such as “offensive” and “menacing” left the provision impermissibly vague, invited arbitrary enforcement, and chilled protected speech in violation of Article 19(1)(a). Section 295A and its BNS successor rest on terms no more precise, “outrage,” “insult,” “religious feelings”, policed after the fact by whichever officer happens to receive the complaint, yet the court has never brought the *Shreya Singhal* reasoning to bear on the provision whose own constitutionality it settled, without revisiting it since *Ramji Lal Modi* almost sixty years earlier. The inconsistency reads as reluctance rather than principle: it is easier to strike down a recent statute governing an unfamiliar medium than to unsettle an eighty-year-old precedent with a long and emotionally fraught history behind it.

The Punjab context

Set against Punjab’s law specifically, the contradiction sharpens into several distinct legal problems. The first concerns equality. By protecting only the *Guru Granth Sahib* and no other scripture, the 2026 Act revives the very objection that sank the 2016 attempt: a provision drawing a line between one community’s sacred text and every other’s needs an “intelligible differentia” bearing a “rational nexus” to its stated purpose of communal harmony, the test the Supreme Court set out in *State of West Bengal versus Anwar Ali Sarkar*, and it is difficult to see how singling out one faith serves a purpose framed in terms of all of them.

This is not merely a doctrinal prediction. In May 2026, the Anglican Church of India, through its Amritsar bishop, petitioned the Punjab and Haryana High Court arguing that the Act creates a religion-specific penal regime that violates the constitutional guarantee of equality before law, and sought both the quashing of the Act and a stay on its implementation.

The Bench’s response points to an underappreciated wrinkle in the equality argument itself: it reportedly questioned how a church whose own scripture the Act does not touch could claim to be aggrieved by it at all, a question that inadvertently demonstrates the very defect being alleged, since a law can discriminate in structure while leaving those it excludes without the conventional standing to challenge it. The petition remains pending.

The second is a matter of proportionality. The Act’s mandatory minimum sentence, which under its most serious provisions can extend to life imprisonment and leaves no room for a judge to calibrate punishment to the facts of a given case, sits awkwardly beside *Mithu versus State of Punjab*, in which the Supreme Court struck down a different mandatory sentencing provision precisely because it stripped courts of discretion and so failed the test of a “just, fair and reasonable” procedure that *Maneka Gandhi versus Union of India* had read into Article 21; that the earlier case also happened to arise out of Punjab makes the parallel almost too neat. The third



goes to federal competence. Criminal law sits on the Concurrent List, and Article 254 provides that a State law repugnant to a central enactment on the same subject, such as the Bharatiya Nyaya Sanhita's own provisions on sacrilege and on outraging religious feeling, is void to that extent unless it has received Presidential assent under Article 254(2). Punjab avoided that requirement in 2026 by amending a pre-existing, ostensibly ceremonial state statute rather than the BNS directly, an approach now under challenge in the Punjab and Haryana High Court on precisely the ground that a life sentence for the same underlying wrong cannot dodge central scrutiny merely by changing which statute book it sits in. Each of these is a distinct constitutional infirmity, quite apart from the broader secularism argument above, and Punjab's law arguably carries all three at once.

BEYOND BLASPHEMY: HOW LAWS CAN CURTAIL THE POSSIBILITY OF SOCIAL REFORM

The history of Section 295A and its cousins shows how easily laws meant to prevent communal violence have instead been turned against the critique of regressive or simply unconventional religious practice. In 1932, a small collection of Urdu short stories called *Angarey*, which attacked obscurantist customs and the sexual hypocrisy of some religious figures, was banned soon after publication, and its authors faced threats. Seven Indian States banned the film and book *The Da Vinci Code* in 2006 on the ground that it offended Christian sentiment, a ban two States later lifted only after High Court intervention.

More recent cases show the pattern continuing under a veneer of literary and scholarly respectability. Wendy Doniger's *The Hindus: An Alternative History* was withdrawn by Penguin India in 2014 after a civil suit invoking Section 295A. Tamil novelist Perumal Murugan faced a criminal complaint and a mob campaign over his novel *Madhorubagan*; he announced his own "death" as a writer in 2015 rather than face continued harassment. It took a landmark 2016 Madras High Court judgment, which closed with the appeal to "let the author be resurrected to what he is best at, write," to quash the case and restore his right to publish. The painter M.F. Husain was hounded into exile and death abroad after decades of prosecutions and threats over his nude depictions of Hindu deities. Taslima Nasrin's writing has met similar treatment, and the government's 1988 ban on importing Salman Rushdie's *The Satanic Verses* made India one of the first countries, a secular one at that, in the world to act against that novel.

The provision has, if anything, found new life in the era of social media and televised debate, where the underlying act being punished has grown thinner still. In 2018, weeks after the Supreme Court lifted the traditional ban on women of menstruating age entering the Sabarimala temple, the Kerala activist Rehana Fathima was arrested under Section 295A over a Facebook photograph of herself dressed as an Ayyappa devotee, spent over two weeks in judicial custody, and was suspended by her employer within days of her arrest, all over an image rather than an argument. In 2020, the television anchor Amish Devgan called the Sufi saint Khwaja Moinuddin Chishti a 'looter' during a live debate, apologised within days for what he said was an inadvertent slip for a different historical name, and still faced seven separate FIRs across five States; the Supreme Court declined to quash any of them, merely clubbing them together in Ajmer. These cases rarely end in conviction; more often the prosecution goes nowhere. What unites them is that the damage is done well before any verdict, through arrest, through the heckler's veto of an aggressive, sometimes violent audience, and through the pre-emptive caution of publishers and film certifiers who calculate, reasonably, that no book or film is worth the trouble.



The other direction

It would be unfair to the complexity of Indian law, to present this as a single uninterrupted march towards religious censorship. India also has statutes that go the other way, actively empowering the State to attack religious or superstitious practice, and the constitutional foundation for this other tendency was laid before the Constitution had even been adopted. Speaking in the Constituent Assembly on December 2, 1948, during the debate on whether personal law should be shielded from legislative reform, Dr. B.R. Ambedkar rejected the idea that religion could claim a veto over social legislation merely because a given custom carried religious sanction. "I personally do not understand why religion should be given this vast, expansive jurisdiction so as to cover the whole of life and to prevent the legislature from encroaching upon that field... We are having this liberty in order to reform our social system... It is, therefore, quite impossible for anybody to conceive that the personal law shall be excluded from the jurisdiction of the State," Dr. Ambedkar said.

Maharashtra's Prevention and Eradication of Human Sacrifice and Other Inhuman, Evil and Aghori Practices and Black Magic Act, passed in 2013 after the assassination of the rationalist campaigner Narendra Dabholkar, criminalises a long list of exploitative religious practices, from claiming to cure disease through faith healing to inducing self-flagellation. Karnataka passed a similar law in 2017. The Sati (Prevention) Act of 1987 goes further still, criminalising not only the act of widow immolation but the glorification of it, treating celebratory speech about a religious practice as itself an offence, the mirror image of a blasphemy law rather than its opposite.

The coexistence of these two tendencies, laws that punish criticism of religion and laws that mandate criticism of religious practice, suggests that Indian law has no coherent theory of when religious sentiment deserves protection. What actually governs is a case-by-case political calculation about which practices are currently unpopular enough, or which constituencies are currently powerful enough, to tip the balance one way or the other.

The reformer as blasphemer

The starkest illustration of what this body of law puts at risk is not the outsider mocking a faith he does not share, but the insider attacking his own. In *The State of Mysore versus Henry Rodrigues*, decided by the Mysore High Court in 1961, a Catholic editor named Henry Rodrigues was tried under Section 295A over an article in his Konkani-language magazine *Crusader*, titled "Honour to Mary or Dishonour?", which accused Catholic priests of exploiting the credulous by falsely attributing miracles to the Virgin Mary. His defence argued that since the criticised beliefs and practices were, in his view, superstitious and contrary to the Bible itself, the truth of his charge ought to absolve him. The court, following an earlier Allahabad High Court ruling, rejected this outright: even a wholly true statement, it held, can outrage religious feelings, and Section 295A punishes the intent to outrage rather than the accuracy of what is said. A believer's sincere, internally argued complaint against his own clergy was treated exactly as the law treats a stranger's contempt.

The doctrine that truth is no defence is what should give the sharpest pause to anyone tempted to think of a blasphemy law as merely a shield against bigotry. India's own history is built on reformers who succeeded only because they were prepared to be called blasphemers by their own people. Jyotirao Phule spent the 1870s attacking Brahminical religious authority as the theological scaffolding of caste oppression, recasting Hindu myth in his tract *Gulamgiri* to expose it as a device for keeping the lower castes subjugated. A century later, Hamid Dalwai founded the Muslim



Satyashodhak Mandal explicitly on Phule's model, marched a handful of Muslim women to the Maharashtra Assembly to demand an end to triple talaq and polygamy, and was ostracised and abused for it. Neither man set out to comfort the pious. Both set out to unsettle them, because unsettling belief is what the reform of belief requires; it is not hard to imagine how a modern Section 299 complaint, or a Punjab-style sacrilege charge over their treatment of scripture and tradition, would read against language of that kind.

A law that criminalises the "deliberate and malicious" intention to outrage religious feeling, read honestly rather than sympathetically, does not obviously distinguish a Phule or a Dalwai from a bigot baiting a rival faith for sport: both are, in the plainest sense, trying to make believers feel bad about what they believe. What should separate them, in any society that values reform as much as it values sentiment, is whether the critic is trying to improve the community or merely humiliate it, a distinction that a police station taking down a complaint is poorly placed to draw.

Limits of protection

Supporters of laws like Punjab's have an argument, and it deserves to be engaged with rather than waved off. India is a country where religious sentiment has repeatedly proved combustible. A targeted law, applied with judicial restraint and the safeguard of proven intent, could in principle be a proportionate response to that risk rather than an assault on free thought.

The historical record of Section 295A, and now of Punjab's own sacrilege law, gives little confidence that restraint is what actually happens in practice.

A secular Constitution that permits the state to imprison people for life over an insult to a book, however sacred, has conceded more ground to religious authority than its own founding principle allows. If India wishes to remain true to the secularism its Constitution declares unamendable, the honest path is to narrow these provisions to their original, defensible purpose: preventing incitement to actual violence, and leave the criticism, satire and reform of religious practice, however uncomfortable, to public argument rather than to the criminal courts.

A SECULAR REPUBLIC'S SACRILEGE PROBLEM: THE LEGAL PRICE OF CRITICISING HOLY WRIT IN INDIA

In April 2026, the Governor of Punjab gave his assent to the Jaagat Jot Sri Guru Granth Sahib Satkar (Amendment) Act, which criminalises sacrilege against the Guru Granth Sahib with sentences running as high as life imprisonment. The law arrived almost immediately after passage, closing out a decade of agitation that followed the desecration incidents at Bargari and Burj Jawahar Singh Wala in 2015, and the police firing at Behbal Kalan that killed two protesters. On paper, this looks like routine State legislation responding to genuine communal hurt. In substance, it is India's most severe working sacrilege law: a statute that punishes the physical desecration of a sacred text with sentences up to and including life.

The Constitution declares secularism part of its "basic structure," and a law of this kind sits awkwardly against that declaration. It permits, and in Punjab's case has now enacted, punishment for disrespect to religion in a nation-state that officially professes no religion of its own and guarantees every citizen the right to free speech. Punjab's law is only the most vivid recent example of a wider pattern: a body of provisions, some colonial in origin and some entirely contemporary, that treat criticism of religious belief and practice as a matter for the police rather than public debate.



Two wrongs, one writ

Blasphemy, in the sense English ecclesiastical law first gave the word, is an expressive wrong: contemptuous or irreverent speech, writing or imagery about a god, a prophet, a scripture or a set of beliefs. Sacrilege is a different kind of wrong, the violation or defilement of something set apart as sacred, whether a place of worship, a rite, or a physical object. It has historically been understood as a matter of conduct, akin to trespass or vandalism, rather than expression. The distinction sounds academic, but Indian law actually draws it on the statute book. Section 298 of the Bharatiya Nyaya Sanhita, carrying forward the old Section 295 of the Penal Code, punishes injuring or defiling a place of worship with intent to insult a religion, a sacrilege-type offence aimed at conduct. Section 299 of the BNS, carrying forward the old Section 295A, punishes deliberate and malicious insult to religious beliefs by words, signs or visible representation. Reference works on Indian law describe this expressive offence as the country's general prohibition on blasphemy.

Measured against that distinction, Punjab's new law does not sit cleanly on the sacrilege side of it. The Act's own definition of "sacrilege" is written in two parts: it covers any "wilful and deliberate" act of desecration through physical damage, defacement, burning, tearing or theft of the Saroop, the physical volume of the Guru Granth Sahib or part of it, but the same clause extends sacrilege equally to acts committed "by words, either spoken or written, or by signs or by visible representations or through electronic means," wherever this is of a nature to hurt the religious feelings of persons professing the Sikh faith. The first half criminalises what is done to the book itself. The second half criminalises expressing a disrespectful opinion about it, which is precisely the blasphemy-type wrong the distinction above is meant to set apart.

The line is real, but it does not always survive contact with how these laws are enforced. In 2007, the Karnataka editor B.V. Seetaram, along with his wife and co-director Rohini, was arrested after the Kannada dailies they ran published articles questioning the right of Digambara Jain monks to appear naked in public. Nothing had been physically defiled. The entire complaint concerned words in print, precisely the terrain the blasphemy-type Section 295A exists to cover. That the case still produced an arrest and days in judicial custody shows how quickly an expressive complaint can escalate into criminal process once religious offence is invoked.

A colonial ancestry

India's principal blasphemy provision, Section 295A of the old Indian Penal Code (now Section 299 of the Bharatiya Nyaya Sanhita, in force since July 2024), was not an indigenous invention. Its origin lies in the story of Rangila Rasul, a pamphlet about the marriages of the Prophet Muhammad published in Lahore in May 1924 by Mahashe Rajpal, under the anonymous authorship of an Arya Samajist, Pandit Chamupati. The pamphlet did not appear out of nowhere: it was written, on the evidence of Dr. B.R. Ambedkar's own account of the affair, in direct retaliation for an earlier Muslim pamphlet, Sitaka Chinala, which had made insulting claims about Sita, the wife of Lord Rama, and it arrived in the middle of a decade in which Hindu and Muslim publicists in Punjab were trading such attacks with regularity. Rajpal was prosecuted under Section 153A, the general provision against promoting enmity between communities. A magistrate convicted him in 1926, the Lahore Sessions Court upheld the conviction in February 1927, and the Lahore High Court, in a judgment by Justice Dalip Singh on May 4, 1927, acquitted him, holding that however malicious and wounding the pamphlet was, Section 153A was meant to prevent attacks on a living community, not polemics against a deceased religious founder, however scurrilous.



The acquittal caused precisely the disorder the law had been trying to prevent, and Justice Dalip Singh himself had urged the legislature to close the gap he had just identified. It did so quickly: a bill was introduced within months, refined by a Select Committee that included Muhammad Ali Jinnah, and enacted as Section 295A, receiving the Governor-General's assent on September 22, 1927. The new section criminalised “deliberate and malicious” acts intended to outrage the religious feelings of any class of citizens, whether by words, signs, or visible representation, and now, under the BNS, explicitly by electronic means. The law arrived too late to touch the original pamphlet, and it did not, in the event, prevent what came next. On April 6, 1929, nineteen months after Section 295A had already entered the statute book, a young Lahore carpenter named IIm-ud-din stabbed Rajpal to death, declaring that he had taken revenge for the Prophet. Jinnah himself argued IIm-ud-din's unsuccessful appeal against the death sentence; he was executed that October. Whatever else it achieved, Section 295A cannot be credited with preventing the very killing its enactment is sometimes said to have followed. In 1957, the Supreme Court in *Ramji Lal Modi versus State of Uttar Pradesh* upheld the provision's constitutionality regardless, reasoning that it fell within the “public order” exception to free speech carved out by Article 19(2) of the Constitution.

The reasoning has held for nearly a century, but it rests on a fiction that has always troubled civil libertarians: that hurt feelings, however genuinely felt, are equivalent to a threat to public order. A law meant to prevent riots has, in practice, become a general licence to prosecute writers, film-makers, and cartoonists whenever a sufficiently organised group of the offended chooses to complain. The Select Committee that drafted Section 295A inserted the words “deliberate and malicious” specifically to protect social reformers who might need to attack superstition or ill practice to bring about change. Jinnah went further still: addressing the Central Legislative Assembly on 5 September 1927, he argued that the law had to protect “those who are engaged in bona fide and honest criticism of a religion,” alongside historians and truth-seekers, from being caught by the same net meant for wanton vilification. The trouble is that “bona fide and honest” is not a rule so much as an invitation to a judgment call, and it is subject to the perspective from which it is judged.

The country that gave India this legal inheritance has since gone the other way entirely. In England and Wales, the common law offences of blasphemy and blasphemous libel, from which Section 295A's own drafting ultimately descends, were abolished by Section 79 of the Criminal Justice and Immigration Act 2008, which received Royal Assent on May 8, 2008, and took effect that July; Scotland repealed its own common law blasphemy offence in 2021, in force from 2024.

India inherited a colonial category of law that its former coloniser has since dismantled across almost all of its own territory, and then, in Punjab's case nearly a century later, made its own version of the underlying idea more severe rather than less.

DUE DILIGENCE

Curbs on surrogate advertising must avoid regulatory overreach

Maharashtra Food and Drug Administration (FDA) Commissioner Tukaram Mundhe's attempts to disrupt the marketing chain, by targeting the celebrities who prop up the brand recall of manufacturers' products, is an encouraging counterpoise to the consumer goods advertising landscape of today. This landscape has long suffered the consequences of a gross asymmetry: the person with the persuasive power suffers almost none of the economic downsides of consuming certain goods, a situation sustained as much by uncritical endorsement as by inequities in the



public health-care system. But the FDA must still prove its suspicions. According to it, Vimal Elaichi — which Shah Rukh Khan, Ajay Devgn and Tiger Shroff have endorsed — does not have a market identity independent of its association with tobacco and that endorsing it amounts to a surrogate endorsement of tobacco products. While this seems a reasonable reading of the Cigarettes and Other Tobacco Products Act (COTPA) Rules, the Delhi High Court, in *DGHS vs Som Pan Product Pvt. Ltd.* (2024), had held that the state had a responsibility to prove a case of surrogate advertising. That is, neither could brand registration alone prove surrogate advertising nor could the mere existence of a technically legal product permit a particular advertisement.

While Mr. Mundhe's efforts are commendable, the FDA should follow through with inquiries under COTPA and the Food Safety and Standards Act 2006 that withstand scrutiny. India bears the world's largest burden of oral cancer, and the FDA is right to treat certain advertisements as unfair trade practices with significant consequences for consumer health. The endorser liability created by the Consumer Protection Act 2019, together with hefty financial penalties, has also undermined celebrities' ability to invoke ignorance of a manufacturer's intentions as a defence. The FDA's decision to have celebrity endorsers explain their decision-making is a logical extension of this principle in the domain of enforcement. The problem exemplified by tobacco also extends to products making unsubstantiated claims (e.g., "boosts immunity"), and educational and financial products. Unfortunately, India's regulatory regime is fragmented across a slew of Acts and Rules; problematic advertisements often invoke legal and administrative instruments to draw the judiciary's intervention. Penalties or bans in the FDA's case could significantly narrow the space exploited for surrogate advertising. If the FDA fails to act fairly, however, it could become yet another example of regulatory overreach that strengthened the practices it sought to end.

SAVING FACES

Use of facial recognition equipment at protest sites is worrisome

India appears to be normalising the technical ability to subject political gatherings to searchable biometric surveillance without first having settled, through legislation and judicial oversight, the circumstances in which the state may lawfully do so. While the Delhi Police have continued to deny the use of excessive force and manhandling people involved in the Cockroach Janta Party protests, contrary to protestors' testimonies, facial recognition equipment was present at the protest site while the demonstrations were on. According to its affidavit to the Supreme Court of India, the police deployed a facial recognition system (including Artificial Intelligence-enabled cameras to scan faces in real-time against a database), a mobile surveillance van and a command and control vehicle, smart spectacles for identifying individuals on the move, and drones and videographers; the van and the spectacles have been tied to private contractors. The police have also not addressed whether actual biometric processing occurred with every individual within the range of cameras. Even if the police discarded the images associated with infructuous checks, that the data may have been accessible to private contractors, whose terms of engagement are unclear, is worrisome. However, no statute governs the use of facial recognition systems; the Digital Personal Data Protection Act, whose data-processing obligations are not yet in force, still makes broad exemptions for state agencies. The Automated Facial Recognition System of the National Crime Records Bureau can be used to identify criminals, unidentified bodies, and so on, and the Criminal Procedure (Identification) Act 2022 expanded the set of records that the police may collect from specified persons. However, these actions are still only allowed vis-à-vis specific groups of people.



Irrespective of the constitutional validity of the police's actions, the chilling effect on potential participants may also curtail the right to protest. The state has to pass a well-established proportionality test when interfering with the right to privacy. While the first question — the existence of a legitimate objective — already poses important challenges to facial recognition en masse, the technology is indiscriminate at the point of capture. After all, there is a less restrictive but equally effective alternative (e.g., conventional policing). At this time, far too many questions are unanswered — including over the data-processing agreements, access, legal provisions that authorised major decisions, and the expected rate of false positives — for the use of facial recognition with all protesters to be justified.

THE FEDERAL DILEMMA OF DELIMITATION

The story so far:

The Tamil Nadu Legislative Assembly has passed a resolution urging the Centre to permanently freeze the number of Lok Sabha seats at the existing number of 543 and maintain the present State-wise distribution of those seats. It also advocated the preservation of current ratio of 2.2:1 between Lok Sabha and Rajya Sabha seats. It sought the implementation of one-third reservation of seats for women in the Lok Sabha from the 2029 election onwards, without linking it to any future census or delimitation.

Defining delimitation

Delimitation means the process of fixing the number of seats and boundaries of the territorial constituencies in each State for the Lok Sabha and Legislative Assemblies. This 'Delimitation process' is performed by 'Delimitation Commission' that is set up under an act of Parliament. The last time when the number of seats were determined was on the basis of 1971 census population.

'Democracy' means 'rule or government by the people'. It follows that the government is elected by a majority with the broad principle of 'one citizen-one vote-one value'. Article 81(2) of the Constitution provides that the ratio between the number of seats and population of a State, shall as far as practicable be same for all the States. The number of seats in the Lok Sabha based on 1971 census was fixed at 543, when the population was 54.8 crores. This broadly translated to an average population of 10.1 lakhs per constituency. However, it has been frozen as per 1971 census in order to encourage population control measures so that States with higher population growth do not end up having higher number of seats. This was done through the 42nd Amendment Act till the year 2000 and was extended by the 84th amendment act till 2026. This number will have to be readjusted based on the first census after 2026 which would be the next census in 2027. In 2023, through the 106th Constitutional Amendment, the Parliament had provided for one-third reservation of seats for women in the Lok Sabha and Legislative Assemblies. This would be through delimitation based on the census in 2027.

The issues involved

The population explosion that happened in our country during the last five decades has been uneven, with some States like Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan witnessing a greater increase than States like Kerala, Tamil Nadu, Karnataka and Andhra Pradesh. The ratio between the current number of seats and the projected population of States as of 2026 does not satisfy the core democratic principle of 'one person-one vote-one value'. On the other hand, the increase in the number of seats among various States based on the current population (to 848)



will have consequences. Southern States, smaller states in the North, as well as the North Eastern States, are bound to be at a disadvantage when compared to large north Indian States in such a scenario. This would be against the federal principles of our country. It also goes against the philosophy for freezing the seats as per 1971 census with the States that have been better at controlling the population losing out on their political significance.

Current proposal by the Centre

The Union government had introduced the Constitution 131st Amendment Bill in April 2026 to increase the maximum number of Lok Sabha seats from existing 550 to 850. The Home Minister made an oral assurance in the Parliament that the number of seats in each State/Union Territory would be increased by 50% on a pro-rata basis. However, this bill was defeated in the Lok Sabha. There are expectations that the government may introduce the bill again, in the near future with explicit provisions for 50% increase in seats for all States/Union Territories on a pro-rata basis.

The larger implications

There are two main arguments in support of the proposal for 50% pro-rata increase. First, it would not alter the current proportion of representation of various States/Union Territories in the Lok Sabha. Second, it would enable seamless reservation of one-third seats for women with the additional 272 seats being reserved for women out of the enlarged house of around 816 seats.

However, such an increase has its share of challenges. Firstly, the current strength of Rajya Sabha is 245 that results in a ratio of 2.2:1 between the total strength of Lok Sabha and Rajya Sabha. An increase in Lok Sabha seats by 50% without altering seats in Rajya Sabha would skew this ratio to 3.3:1.

In the event of disagreement between the two houses on any bill, there is a mechanism for Joint Sitting under the Constitution to resolve the deadlock. Though used rarely in the past (only 3 times since Independence), this increased strength in the Lok Sabha runs the risk of rise in such joint sittings to push through Bills. In such a scenario, it would diminish the role of the Rajya Sabha as an effective check and balance on the Lok Sabha. Secondly, considering that the Lok Sabha sits for only around 60 days in a year, there would hardly be any meaningful time for each MP to raise their issues in the house. The purpose of the house would then be reduced to mere numerical representation rather than meaningful deliberation.

Finally, the increased cost to the exchequer because of additional MPs including allocation for the Members of Parliament Local Area Development Scheme (MPLADS) funds needs to be borne in mind.

Harmonious reconciliation

The issue arises as the democratic and federal principles seem to be at loggerheads in the delimitation exercise as currently envisaged. However, they can be harmoniously reconciled by giving equal importance to both. The main work of a Member of Parliament is to legislate on the 'Union List' subjects such as defence, external affairs, railways, telecommunication, taxation etc. and hold the Central government accountable. A majority of the schemes of the Central Government are implemented only by the State governments. Hence, the number of MPs in Lok Sabha may be frozen at the present number of 543, which would ensure no disruption to the current representation of various States. This would maintain and uphold the federal principle. One-third reservation for women can be provided out of the existing 543 seats. The number of



MLAs in each State may be increased in line with the current population to address the democratic representational requirement.

UNITED AND FREE

India needs unity, not uniformity; dissent must not be seen as divisive

Prime Minister Narendra Modi's Independence Day speech, his thirteenth, was delivered within an entirely new political context, shaped by the recent student protests that led to the resignation of his Education Minister. The protests may have waned, but their underlying and lingering reasons for the unrest remain a matter of serious concern for the country. Mr. Modi sought to offer hope, inspiration and purpose on the one hand while, on the other, built a new phantom labelled 'dimagi naxals', who, he said, influenced policymaking and required purging. The speech was specifically addressed to the young citizens of the nation. Mr. Modi repeatedly stressed the need for big dreams, firm resolve and rapid execution, arguing that India could no longer think in incremental terms. He promised skill training for one crore youth over the next year to prepare India for the artificial intelligence era; free online coaching for competitive examinations to reduce the burden on families and improve access to opportunities; and renewed the government's emphasis on innovation, quantum technology, space, robotics, data centres and other emerging sectors. Mr. Modi reiterated his commitment to self-reliance in defence production, including advanced technologies such as drones and next-generation defence systems. All Indians would naturally appreciate these promises and the statement of purpose.

Whether Mr. Modi wanted, or tried, to build a unified national approach towards these challenges and their management is doubtful. India's progress is a continuum that should ideally have a compounding effect with each subsequent year. Comparing, in absolute terms, achievements before and after 2014, when he became Prime Minister, is neither statistically relevant nor politically prudent. The fact about India as it enters the 80th year as a free nation that fought off colonialism is that its challenges are unprecedented. It has a massive young population entering the workforce even as technology is disrupting life and work as never before. What India needs is an all-hands-on-the-deck approach, requiring a unified political will among parties and stakeholders that is unaffected by electoral contests. India also needs an indigenous understanding and philosophy of development rather than trying to mimic the techno-capitalism that is rattling advanced economies. This is a point that was underlined by the Rashtriya Swayamsevak Sangh chief Mohan Bhagwat in his Independence Day speech. Mr. Modi clearly sees the challenges; but he also sees, unfortunately, an enemy in every critic. As he leads the country into a new year of independence, perhaps he could consider new ideas, including those from his critics, instead of amplifying divisive ones.

CENSUS QUESTIONNAIRE SEEKS DATA ON PARENTS' RELIGION, PLACE OF BIRTH

The questionnaire or the schedule for the population enumeration phase of Census 2027, which has gone live in Ladakh and snow-bound areas of three other States ahead of the rest of the country, seeks information on religion, date of birth and place of birth up to the village level of both the father and mother, according to the questions seen by The Hindu.

Under the data head "Family Particulars," the questionnaire also has an option to record the place of birth of the father and mother if they were born outside India. Other than the six religious categories — Hindu, Christian, Sikh, Buddhist, Muslim and Jain — respondents can record "other religion" in a separate column.



Scheduled Caste and Scheduled Tribe respondents can choose their caste from a predetermined drop-down menu, while all others will have to type the caste name in an open field. This is Independent India's first caste enumeration. Question 10 (C) says: "If not SC/ST in this State/UT-Enter Caste name." There are two other options besides the caste field: "Does not want to declare Caste" and "No Caste." The data fields are marked "mandatory."

The Registrar-General and Census Commissioner of India on August 14 notified a set of 40 questions to be asked during the population enumeration phase, or the second phase of the Census, adding 13 new questions or data fields that were not part of the Census 2011 questionnaire, which had 29 questions.

Some of the additional questions, such as particulars of mother and father, Aadhaar, mobile, voter ID and driving licence details, mirror those asked in the rehearsal form for the National Population Register (NPR) in 2019. The NPR, which was initially proposed to be updated with the first phase of the Census, has been put on the back burner amid opposition from political parties and civil society members, over concerns that the data can be used to create a country-wide National Register of Citizens (NRC).

The open-field methodology to record caste has been questioned by the Congress. On Tuesday, Congress leader Jairam Ramesh, in a post on X, accused the government of sabotaging the caste Census. "The PM had made a complete U-turn on April 30, 2025 and announced that a caste census — which he had earlier attacked as an "urban naxal" idea — would take place. Now he has done another U-turn on his earlier U-turn and without saying so has buried the idea of a caste census. He is an U-turn ustad," he said.

The open-field method had resulted in the 2011 Socio-Economic Caste Census (SECC) returning over 46 lakh different "caste names". Significantly, the government has consistently maintained over the last decade that the data were unreliable because of "errors" in data collection.

AWAITING ANSWERS

Student agitations in Ranchi reveal angst over flawed examination processes

When the route up the economic ladder in society is limited to an ever-narrowing range of options in the public sector, and the process of gaining entry through entrance examinations becomes tainted, angst and agitation are the results. This is why students in Jharkhand, loosely organised into two platforms — the Jharkhand Public Service Commission (JPSC)-Jharkhand Staff Selection Commission (JSSC) Abhyarthi Nyay Manch and the JPSC-JSSC Reform Manch — have been protesting in Ranchi for over three weeks. The trigger was the July 2 result of the JPSC's 14th Combined Civil Services preliminary examination, which shortlisted 2,204 candidates from about 3.5 lakh aspirants for 103 posts. Aspirants pointed to undisclosed category-wise cut-offs, oddities in the merit list, a widely circulated OMR sheet on which an ostensibly successful candidate had attempted fewer than half the questions, and the fact that the conducting agency had been blacklisted in May 2025. The two platforms differ in their political leanings and have sought to negotiate separately with the government, but both want the cancellation of the disputed JPSC and JSSC exams, a CBI investigation and prosecution of officials, besides the reconstitution of commissions and a predictable examination calendar. The Jharkhand Mukti Morcha-led coalition government has responded with CID raids, arrests, resignations in the JPSC, and a cabinet committee. On Monday it went further, announcing the cancellation of all examinations conducted



since 2014 by the outsourced agency, TSR Data Processing, which might help assuage the agitating students but could leave those who cleared the examinations fairly in the lurch.

The rot in the exam system is deep-rooted. Since the State's formation in 2000, results have frequently been delayed and cycles have been bunched up many times. In a recent JSSC exam, an SIT reported no organised leak despite CID reports that described money changing hands for pre-examination access. These have eroded students' trust in the government; hence the demand for a CBI probe. The 2003 and 2005 exams were subject to CBI scrutiny but the cases are still pending. Yet, the Hemant Soren-led government should concede this politically unpalatable demand, along with other steps, including a fixed exam calendar, and fair and transparent marking with clear cut-offs and time-bound results. Jharkhand is one of India's poorest States, and its mineral wealth has not led to sufficient employment. With youth forced to rely on monsoon-dependent agriculture and allied activities, a government job offers a steady option. Aspirants spend years in coaching centres and libraries in pursuit of this. The youth deserve not only a fair recruitment system but also a government that diversifies their options for gainful employment.

GIRLS CONDITIONED FROM CHILDHOOD TO TAKE UP DOMESTIC BURDEN

The time women spend on housework begins to rise around the age of 10 and reaches a peak of nearly 460 minutes a day around age 30

In a recent interaction with women aspiring to become entrepreneurs in rural Haryana, it was found that other than social and cultural norms, the biggest practical problem constraining the women's ability to do more paid work was that a large share of their time was tied up in cooking and completing household chores. Strikingly, their daughters, rather than their sons, were already sharing this burden by helping them in the kitchen and other chores. The next generation, it seemed, is already learning to reproduce the gender gap in invisible, unpaid work.

India's Time Use Survey (2025) highlights that the division of labour that emerges in adulthood begins much earlier, through childhood conditioning. What starts in childhood widens with age, reaching its peak in the prime working years.

The time women spend on housework begins to rise around the age of 10 and continues through the late teens and twenties, reaching a peak of nearly 460 minutes (7.5 hours +) a day around age 30. The male curve, however, never crosses 65 minutes at any age between six and 75. Adolescence, in this sense, is not separate from adulthood; it is when the adult pattern begins to take shape. Data shows that at age six, Indian boys and girls spend almost the same amount of time on domestic and care work at about five minutes a day. Their trajectories remain relatively close through early childhood. Thereafter, however, they diverge sharply.

Around age 10, the girls' curve begins to pull away. Girls spend about 15 minutes a day on domestic and care work at age 10, 75 minutes at 15, and around 130 minutes by age 17. Boys, meanwhile, move from roughly five minutes at age six to only about 17 minutes by the end of childhood. The result is a dramatic widening of the gender gap. The girl-to-boy ratio in unpaid work rises from 1.6 among children aged 6–9, to 4.5 among those aged 10–14, and to 7.5 among adolescents aged 15–17.



Little control over time

The cost is leisure. Between ages six and 17, girls' housework rises by roughly 124 minutes a day, while their leisure time falls by around 115 minutes. For boys, the decline in leisure is much smaller but the time they spend on housework changes relatively little.

This matters because the cost of girls' domestic work is often framed primarily as a trade-off with schooling and education. But data shows that girls, in fact, are spending slightly more time on learning than boys at most ages. They, therefore, remain in school but still pay a substantial price in leisure time that could be spent on sport, friendships, rest, exploration and simply having discretionary control over their own time. These are not economically irrelevant activities. They are part of how children build confidence, social networks, physical capability and even a sense of agency, all of which influence their ability to build career trajectories later in life.

Cooking lies at the centre of this divergence. Among adolescents aged 15–17 years, 42.4% of girls report cooking, compared with only 2.9% of boys. Girls in this age group spend close to an hour cooking, while boys spend just two minutes. Cleaning and laundry also become increasingly gendered, with wide gaps in both participation and time spent. The only tasks where adolescent boys match or exceed girls are farm work and shopping; activities that are more outward-facing (the field and market), rather than inward-facing into the kitchen.

Between childhood and adulthood, therefore, girls are being trained for the household while boys are being trained for the world outside. This helps explain why childhood conditioning can later appear as an "efficient" gendered allocation of household work.

One of the clearest manifestations of these gendered expectations is women's absence from the labour force. In the 2025 PLFS, childcare and domestic responsibilities were the single most-cited reason women gave for staying out of the labour force, reported by 52.5% of urban women and 40% of rural women, compared with less than 1% of men.

Most policy interventions address women's unpaid work in adulthood through childcare, community kitchens, safe mobility infrastructure, flexible work and social protection, among others. But the Time Use Survey suggests that policy must also start much earlier, by addressing the unequal assignment of domestic work between boys and girls.

The objective is not to remove domestic work from children's lives, but to remove its gender assignment. Schools can help by giving every child, boy or girl, equal opportunities to learn practical life skills, from cooking and home management to stitching, carpentry and financial management.

India has invested heavily in keeping girls in school and improving their educational outcomes, but equal attention must be paid to what happens to their time outside school. Otherwise, by the time young women enter the labour market, years of gendered conditioning and unpaid work may already have narrowed their choices. If we want a different workforce tomorrow, we may need to start by giving boys and girls a different childhood today.

BIHAR'S ALCOHOL BAN HAS BEEN A SUCCESS FOR SOCIAL WELLNESS, DATA SHOW

Recently, a report titled 'Macro Perspective of Bihar's Development Achievements, Unfinished Agenda, and the Way Forward' presented at the India Policy Forum 2026 received widespread media attention. While it is a good and timely report, one of the recommendations it makes is



flawed from public health and social development perspectives: that the State of Bihar should lift its alcohol ban.

To this end, the reports' authors have argued that the ban has not really led to a decrease in violence against women and that the ban cost the State valuable revenue. However, these contentions are incorrect and incomplete, respectively.

Caution with crime data

On the first: crime data from the National Crime Records Bureau are often used as a proxy for the most severe forms of violence against women. Per the report, the total number of crimes reported against women has increased over the years in Bihar and that this rise is not punctuated by the alcohol ban. However, the crime data do not cover all violence. Often, only severe violence is reported as crime. Instances of violence perpetrated by family members, friends, and those close to the victim in the community are also rarely reported. As a result, several instances of violence are unreported in this data.

While useful, crime data should also be used with caution. An increase in the total number of crimes 'reported' against women can be explained by well-known secular improvements in crime reporting in India, to de-stigmatisation, to public awareness, to better legal aid, and to efforts by the law enforcement. A rise in reporting is not synonymous with there being more crime against women per se.

Using a blanket outcome such as the total number of crimes against women is also problematic. Only certain crimes can be tied to alcohol use among violent perpetrators. An appendix figure in the report also shows that the incidence of rape in fact decreased or somewhat flattened out after the alcohol ban, especially until 2020, when the COVID-19 pandemic began. To understand policy effects, specific outcomes tied to how the policy is intended to act will be better than blanket outcomes.

Assessing a ban

Evidence generation and synthesis involve description, association, and causation. While descriptive evidence helps allocate resources and association helps identify patterns, neither can drive policy action, especially for interventions. Ideally, causal evidence should drive policy action. Well-conducted quasi-experimental studies designed to answer that question — e.g. "how much did the alcohol ban reduce violence against women?" — would be the way to go. An emerging body of literature on how the ban has affected violence also includes a couple of quasi-experimental evaluations with better validity for causal claims. This literature supports two important conclusions.

First, the majority of these studies indicate that since the ban, intimate partner or spousal violence against women has decreased substantially in Bihar compared to decreases in other States in the same period, after accounting for several factors that could influence this relationship. One of these studies, in *The Lancet Regional Health* in 2024, concluded that the ban had prevented more than 21 lakh cases of violence. While there might be some differences with respect to the extent of reduction across physical, sexual, and emotional violence recorded by different studies, the reduction in intimate partner violence overall is clear.

Second, there is a limited number of studies investigating the effects of bans on crime outcomes. That said, the sole peer-reviewed quasi-experimental study on the topic, published in mid-2024,



noted a significant drop in the number of assaults on women. More and better research is certainly required to tie the alcohol ban to crime outcomes.

Studies have also assessed the effects of the ban on non-communicable disease outcomes such as hypertension, diabetes, and obesity and have found substantial reductions among men. The aforementioned The Lancet study also noted that the ban prevented 18 lakh cases of overweight/obesity among men.

Taken together, the current quasi-experimental epidemiologic literature does not support the claim that the ban has not worked.

Distracting binary

Further, the argument about lost State revenue is based on an incomplete assessment. The losses worth “14% of the State revenue” need to be balanced against the medium- and long-term economic gains to society from better population health, safety, and wellbeing.

Health economic evaluations of the Bihar alcohol ban are key and are currently missing, although a 2019 estimate in the International Journal of Drug Policy estimated that alcohol use in India is associated with “an average loss of 1.45% of the gross domestic product per year to the Indian economy”, or around ₹98 lakh crore, after adjusting for tax receipts. The social value of losses has also been estimated to be more than three-times the economic gains from alcohol excise taxes.

Even if the ban is to be lifted, doing so must not undo the health and social benefits it has achieved. The more relevant question to ensure this is: over the last 10 years, have mental health and addiction services scaled up, public education and awareness increased, and employment and educational opportunities expanded?

Most importantly, ‘ban’ or ‘no ban’ are not the only policy alternatives. The last 70 years of alcohol research worldwide, endorsed by all major clinical and public health organisations, including the World Health Organization, suggest a veritable menu of alcohol control policy options. Policies that restrict alcohol availability, such as rationing systems, could be a softer intermediate step, to be complemented with policies to control access, economics, and education. In other words, instead of debating lifting the ban, the focus should be on considering whether other, less restrictive and enforceable policy options will be better.

TRIAL BY FIRE

West Bengal should rebuild its crumbling, hazardous infrastructure

What is it with West Bengal and fires? Since 2025, there have been major fires, in hotels and in godowns, claiming some 65 lives, many of them poor and migrant workers and pilgrims. The State seems to be an egregious case of the generally poor fire safety record of Indian factories, industrial facilities as well as cities and towns built on top of greed, a disregard for laws, corruption, and scant respect for lives and property. The Shikha Inn was housed in a century-old building on Mirza Ghalib Street in Kolkata, which apparently had several hotels — on each of its five floors. It was obviously not built to be a hotel. Shikha Inn is typical of what happens in India, where old buildings with electrical systems designed for a certain load are quickly repurposed, and modern equipment is added without any consideration of whether the system can handle the air-conditioners, washing machines, heaters and induction stoves. The August 17 fire in Tarapith was apparently electrical too and the killer was the smoke. The fire spread rapidly because the pilgrim hotel used



flammable materials extensively. Rituraj Hotel, which caught fire in April 2025, had also been repurposed. With just one stairway, the fire on the first floor cut off escape, and, just as in the Mirza Ghalib Street fire, smoke trapped those above.

For the new BJP government in West Bengal, the accidents have provided more fodder for its attacks on the TMC. Though Chief Minister Suwendu Adhikari called the Kolkata fire “impossible to ignore”, he nevertheless blamed a “legacy of negligence”. This may well be true but serves little purpose. The present government has, similar to its predecessor, a dedicated Fire Minister. There have been promises of robust action such as a Statewide safety audit, but the focus seems to be more on the TMC than on corrective action. Mr. Adhikari should dismount the campaign horse and look at the elephant in the room — crumbling infrastructure. In its first 100 days, the government has been rather silent on the creaky infrastructure of West Bengal — a State with a rich history of urban life, industrialisation, culture and progressive politics that once led the nation, but now lags behind much of India in roads, buildings, amenities and governance. Urban renewal is the stock-in-trade of the BJP across India and West Bengal will be well served by a State BJP that adopts it. Heritage buildings and conservation have their own value, including for tourism, but require careful planning to suit today’s needs. Mr. Adhikari should place governance above petty politics and focus on infrastructure.

NMC PROPOSES NATIONAL LICENCE TO PRACTISE MEDICINE

The National Medical Commission (NMC) has proposed a registration system under which a medical practitioner, once registered with a State Medical Council, would be eligible to practise across India without obtaining fresh registration or a licence in another State. The practitioner would be allotted a Unique Identification (UID) number in the National Medical Register.

The proposal is part of the draft Registration of Medical Practitioners and Licence to Practice Medicine (Amendment) Regulations, 2026, notified by the NMC on August 11. The Commission has invited objections and suggestions for 30 days from the date of notification. Under the proposed system, State Medical Councils would continue to scrutinise applications and grant registration and licence for doctors to practise, but the approval would be reflected in both the State Medical Register (SMR) and National Medical Register (NMR).

The draft rules seek to amend the 2023 regulations governing registration and licensing of doctors, routing the process through a unified registration portal of the NMC’s Ethics and Medical Registration Board.

UID to have State code

The UID assigned in the register would incorporate the State/Union Territory code and the practitioner’s SMR number, the NMC said. Once the State Medical Council grants registration and the Ethics and Medical Registration Board allots the UID, the doctor would not require fresh registration or a separate licence to practise in another State or Union Territory.

The draft also proposes automatic electronic synchronisation between the national and State registers so that a change made in one register is reflected in the other. The NMR would serve as a central repository of registration details as well as disciplinary proceedings, including suspension, removal, and restoration of registration.

The NMR would also carry information on whether a doctor’s licence is active or inactive, and details of disciplinary action taken, if any. The Ethics and Medical Registration Board and the NMC



would have powers to seek records and monitor State Medical Councils to promote uniformity and transparency in regulation.

The proposal retains the five-year validity of a licence. If a doctor does not apply for renewal within three months of expiry, the registration will be marked inactive, and the practitioner will not be entitled to practise medicine. The inactive status would reflect in the NMR.

While seeking to create a nationwide registration framework, the draft leaves disciplinary jurisdiction primarily with the State Council in whose territorial jurisdiction the alleged professional misconduct, unethical conduct or medical negligence occurred.

The State Council would have the power to inquire into and decide the matter, and record the outcome against the practitioner's credentials in the online register. Where disciplinary action is recommended by a State Council other than the doctor's primary registering council, the action would be reflected in the NMR and automatically updated in the State register of the council of primary registration.

HOW WILL GAGANYAAN'S THERMAL SHIELD PROTECT THE CREW?

The atmospheric phase of all space missions is challenging for both ascending rockets and descending space capsules.

As the rocket lifts off from the earth and heads towards its orbit, it accelerates slowly through the atmosphere to keep the mechanical loads on the vehicle to a minimum. When a space capsule, like the Gaganyaan crew module, re-enters from its orbit around the earth, it will hit the atmosphere at a blistering speed of 7,500-8,000 m/s. More than 99% of this kinetic energy will be dissipated into the atmosphere as heat energy. However, a small portion directed back towards the module will still be intense enough to melt it if it is not protected by a robust thermal protection system (TPS).

Why is re-entry challenging?

Compared to rockets, re-entering modules have a unique set of challenges. Foremost among them is that once the descent begins, there is no provision to abort the mission. Another constraint is the limited role for the crew to intervene and correct any system non-conformance. This is because atmospheric descent is incredibly fast and the deceleration forces change constantly. Human response times are simply too high to manually correct any sudden system abnormality. Hence, all the systems should be made robust enough to withstand the scorching conditions of re-entry. During re-entry, the exterior of the Gaganyaan crew module will encounter temperatures as high as 1,800° C in some regions. To withstand this heat, the module will rely on its protective external heatshield. Despite being just 30-35 mm thick, this TPS will perform the critical task of maintaining the module's structural integrity by keeping its temperature safely below 150° C.

How does TPS protect the crew module?

A TPS is predominantly classified into three types depending on how it removes heat: ablative, radiative, and heat sink. An ablative TPS is a single-use TPS that removes heat energy by sacrificing its layers through chemical and physical processes. Specifically, the TPS will absorb extreme quantities of thermal energy and itself chemically decompose into a protective layer of solid char and outgassing vapours. This process physically carries heat away from the module as the material burns off. In addition, the escaping gases create a cooler boundary layer that acts as a



buffer, blocking intense heat from being transferred into the module. For a simple metaphor, it is like a block of wax that absorbs heat by melting and shedding its outer layers. Carbon phenolic and silica phenolic are good examples of an ablative TPS. India's maiden re-entry mission, the 'Space Capsule Recovery Experiment' (SRE), used a carbon phenolic ablative to protect the module's nose cap, where heat flux was the highest. The Crew Dragon capsule of SpaceX uses an ablative named phenolic-impregnated carbon ablator, or PICA, a lightweight carbon fibre matrix filled with a phenolic resin.

The LVM-3/CARE mission that the Indian Space Research Organisation (ISRO) conducted in 2014 successfully demonstrated crew module reentry using an ablative TPS, establishing the foundational technology that is now being used in the Gaganyaan programme.

A radiative TPS setup works by absorbing the extreme heat of re-entry, then releasing it back into space as electromagnetic radiation, primarily in the infrared spectrum but also as visible light when it is extremely hot. This is like a traditional clay tandoor oven, where the clay walls absorb heat from the burning charcoal and radiate it back as infrared energy to bake the food.

A radiative TPS will remain intact and withstand the heat without melting or degrading, making it ideal for reusable re-entry vehicles.

Third, a heat sink TPS protects itself by absorbing the heat energy like a giant sponge and raising its own temperature, but without melting or changing its phase in any other way. This is what happens when you pour hot tea into a copper cup. The cup will absorb the heat from the tea and become hot — but it also stays solid. In fact, copper and aluminium are good examples of heat-sink TPS setups.

Why does the crew module use an ablative TPS?

The Gaganyaan crew module uses an ablative TPS because it is a proven, highly robust solution tailored to the module's single-use design philosophy. An ablative TPS can withstand an extreme thermal load without requiring complex or delicate surface maintenance.

Ablative heat shields can easily handle fluctuating heat loads to protect the structure underneath. Radiative systems are less forgiving, as any design errors can quickly cause dangerous overheating. So by avoiding expensive manufacturing, specialised inspection and complex installation processes associated with a reusable radiative TPS, ISRO is opting for a safer, more cost-effective choice.

Built on ISRO's rich heritage in ablative technology and lessons learned from the SRE and CARE missions, the Gaganyaan crew module is engineered to safely bring India's astronauts home through the inferno of reentry — with its first uncrewed test flight launching shortly.

'DESPITE REPUTATION, INDIA'S PER-UNIT SPACE LAUNCH COST HIGHEST'

India spends more to put a kilogram of payload into orbit than any other major spacefaring nation, marring its public image as a cost-effective launcher, according to a new peer-reviewed analysis of more than six decades of rocket launches published in Economics Letters.

The authors, Alessio Terzi of the University of Cambridge and Francesco Nicoli of Politecnico di Torino, estimate that it cost \$13,302 to send a kilogram to low-earth orbit on Indian rockets in



2025 — higher than Europe (\$9,897), Russia (\$6,682), China (\$5,809) and Japan (\$5,287), and the U.S. (\$3,225). The global average was \$3,868.

The authors say the high cost is due to ISRO mostly flying small rockets, due to which the fixed cost of each launch is spread across very little payload. The study finds that only the U.S. and Europe have shown a statistically significant experience curve — meaning costs falling steadily as cumulative launches grow — since 2010. India, the authors write, simply doesn't launch often enough to bring its costs down.

The analysis comes as India is trying to increase the number of launches through private industry. Since opening the sector in 2020, the country has registered about 400 startups with its regulator, IN-SPACe. In July, Hyderabad's Skyroot Aerospace flew India's first privately built orbital rocket, making India only the third nation — after the U.S. and China — with private orbital launch capability.

But while IN-SPACe had projected 30 launches between January 2024 and March 2025, ISRO managed fewer than half. India recorded only five launches in 2025. The gap is pushing Indian satellite operators abroad. In November 2024, NewSpace India flew GSAT-N2, a 4,700-kg communications satellite, on a Falcon 9 from Cape Canaveral — ISRO's first use of a SpaceX rocket. This spacecraft was heavy for India's LVM-3 rocket and Europe's Arianespace had no operational launcher available. Two months on, Bengaluru startups Pixxel and Digantara placed India's first private commercial satellites in orbit aboard a SpaceX rideshare from California. Other startups such as GalaxEye have also booked Falcon 9 slots for 2026.

The dependence matters because launch cost, the authors argue, is becoming a geopolitical vice: "SpaceX ... was responsible for 75% of global payload to orbit in 2025 ... going forward, it is not implausible that a U.S. administration might decide to weaponise this dependency or use it as a bargaining chip to coerce other nations."

INDIA'S LUNAR FUTURE

"The past is a foreign country; they do things differently there," the English novelist L.P. Hartley wrote famously in his 1953 novel *The Go-Between*. In a peculiar twist, the same cannot be said of the Moon. It is not a foreign country, or even a foreign world: the U.S.'s manoeuvring to beat China to the satellite has increasingly meant the moon is an extension of the Earth's geopolitics and political culture.

At the ninth India-U.S. Civil Space Joint Working Group meeting at Indian Space Research Organisation (ISRO) headquarters last week, NASA invited the organisation to participate in its 'Moon Base' programme, ostensibly as part of the two countries' Artemis Accords partnership. According to NASA, the facility will be built piece by piece near the Moon's south pole, where sunlight is available for longer durations and where permanently shadowed craters hold significant water-ice deposits. The target is for it to be humankind's first outpost on a new celestial body, taking shape around 2030.

NASA is leaning heavily on private industry for this, having already awarded contracts to Astrolab (worth \$219 million) and Lunar Outpost (\$220 million) for lunar terrain vehicles, Blue Origin (\$188 million) for delivery task orders, and Astrobotic, Firefly Aerospace, and Intuitive Machines (\$600 million) for four robotic missions to the Moon to deliver equipment. Intuitive is also developing a relay satellite under a separate contract.



Further, as part of NASA chief Jared Isaacman's overhaul of the Artemis programme earlier this year, in no small part responding to the Trump administration's December 2025 space policy calling for securing U.S. interests in cislunar space, the profiles of the Artemis III and IV Missions changed. Now, Mission III will be a crewed test flight in Earth orbit in 2027 and Mission IV will attempt the first lunar landing under the programme in 2028. Taken together, the 'Moon Base' is effectively the next phase of the new Artemis programme, tasked with keeping — intermittently at first, and eventually continuously — Artemis astronauts on the Moon.

Deepening partnership

Since India signed the Artemis Accords in 2023, NASA and ISRO have engaged regularly across several areas. NASA has trained India's astronaut candidates for the 'Gaganyaan' human spaceflight mission. In 2025, Prime Minister Narendra Modi and U.S. President Donald Trump jointly announced a broader strategic technologies framework, including spaceflight.

ISRO also launched the NASA-ISRO Synthetic Aperture Radar, a major scientific mission that has been a decade in the making. NASA instruments are slated to fly on forthcoming Chandrayaan missions just as they did on the first three.

While it seems almost facile to suggest the U.S. also engage with China considering the latter's formidable spaceflight capabilities — many industry experts agree the age of U.S. dominance in spaceflight is in its twilight years — the two countries' actions mean that the lines they have drawn on the Earth are set to be extended to the Moon, and that will pose new challenges for India.

In 2021, China and Russia announced plans to cooperate on an 'International Lunar Research Station' (ILRS), which China described as a long-term lunar science and technology facility, also to be built near the south pole and with a targeted deadline of 2035. Like the Artemis Accords, the ILRS is an international effort, currently involving 17 countries and organisations and more than 50 research institutions worldwide.

Earlier this year, when NASA solicited proposals for payloads to send to the Moon, it said it welcomed foreign entities "except those with bilateral ties to China". NASA's FY2027 budget request has also described the 'Moon Base' as a means to establish U.S. "superiority on the Moon" and to preserve U.S. leadership in space — language with more strategic overtones relative to the agency's pre-Trump rhetoric.

Given how much of U.S. policy is shaped by out-competing China, India's gains or losses will not be restricted to its space programme either. For instance, ISRO's engagement with NASA has arguably become more politicised thanks to NASA's own politicisation by virtue of having to respond to China's ILRS plans. Contrary to the focus areas of these bodies through much of their histories, future discussions would be poorly served by treating their engagement on the Moon as purely exploratory.

For example, the Artemis Accords do not say a signatory cannot cooperate with non-signatory countries. (In June, ISRO also hosted the BRICS Heads of Space Agencies meeting in Bengaluru with China among the participants). However, the Artemis programme itself is increasingly concerned with infrastructure, and building one's components, equipment, tools, etc. to be interoperable with that infrastructure will thus extend geopolitical alignments on the Earth to the Moon.



Suppose China invites India to join the ILRS in 2035. (In fact, the Moon could become one of the few domains in which India and China may have a practical incentive to cooperate on the Moon even while competing on the Earth, and India should endeavour to preserve rather than foreclose that possibility.) The government can say 'yes', but if China uses different communication protocols, data formats or operational procedures, India will face a tough choice: to build a second, expensive set of capabilities with China or to persuade China to change its systems to be interoperable with American designs.

Different ecosystems

That is, the U.S.-China competition means India's increasing embedding in one technological ecosystem will also increase the cost of engaging with the other in future. At the same time, India will be mistaken to avoid deepening ISRO's relationship with NASA. The U.S.-led ecosystem is much larger and more technologically diverse than the one led by China. But India may nonetheless have to reconsider its strategic autonomy in the spaceflight domain — particularly if the U.S.-China rivalry changes substantially over the next two or three decades. It should certainly steer clear of any dependencies that could hold back its own space programme because of U.S. objections.

In fact, one useful way to achieve this that also presents yet another opportunity for Indian leadership in space is to push for open international standards that allow nations to retain sovereign control over specific hardware and software components without hampering collaborations in space. Such diplomacy could foster interoperability between the lunar blocs and allow India to retain its strategic autonomy.

If it does not, the Moon may cease to be a foreign world but India may find itself a foreigner there.

ARMY TO READY EX-AGNIVEER LIST FOR CAPF POSTINGS

The armed forces are likely to compile a list of Agniveers eligible for recruitment into the Central Armed Police Forces (CAPFs) under the government's reservation policy for the temporary recruits, a government source has told The Hindu.

The first batch of around 25,000 Agniveers is scheduled to retire from the Army by December.

While the CAPFs have reserved 50% of constable vacancies for former Agniveers, the Army, Navy, and Air Force will furnish details of eligible personnel, indicating that ex-Agniveers may not be able to apply directly for recruitment under the reserved quota, the source said.

Although recruitment into the armed forces is not based on caste reservations, the official said that the existing quotas for the Scheduled Castes, Scheduled Tribes, and Other Backward Classes will continue to apply for recruitment into the CAPFs.

Longer service tenure

The service tenure of personnel in the CAPFs extends up to the age of 60, whereas those in the armed forces retire much earlier. "During deliberations, it was felt that, if given a choice, many Agniveers would prefer to join the CAPFs rather than continue in the armed forces because of the longer career span and greater job security," the source said.



“Therefore, it has been decided, at least initially, that the armed forces, beginning with the Army, will provide the CAPFs with a list of eligible candidates for recruitment under the reserved quota,” the source added.

Over the past month, CAPFs such as the Central Reserve Police Force (CRPF), Sashastra Seema Bal, and Assam Rifles have issued notifications, specifying 50% quota for the ex-Agniveers. As reported by The Hindu, the Border Security Force was the first to issue such a notification.

For instance, the annual intake of constables in the CRPF, the largest CAPF, is typically around 7,000. Under the new recruitment framework, about 3,500 of these vacancies will be reserved for ex-Agniveers. If all the reserved vacancies are not filled during the first phase of recruitment, the unfilled posts will be carried forward and added to the remaining 50% of vacancies to be filled through the open recruitment process in the second phase.

The ex-Agniveers will be exempted from written examinations, physical standard tests, and physical efficiency tests, the notifications said.

Recruitment to the post of Constable (General Duty) will be carried out through direct recruitment, with 50% of vacancies in every recruitment year reserved for ex-Agniveers, the CRPF’s notification, issued on July 27, said.

“In the first phase, the concerned nodal force will conduct recruitment to fill the vacancies earmarked for ex-Agniveers, or in accordance with instructions issued by the Ministry of Home Affairs (MHA) from time to time. In the second phase, recruitment for the remaining 50% of vacancies will be conducted through an open examination under the existing recruitment provisions,” the CRPF said.

LOSING FOREST FOR TREES

India is counting trees when it should be restoring forests

A performance audit by the Comptroller and Auditor General (CAG) of the Green India Mission (GIM) has found that a scheme conceived to heal India’s forests had, across a decade, achieved almost nothing it set out to do. Instead of improving forest quality over 1.4 million hectares, the mission only managed 0.11 million — not even a tenth of the target. On expanding forest cover, the mission barely scraped together four per cent. The Compensatory Afforestation Fund Management and Planning Authority (CAMPA) channels money collected from industry for diverting forest land into afforestation, while the Mahatma Gandhi National Rural Employment Guarantee Scheme, now rebranded as VB-G RAM G funds rural wage labour that can be used for plantation and land-restoration works, but GIM’s intended convergence with these schemes never materialised. The mission was one of the eight pillars of the National Action Plan on Climate Change, unveiled in 2008, and the instrument through which India promised the Paris Agreement an additional carbon sink of 2.5 billion to 3 billion tonnes by 2030. Its animating idea was ecological — biodiversity, water, sequestration, and the revival of habitat. GIM however seems to be on the back burner and, for all practical purposes, replaced by a tree plantation drive called ‘Ek Ped Maa Ke Naam (A Tree in the Name of Mother)’. Launched in 2024, the government reports planting 140 crore saplings so far, but the latest forest data expose the gulf between a tree and a forest. The India State of Forest Report 2023 records a gain of 1,445 square kilometres in green cover but only 156 sq km of it is true forest. The rest, 1,289 sq km, is ‘tree cover outside recorded



forests.' Within the recorded forests, dense canopy is thinning into scrub. Ergo, India is planting more and foresting less.

Few examples encapsulate this as much as the controversy over the Aravallis. Arguably the country's most degraded range — its hillocks quarried away, its native growth overrun by the invasive 'vilayati kikar' (*Prosopis juliflora*) — it is now to be rescued by a 'Green Wall' of fresh planting. But these arboreal conscripts cannot undo the damage from years of mining, halt encroachment, or summon back an ecosystem that took millennia to form. Restoration is not landscaping. The CAG's instrument is accountancy: it can count hectares and rupees, not the worth of a living forest; and its assessment cannot always capture the practical challenges of implementing missions. However, its verdict still lands. A mission to restore India's forests has been allowed to wither while the state busies itself counting trees.

THE WARRIOR TRADITION

They are difficult to miss. In electric-blue robes, with towering conical turbans rising above their heads and steel quoits, insignia and rosaries woven into them, Nihang Singhs move through a gathering with swords, spears and other traditional weapons hanging from their bodies. Their appearance is at once religious, martial and theatrical, but for the Nihangs, little of it is ornamental.

The community has returned to public attention after Shiromani Akali Dal president and former Punjab Deputy Chief Minister Sukhbir Singh Badal was attacked with a kirpan at the Mata Sahib Devan Ji Gurdwara in Nanded, Maharashtra, on August 13. The accused, identified as 62-year-old Jaspal Singh, had been serving at the gurdwara for two years and was described as a Nihang.

Nihangs were a conspicuous presence during the farmers' agitation at Delhi's Singhu border in 2020-21 and more recently at the student protest at Delhi's Jantar Mantar in July 2026. Their presence, as much as their distinctive appearance, drew attention.

Their origin is associated with the creation of the Khalsa Panth by the 10th Sikh Guru, Gobind Singh, in 1699. Traditionally regarded as 'Guru ki fauji', or the Guru's army, they represent the armed warrior tradition within Sikhism. The name Nihang is commonly associated with fearlessness and freedom from worldly attachment; another interpretation traces it to the Persian *nahang*, or crocodile, invoking the creature's ferocity and toughness.

Historical roots

The tradition took shape in an age when Sikh communities faced repeated military persecution. Nihang warriors became mobile fighting groups, defending Sikh settlements and religious institutions against Mughal forces and, later, Afghan invaders. The martial tradition was subsequently woven into the military structures of the Sikh misls and the forces of Maharaja Ranjit Singh.

With the end of that era of warfare, their battlefield role gradually receded. But the discipline associated with it survived. Today, Nihangs are not a standing army. Their role is largely that of custodians and practitioners of a religious and martial tradition.

There is no single Nihang organisation representing the entire community. Historically divided into two broad dals, Baba Budha Dal and Taruna Dal — associated broadly with older and younger bands, respectively — both have since split into several factions. Researchers estimate there are more than 30 Nihang factions, large and small, in Punjab, making it difficult to arrive at a precise



count of Nihangs. Their mobile and decentralised nature means there is no central command or membership registry.

A person wearing blue and carrying a weapon may look like a Nihang, but the traditional order demands considerably more: bani (wisdom) and bana (attire), spiritual practice and outward discipline, explained Varinder Walia, a former editor with a Punjabi daily and professor at Punjabi University in Patiala. Daily prayers and meditation, knowledge of Sikh scripture, observance of the Khalsa code, Shastar Vidya, the traditional study and practice of Sikh weaponry, horse-riding, physical endurance and seva form part of the ideal.

Their tradition of movement and collective identity has also brought Nihangs into contemporary public life. Such appearances, historians suggest, need to be understood against the order's decentralised structure: the presence or actions of one group or individual do not necessarily represent the Nihang community as a whole.

Nanded gives this story another layer. The city on the Godavari is home to Takht Sachkhand Sri Hazur Sahib, one of Sikhism's five Takhts and the place where Guru Gobind Singh spent the final period of his life. The presence of a Nihang-managed gurdwara in the wider Hazur Sahib religious landscape is part of a much older institutional connection, even as the latest incident there has brought the community under renewed scrutiny.

The challenge in understanding the Nihangs today is to hold these two realities together. They are a living religious order, not a museum piece: their members pray, study scripture, serve food, care for horses and teach martial arts. At the same time, they carry a warrior vocabulary forged in an era when armed defence was central to Sikh survival. The battlefield may have changed, but the identity has endured.

NOISE ANNOYS

India must enforce noise pollution regulations uniformly and consistently

In a February 2025 hearing in the matter of Surendra Prasad vs State of Bihar, the Patna High Court acknowledged DJ trolleys and loudspeakers to be a major source of noise in Patna. After criticising the Bihar State Pollution Control Board (BSPCB) for failing to curb the menace, Justice Rajiv Roy directed the BSPCB to obtain reports from the police about permissions granted to operators of these noise sources and the action taken. In October, the police said they had seized equipment, levied fines, and so on over three months in Patna, Barh, and Fatuha but had taken no action in Masaurhi, a picture Justice Roy called "unbelievable" for suggesting that there were no noise violations there. In the course of these hearings, Justice Roy also summoned police officers and upbraided boilerplate affidavits, among others. The High Court's August 14 order was a continuation of this escalation, culminating — for now — in Statewide directives on the emission of high-decibel noise. Effectively, the High Court's actions illustrate how dismal enforcement has become despite the existence of comprehensive laws. Courts have repeatedly said that people have a right under Article 21 to be protected from unlawful noise. Today, with episodic enforcement having become endemic, the Patna High Court becoming a quasi-regulator is, at least as a stopgap measure, creditable.

It is absurd to expect the public to complain about every DJ or horn before the police can respond. The High Court's directions to the authorities to pursue routine rather than complaints-based enforcement and to have DJs, sound-system operators, and event halls register themselves with



the subdivisional authorities are the sort of proactive enforcement that regulating noise pollution in particular warrants. In fact, the High Court's order also touched on a practical, everyday understanding of how loud-noise violations occur when it directed loudspeakers to stop playing at 9.55 p.m., five minutes before the law's 10 p.m. cut-off, effectively allowing time for operators to wind up rather than permit the deceptively innocuous practice of carrying on past 10 p.m. because "it is just a few minutes". Loud noise is often produced by ordinary social events such as festivals, weddings, political campaigns, and religious events, and enforcing rules creates friction with people who believe they have a right to practise their culture as they deem fit. Also, governments have an incentive to tolerate, rather than antagonise, their constituents. At the same time, having operators register themselves so that officials can regulate all of them equally rather than sporadically can also eliminate selective interventions. In the final analysis, the success of the High Court's latest order should be measured by whether the State develops a consistent habit of enforcement.

SC ORDERS FRESH SURVEY, SAYS NO STATE CAN BLOCKADE TRADITIONAL ELEPHANT ROUTES

The Supreme Court on Monday directed the Centre to hold a nationwide check and take steps to ensure the free passage of wild elephant herds through their ancient corridors across States without human will or habitations blocking or impeding their natural routes.

"No State can block their [elephants] paths. Blockading elephant corridors is not the solution to human-animal conflicts. Elephants travel across many States. One State cannot come in their way and block their traditional pathways. The solutions to this [animal-human conflict] are altogether different, and not constructing blockades," Chief Justice of India Surya Kant said.

Justice Joymalya Bagchi, on the three-judge Bench with Justice V. Mohana, said elephant pathways were not State-specific, and herds travel far by nature.

"Elephant corridors have been obstructed, impeded, blocked due to some local factors. The Union of India must conduct a fresh survey and file a comprehensive report, which would include the necessary steps taken to prevent such obstructions," Chief Justice Kant ordered.

The court directed the Union government to examine allegations that fireballs, mashaals (fire-torches) and spikes are thrown at wild elephants. In 2018, the apex court had prohibited the use of fireballs, burning rods, and spikes to chase elephants and called it "barbaric and illegal".

The court also asked the government to ensure the implementation of the ban of such measures by 'hula' parties to drive away wild elephants from crops and villages. Elephants are Schedule I animals under the Wild Life (Protection) Act, 1972. They are considered a vulnerable species which receive absolute legal protection.

Appearing for the Centre, Additional Solicitor General Aishwarya Bhati agreed to conduct a nationwide survey and submit the status report. Ms. Bhati sought three months, but the court said it would list the case after eight weeks to check on progress.

'No obstacles allowed'

"Construction of any kind of obstacle or creating blockades in elephant corridors is not acceptable. We are very clear that there cannot be obstacles in the way of wildlife. No State can say that just



because crops are getting destroyed, they will have to construct obstacles on their path,” the Bench reiterated.

Justice Bagchi said the practice of using fireballs and spikes in West Bengal was prevalent because the elephants came from Nepal and through West Bengal they went to Jharkhand and other States. Chief Justice Kant said there were elephants in the Yamunanagar area of Haryana which travel to Uttarakhand and Himachal Pradesh.

SUMIT SARKAR BROUGHT ORDINARY PEOPLE, THEIR EXPERIENCES INTO HISTORY BOOKS

I did not have the good fortune of being taught by Sumit Sarkar. But like every (conscientious) modern Indian historian, I have indeed been ‘taught’ by him. His classic, *Modern India*, modestly described as a ‘textbook’, is perhaps the most well-thumbed of my many books. Here, along with colonial masters and nationalist leaders, peasants, workers, and ordinary people sprang from its pages.

This was no simple inclusion: it was a conceptual break, altering our understanding of Indian history in profound ways, acknowledging the lives and actions of millions, even their failures, as the true basis on which to understand our past. But political leaders, their actions, and the periodisations familiar to students of history could not be dispensed with altogether. Therefore, the book, despite its emphasis on the novel breakthroughs of a ‘history from below’, was sandwiched ‘between the foundation of the Indian National Congress in 1885 and the achievement of independence in 1947’, since those 60 years ‘witnessed perhaps the greatest transition in our country’s long history’. In one memorable sentence, he signalled the many unfulfilled promises of Indian nationalism: thus, the Mahatma succeeded in ‘drawing in the masses, while at the same time keeping mass activity strictly pegged down to certain forms predetermined by the leader.’

Let me not dwell on the gaping hole that Sarkar’s demise had left among historians, and focus instead on the riches he has left us. His book, *Swadeshi Movement in Bengal*, on Bengal’s (first) partition of 1905, and the nationalist movement that it spawned, was full of methodological innovations, using plays, novels, newspapers, pamphlets, in addition to the more familiar colonial archive. These materials led him to ask questions that often led to ambiguous or unsatisfactory answers. Educated unemployment and rising prices surely fuelled the anger against the Bengal partition. But the pride-inducing victory of a little ‘eastern’ nation, Japan, over a powerful ‘western’ neighbour, Russia, — the Russo-Japanese war of 1904-05 — also played its part, despite a relative ignorance in India of emerging critiques of imperialism elsewhere.

Sarkar also asked himself: how could a *Swadeshi* editorial in the *Bande Mataram* praise, in the same breath, both the labour movement and the caste system, the latter for having had ‘the true socialistic aim of keeping awake in every class of society a sense of duty to it’? Or, as he would ask later, what drew upper caste men to revolutionary terrorism in Bengal, and why has that memory endured longer than those of tribal or lower caste participants?

He was among the earliest of historians to unpack how ‘Hindu’ nationalism gradually became ‘common sense’, with consequences up to this day.

Sarkar’s task was to break out of the economic determinism and narrow positivism that was the hallmark of Marxist scholarship at the time. But the work remains unsurpassed, since it upholds the protocols of historical research, the verifiability of evidence, and as he said, ‘the constant knowledge that my conclusions remain open to revision and change’. Would a revised *Modern*



India, that more correctly reflects the scholarship of the last four decades — as many regions, social groups, practices, and events have found their historians – be at all possible in our times? How were material conditions and cultural forms to be integrated within a structured totality?

His Marxism did not come in the way of engaging with what Ranajit Guha has called the oldest (and richest) archive in India: religion. He read religion, but not as a believer; not to denigrate but to connect the celestial world to its earthly presence in meaningful ways.

In fact, Marxism enabled his interest in the 19th-century mystic (and rustic) Hindu thinker Ramakrishna Paramhansa, and the petty-bourgeois, clerical ambience within which he operated, which gave his philosophy its force and material influence, especially among the emerging, well-read, urban middle class. That contradiction needed to be explained. Sarkar linked the belated entry of clock-time into India, and the disciplinary mechanisms it generated, to the slavery of clerical labour, which paved the way for the reception of Ramakrishna.

On RSS and Left

Sarkar showed us the true meaning of engaged scholarship: when India was stunned in 1992 by the shock troops of the BJP and RSS that brought down the Babri Masjid, Sarkar and his colleagues produced a short but vital book called *Khaki Shorts and Saffron Flags*. It was the first serious historical reconstruction (based also on sensitive fieldwork) of what the RSS had become, the most formidable force on the Indian political firmament. Certainly the young people who have today given us a ray of hope should place this book at the top of their reading lists.

Sarkar, in both his writing and his political positions, was unafraid to confront the official Left and its surrender to global capital, as at Nandigram and Singur. He would have been the first to admit that proletarians have not been the grave diggers of capitalism, though he welcomed historians who showed renewed interest in labour and working class history.

I was personally honoured when this remarkable historian included me in his review of five such books. But more striking was his intellectual openness: his choices ‘provincialised’ Bengal, by acknowledging the worlds and questions that lay well beyond it – Kanpur, Jamshedpur, KGF, Bombay, the railway works.

At a time when ‘everyone’ is a historian, and we are being trained in thinking of history only as ‘pride’ in the past, we will miss complex thinkers like Sarkar even more, for his passing no doubt signals the end of an era.



SHORT NEWS

NITI AAYOG'S REPORT 'REIMAGINING SKILLING FOR VIKSIT BHARAT@2047'

- An estimated 8.7 crore Indians aged 15 to 29 were not studying, working or undergoing training in 2021, according to NITI Aayog's report 'Reimagining Skilling for Viksit Bharat@2047'. The figure points to a large section of young people who are not making a direct transition from education to employment or skill development.
- The report, based on data from the 78th round of the National Sample Survey, identifies this group as NEET youth — those not in education, employment or training, including unemployed people. NITI Aayog said this group, along with women, needs affordable or subsidised training and financial support, while skilling programmes should be linked to local demand, self-employment opportunities and emerging sectors.
- One of the concerns highlighted by the report is the weak link between formal education and employment. Only 8.25 per cent of graduates are employed in roles aligned with their qualifications, it said. Limited practical exposure and industry-aligned training continue to affect employability even among formally educated young people.
- The report said students from low-income households often cannot afford additional paid skilling alongside college expenses and private tuition. After graduation, some take up whatever work provides a stable income, even when it is low-paying, while others struggle to enter the workforce and become NEET.

VAISHYA TEKRI

- The Madhya Pradesh government has begun restoring Buddhist monuments linked to the Mauryan emperor Ashoka, starting with a fresh excavation at Vaishya Tekri.
- In his 2011 paper, *Aśoka and Buddhist Nuns: Early Buddhism in Ujjain and Malwa*, academic Peter Skilling wrote: "The largest stupa, popularly called Vaisya Tekri, is about 350 feet at its base and 100 feet high. Nearby is a smaller stupa, called Kumbhar (or Kumhar) Tekri. Both are relatively undisturbed, except for the unfortunate fact that a power line runs between them, and a giant pylon squats rudely on Kumbhar Tekri's shoulder."
- Initial excavations by the Department of Archaeology of the erstwhile Gwalior State in 1938–39 unveiled large bricks and punch-marked coins, prompting archaeologists to date the structures to the Mauryan period.
- The monument's size was only one part of what fascinated the excavators; its construction was unlike what they had encountered elsewhere. Instead of a conventional solid brick structure, the heart of the monument was made from local blackish murum, rammed hard to form the massive core. The exterior was then faced with brick masonry laid in mud mortar.

INDIA AND MAURITIUS SIGN FIVE-YEAR FUEL SUPPLY PACT

- India and Mauritius have deepened their energy partnership with a five-year agreement under which Indian Oil Corporation will supply the island nation's entire import requirement of petrol,



diesel and aviation turbine fuel, strengthening New Delhi's role as a key energy-security partner in the Indian Ocean.

— The agreement was exchanged during Petroleum Minister Hardeep Singh Puri's official visit to Mauritius on August 20-21, alongside a government-to-government memorandum of understanding (MoU) to expand cooperation in oil and gas, including petroleum product supplies, training and capacity building, and biofuels.

THE GREAT TRANSHIPMENT SCAM: GLOBAL EVASION AND ECONOMIC COSTS' REPORT

— After significantly reducing its direct dependency on Chinese products, the Trump administration, in a report titled 'The Great Transshipment Scam: Global Evasion and Economic Costs', said that more than 40 countries, including India, are part of a 'shadow transshipment network' designed to hide the true economic origin of goods produced in China.

INDIA'S CAMPAIGN FOR UNSC SEAT IN 2028-29

— India recently launched its campaign to serve the two-year (2028-29) term on the United Nations Security Council (UNSC). If elected, this will be India's 9th time on the UNSC. The election will be held in June 2027. The other contestant for the one seat from Asia is Tajikistan.

— The United Nations is divided into five regional groups representing Asia, Africa, Latin America, Eastern Europe, and Western Europe & Others (WEOG). The latter comprises the United States, Canada, Australia, New Zealand and Israel.

— The Eastern Europe group is reminiscent of the Cold War era, with the UNSC's permanent membership (P5) of the United States, United Kingdom, France and Russia also representing the victorious Allied powers, plus China.

— The UNSC also has 10 non-permanent members elected by the UN General Assembly for two-year terms. These include three from Africa, one from Eastern Europe, and two each from Asia, Latin America and WEOG.

— Five elected members retire every year, making way for a rotation among the non-permanent members.

PM CARES FUND

— Total contributions to the Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund) fell to Rs 479.96 crore in financial year 2024-25. Its closing balance, however, touched an all-time high of Rs 8,452.06 crore as the spending, too, fell to a five-year low of Rs 87.85 lakh.

— According to the latest Receipt and Payment Accounts (Audited) statement available on the PM CARES Fund portal, domestic donations accounted for Rs 479.04 crore of the total contributions while foreign donations added up to about Rs 92 lakh.

— Notably, the PM CARES Fund was registered as a public charitable trust under the Registration Act, 1908, on March 27, 2020 — days after the country went into a lockdown in the wake of Covid-19. The Prime Minister is the ex-officio chairman of the Fund, while the Defence Minister, Home Minister and Finance Minister are ex-officio trustees.



SUPREME COURT UPHELD HANGING AS A CONSTITUTIONAL MODE OF EXECUTION

- A bench comprising Justices Vikram Nath and Sandeep Mehta upheld the constitutional validity of hanging as a mode of executing a death sentence, dismissing a PIL that argued the method is scientifically unreliable and violates the right to a dignified death under Article 21.
- Hanging is designed to work through a calculated “drop” based on the person’s height and weight, meant to cause a fracture-dislocation at the C2-C3 vertebrae and bring about near-instant unconsciousness.
- The right to die with dignity flows from the right to life guaranteed under Article 21 of the Constitution. The Supreme Court in *Gian Kaur v State of Punjab* (1996) held that the right to life includes the right to live and consequently to die with dignity.

MOBILE PHONE MANUFACTURING SCHEME (MPMS)

- With a budgetary outlay of Rs 62,500 crore, the Ministry of Electronics and Information Technology (MeitY) has notified the Mobile Phone Manufacturing Scheme.
- The five-year scheme, which will run from FY 2026-27 to FY 2030-31, has been split into two distinct tracks. The first is designed as a successor to the earlier PLI programme, offering incentives to large manufacturers and electronics manufacturing services (EMS) companies for expanding production, while increasingly linking benefits to the domestic sourcing of components.
- The second sets aside a separate incentive structure for Indian smartphone brands, offering higher support for companies that not only manufacture in the country but also keep their intellectual property, management control, design and research and development capabilities in India. It marks an effort to move beyond India being primarily a manufacturing base for global brands, towards building a domestic handset company with its own technology and brand.

HOUSEHOLD CONSUMPTION EXPENDITURE SURVEY (HCES)

- With the next edition of the HCES expected to begin in mid-2027 and continue for about a year, the ministry is looking at the adoption of “diary-based data collection” for high-income households living in gated societies, instead of a door-to-door survey by field officials.
- In this method, households note down the information themselves, as and when the relevant activity occurs. In the case of the HCES, this would mean jotting down how much is spent in a month on different goods and services, ranging from food items to haircuts.
- HCES is intended to collect data on households’ consumption and expenditure on goods and services. The survey collects data needed to monitor economic trends and identify and update the basket of consumer goods and services and weights used to calculate the Consumer Price Index.
- The survey is conducted by the Ministry of Statistics and Programme Implementation (MoSPI). Data from HCES is also used to assess poverty, inequality, and social exclusion. The Monthly Per Capita Consumption Expenditure (MPCE), derived from HCES, is the principal indicator used for most analytical purposes.



— In the past, the HCES was conducted every five years. However, after an overhaul of the methods, two back-to-back surveys were conducted in 2022-23 and 2023-24. Going forward, the ministry intends to conduct the HCES every three years or so.

INDIA A NET EXPORTER OF PETROLEUM PRODUCTS

India depends on imports to meet over 88% of its crude oil requirement and about half of its consumption of natural gas, which is imported as LNG. Despite depending on imported oil and gas, India is a net exporter of petroleum products due to its massive refining capacity. The country also imports some petroleum products like liquefied petroleum gas (LPG).

AI AGENT

— Last week, an Australian man shared that his AI agent, which he had tasked with helping him move up the waitlist for his gym class, went above and beyond. It exploited vulnerabilities in the gym's software.

— Unlike an AI assistant, which primarily responds to a user's prompts, an AI agent can independently take a series of actions using other tools or software to achieve a user-defined goal. Such an agent can, for instance, access other software and navigate websites.

— AI agents allow users to hand over the task itself. A user can set a goal for the agent to achieve, while leaving it to figure out the steps required to achieve it. A user may now ask an agent to plan a holiday, from finding suitable flights and drawing up an itinerary to making reservations on their behalf.

GISAT-1A (EOS-05)

— After a seven-month hiatus, the Indian Space Research Organisation (ISRO) is set to resume its launch services, with the earth observation satellite GISAT-1A set to be launched in the first week of September.

— This is one of two satellites — the other being NVS-03 — that has remained parked at Sriharikota spaceport for months as launches were put on hold following a series of setbacks, said officials in the know.

— GISAT-1A or Geo Imaging Satellite — also referred to as EOS-05 under the new nomenclature — is a replacement satellite for the 2021-launched GISAT-1 (or EOS-03), which missed the orbit after the final propulsive segment of the rocket failed to ignite.

— The new satellite, GISAT-1A, which boasts a 10-year mission life, is designed to image large areas of interest at frequent intervals for the purposes of monitoring natural disasters or keeping a track of agriculture or forestry.

CARBON BORDER TAX

— BRICS environment and climate ministers on August 18 opposed the European Union's (EU) Carbon Border Adjustment Mechanism (CBAM) or Carbon Border Tax, calling it a unilateral, punitive, discriminatory and protection measure that is not in line with international law.



— CBAM is an import levy on carbon-intensive goods like steel, iron, fertilisers, aluminium and cement. The tax was aimed as a measure to reduce the carbon footprint of imported goods, but the step has been seen as a trade barrier by developing countries.

— Rolled out on October 1, 2023, with a reporting-only phase, CBAM was entirely effected from January 1, 2026, when importers were asked to purchase and surrender CBAM certificates tied to carbon emissions embedded in their goods.

MISSION COSMOCUBE

— A proposed suitcase-sized satellite could give astronomers a new way to study the universe's earliest stages by listening for faint radio signals from more than 13.5 billion years ago.

— The mission, called CosmoCube, would operate near the Moon and use the lunar far side as a natural shield against radio interference from Earth. Researchers say the concept could help scientists study the poorly understood period between the Big Bang and the formation of the first stars.

— The international team behind CosmoCube proposes placing the small spacecraft in orbit around the Moon, allowing it to collect measurements as it passes behind the Moon's far side. The Moon would block radio noise originating from Earth, creating a much quieter environment for the spacecraft's instruments.

— According to the researchers, CosmoCube would spend around 40 minutes on the far side during every two-hour orbit. Over a proposed two-year mission, the satellite could collect roughly 1,000 hours of data at extremely low radio frequencies. The measurements could offer scientists a clearer picture of the cosmic dark age and the transition towards the formation of the first stars and galaxies.

MAITREE-XV

— The Indian Army contingent departed on August 17 for Thailand to participate in the 15th edition of the India-Thailand Joint Military Exercise MAITREE-XV.

— The Joint Military Exercise will be conducted from 18 to 31 August 2026 in Surat Thani, Thailand. The last edition of the exercise was conducted in Umroi, Meghalaya. Notably, Exercise MAITREE was instituted in 2006.

EXERCISE PITCH BLACK AND EXERCISE UDARA SHAKTI

Recently, the Indian Air Force (IAF) participated in two pivotal international flight engagements, Exercise Pitch Black 2026 in Australia and Exercise Udara Shakti 2026 in Malaysia. The dual-nation deployment underscored the IAF's advanced tactical coordination, operational reach, and commitment to strengthening strategic defence partnerships across the Indo-Pacific region.

MQ-9B SEA GUARDIAN HALE RPAS

— The Ministry of Defence on August 17 inked a Rs 1,943-crore contract with American defence major General Atomics Aeronautical to lease two MQ-9B Sea Guardian High-Altitude Long-Endurance (HALE) Remotely Piloted Aircraft Systems (RPAS) for the Indian Navy for 30 months.



— In a statement, the Defence ministry said the MQ-9B Sea Guardian HALE RPAS, equipped with advanced systems, state-of-the-art sensors and sophisticated payloads, will significantly enhance the Indian Navy's Maritime Domain Awareness capabilities.

— "The systems will provide persistent intelligence, surveillance and reconnaissance coverage over vast areas of the maritime domain, strengthening India's ability to monitor and respond to developments across the Indian Ocean Region," it added.

— Currently, the Navy operates two MQ9As on lease, which were procured in 2020 in the thick of border tensions between India and China for a period of one year, and their lease period was subsequently extended.

IN-USN EXPLOSIVE ORDNANCE DISPOSAL (EOD) EXERCISE 2026

— On August 14, the eighth edition of the IN-USN Explosive Ordnance Disposal (EOD) Exercise 2026 was held at the Southern Naval Command, Kochi.

— The exercise provided a platform for sharing knowledge on various facets of EOD operations and witnessed intensive professional interaction, exchange of best practices, and demonstrations by teams from both Indian and US navies.

MANGROL

On August 21, 'Mangrol,' the third anti-submarine warfare shallow water craft built by Cochin Shipyard Limited (Kochi), was delivered to the Indian Navy. The ship comprises over 80 percent indigenous content and is equipped for underwater surveillance and anti-submarine warfare operations in coastal waters and low-intensity maritime operations, along with mine warfare capabilities. The ship is propelled by waterjets and equipped with state-of-the-art torpedoes and anti-submarine rockets, along with advanced radars and sonars.

USS ABRAHAM LINCOLN

— The senior-most US military commander in the Middle East, US Central Command chief Admiral Brad Cooper, visited the USS Abraham Lincoln in the Arabian Sea, amid claims of food shortages, flagging morale, and even suicide attempts on the aircraft carrier. The USS Abraham Lincoln has been at sea without a break for over 260 days.

— USS Abraham Lincoln (CVN 72) is America's fifth Nimitz-class nuclear-powered aircraft carrier and is named in honour of the 16th president of the United States.

— The largest warships in the world, Nimitz-class aircraft carriers support and operate aircraft that engage in attacks on airborne, afloat, and ashore targets that threaten free use of the sea and engage in sustained power projection operations in support of U.S. and coalition forces.

— Notably, an aircraft carrier is basically a mobile airbase. A land-based fighter plane can fly hundreds or even thousands of kilometres out over the ocean. But after it completes its mission, it needs somewhere to land. It also needs fuel, weapons, maintenance and people to service it. A carrier takes all of this with it.



— India currently operates two aircraft carriers — INS Vikramaditya, the refurbished former Soviet-era Admiral Gorshkov, and the indigenously built INS Vikrant. The Navy has also sought a third carrier to expand its ability to maintain a sustained presence in distant waters.

INDIA LAUNCHED ITS FIRST-EVER GUIDE TO GRASSLANDS AND ONES

— Recently, India launched its first-ever Guide to Grasslands and Other Open Natural Ecosystems (ONES) of India at the 17th Session of the Conference of the Parties (COP17) to the United Nations Convention to Combat Desertification (UNCCD) in Ulaanbaatar, Mongolia.

— India's Guide to Grasslands and ONES marks an important step in the direction of strengthening their conservation, restoration, and sustainable management. It highlights the rich diversity, ecological significance, and socio-economic importance of India's grasslands and other open natural ecosystems.

— It brings together information on major ONES across India, covering their geographical settings, ecological characteristics, biodiversity, and the communities and tribes associated with them. It also contains sections on pastoralism, fire ecology, and carbon sequestration. Notably, India's ONES range from Himalayan and Terai grasslands to the Thar and Banni landscapes, rocky plateaus, ravines, scrublands, Deccan savannas, coastal ecosystems, and desert landscapes.

WORLD DAY TO COMBAT DESERTIFICATION AND DROUGHT

June 17 is observed as the World Day to Combat Desertification and Drought under the UNCCD. The day serves as a global platform to raise awareness and promote action against desertification, land degradation and drought. The theme for this year is "Rangelands: Recognize. Respect. Restore." Notably, the UN has declared 2026 as the International Year of Rangelands and Pastoralists (IYRP).

RK-251

— RK-251 is a new 'smart' cancer drug designed to activate primarily in cancer cells and does not harm healthy cell. Collaborative research led by Dr. Asis Bala from the Institute of Advanced Study in Science and Technology (IASST), an Autonomous Institute under the Department of Science & Technology (Govt. of India), and Dr. K.P. Bhabak from the Indian Institute of Technology-Guwahati has developed a new "smart" cancer drug called RK-251.

— The Ministry of Science & Technology has shared details of the drug, which is designed to exploit a feature of cancer cells: they often have higher levels of reactive oxygen species (ROS), molecules that can be harmful when present in excess. Researchers have used this difference to create a drug that can be activated preferentially inside cancer cells.

— The approach could potentially make cancer treatment more selective and reduce damage to healthy cells. When RK-251 enters a cancer cell with high ROS levels, these molecules trigger the drug's activation, releasing an anticancer compound called NBDHEX.

— NBDHEX blocks target proteins that many cancer cells use to survive and resist treatment. The idea is to keep RK-251 relatively inactive in normal tissues and activate its anticancer action inside cancer cells.



E. COLI

- The Comptroller and Auditor General (CAG) has flagged violations of water quality norms after E. coli bacteria was found in water samples collected from water coolers at multiple railway stations. The findings have raised concerns about water quality and passenger safety.
- Escherichia coli (E.coli) is a bacterial strain that is commonly found in the intestines of people and animals, fecal waste of cattle and humans. The most common manner in which this bacteria contaminates water is if there is a leak in the sewage pipelines in a locality.
- Unlike other disease-causing bacteria, E. coli can cause an infection even if you ingest only small amounts. So even taking a bite of undercooked or contaminated food or swallowing a mouthful of contaminated pool water can cause an infection.
- Consumption of water contaminated with E.coli can cause diarrhoea, digestive issues, urinary tract infection and vomiting. The world over, children have been found more vulnerable to diseases caused by this bacteria.

EBOLA OUTBREAK IN CONGO

Congo has received more than 16,000 doses of the ervebo vaccine as the country grapples with the fastest ebola outbreak in history, the country's health minister said.

VERVE-102

- A new experimental therapy from US pharma major Eli Lilly and its subsidiary Verve Therapeutics — involving a single shot infusion that may bust LDL (low-density lipoprotein), or bad cholesterol, at one go and which sharply lowered LDL by 62% for as long as 18 months after treatment in a trial — continues to make waves among cardiologists. The therapy works by permanently switching off a cholesterol-related gene called PCSK9 inside the liver, taming LDL forever.
- VERVE-102 is not a traditional drug. It is a form of in vivo (administered directly to the patient's body) gene editing, which allows scientists to alter DNA and modify gene function. Instead of temporarily blocking cholesterol production with medicines, researchers use genetic instructions delivered through an intravenous infusion to permanently alter liver cells from producing it altogether.

ITURUP (ETOROFU IN JAPAN)

- Russia's Foreign Ministry on August 18 summoned the Japanese ambassador to protest Tokyo's condemnation of President Vladimir Putin's trip to the Kuril Islands, the Moscow-controlled Pacific archipelago that is claimed by both countries.
- Last week, Putin visited Iturup, one of the four southernmost islands of the chain, which Japan calls the Northern Territories. The Soviet Union took them from Japan in the final days of World War II, and the dispute has kept the countries from signing a peace treaty formally ending their hostilities.



BUSINESS AND ECONOMY

TIME TO PUSH BACK

The U.S. has been emboldened to make increasing demands on India

The latest accusation levelled by the United States against India has the potential to be the most harmful to the Indian economy. A recent White House report, naming around 40 countries in all, has said that India ranks among the top 'enablers' of China's evasion of U.S. tariffs. The accusation is that India and these other countries are importing Chinese goods, making minor modifications to them, and then exporting them to the U.S. at lower tariffs than what Chinese goods would have faced. The fact that Chinese imports form a significant pillar of Indian manufacturing is no secret. Yet, the nature of these imports is slowly changing. India is gradually moving away from importing finished products, making cosmetic changes, and selling them. Instead, the share of intermediate goods in Indian imports from China has been steadily rising. That is, India is doing much of its own assembly and manufacturing in several sectors now, relying on China and other countries for the parts needed. This shift is an important step towards full-scale manufacturing in India. The U.S. has not yet announced punitive actions based on its assessment of apparent Chinese tariff evasion, though that eventuality is conceivable. However, should it do so, India must resist bowing to U.S. pressure on this issue. As even the government has admitted, Chinese imports right now are an important part of the Make in India story.

The fear of India bowing to U.S. pressure is based on precedent. In his first term as U.S. President, Donald Trump railed against India's tariffs on high-end motorcycles. In 2018, India cut these tariffs to 50% from the earlier 60%-75%, and then cut them further to 40% in February 2025, before trade deal talks had even started. Similarly, it slashed the import duties on shrimp feed and its components in the February 2024 Budget, a key ask of the U.S. It did the same with tariffs on frozen duck and turkey. The pressure of the 50% punitive tariffs pushed India to diversify away from Russian oil, despite India's strident claims of energy sovereignty and the discount it was receiving. Russia's share in India's oil imports fell to below 20% in January 2026, from nearly double that when the 50% tariffs were imposed six months earlier. This had happened with Venezuelan oil in 2019 as well. It was the West Asia crisis, and the U.S.'s temporary reprieve, that has seen India turning back to Russian oil. Allowing FDI in the e-commerce inventory model, as India recently did, was something Amazon had been lobbying for for a decade, and a dilution of India's long-held stance. The U.S. can wield immense pressure and so concessions are understandable. But that has emboldened it to make increasing demands. India needs to start pushing back.

CENTRE'S FISCAL OUTLOOK FACES GEOPOLITICAL, REVENUE RISKS

Geopolitical headwinds in the background of recently introduced tax changes would shape the Centre's fiscal outlook for 2026-27. Despite pressure on tax revenues and subsidies, strong non-tax receipts and policy interventions may keep fiscal outcomes broadly on track.

Centre's revenue receipts

As per the The Controller General of Accounts (CGA) data, the Centre's gross tax revenues (GTR) grew only by 3.7% in the first quarter of 2026-27. This was the result of subdued revenue performance of personal income tax (PIT) and Goods and Services Tax (GST), both of which were



subjected to substantive modifications in 2025-26. In both cases, extensive rate rationalisation was undertaken. In the case of GST, there was a substantive rate reduction. The expectation was that while these reforms would entail an initial revenue sacrifice, subsequent expansion of the tax base would offset the revenue loss over time. PIT revenue growth in 2025-26 was only 0.037%, implying a buoyancy of zero. For the second half of 2025-26, GST revenue growth was 4.67%. The revenue reducing effect of these major tax interventions has continued in 2026-27. PIT shows a growth of 6.8% in the first quarter of 2026-27 while GST revenues showed a contraction of (-)11%.

In the meantime, the Indian economy was beset by the West Asian crisis and its related impact, including high and volatile global crude oil prices and other supply-side uncertainties. As retail fuel prices rose, the government reduced excise duties to ease the burden on consumers. This had a direct bearing on revenue from Union excise duties, which contracted by 22.4% in the first quarter of 2026-27.

In order to make up for the shortfall in revenue receipts, the government initiated some remedial measures. First, a Health Security se National Security (HSNS) Cess was introduced with effect from February 1, 2026 even as the GST Compensation Cess was discontinued. Second, the windfall tax on exports of diesel, petrol and aviation turbine fuel was increased effective August 3, 2026. Third, there was an increase in import duties through increased rates on gold and silver bullion and other specific precious metal articles, sweepings, and clad metals. One additional factor is the likelihood of a higher nominal GDP growth rate as compared to the budgeted growth of 10.04%. We expect the 2026-27 nominal GDP growth to be in the range of 12.5% to 13%. This projection reflects an expected real GDP growth of about 7% together with an Implicit Price Deflator (IPD)-based inflation of 5%-5.5%, consistent with the present trajectories of Consumer Price Index (CPI) and Wholesale Price Index (WPI) inflation at 3.9% and 9.3%, respectively, in the first quarter of 2026-27. We note that even with a higher nominal GDP growth rate, the magnitude of nominal GDP as per the 2022-23 base series is estimated at ₹391 lakh crore. This will be lower than the budgeted level at ₹393 lakh crore. On the whole, we consider that the estimated GTR would be realised or fall short by a small margin. At some suitable time, the reduction in excise duty on fuel prices must be restored.

Transfers to States

In estimating net tax revenue from GTR, a factor of 65%, which was the ratio of net to gross tax revenues in 2025-26 and 2026-27 (BE), can be applied since the Sixteenth Finance Commission (FC16) retained the share of States in the divisible pool of central taxes at 41%. There may be a marginal reduction in the shareable pool due to the introduction of the non-shareable HSNS Cess although some part of the revenues from this cess may go to the States as non-FC grants.

In the first quarter of 2026-27, there was a sharp contraction in tax devolution to the States to the extent of (-)19.5%. In subsequent months, there is an expectation of an increase in the assignment of central tax revenues to the States. Based on the FC16's recommendation, the FC grants for the States are budgeted to contract by an amount of ₹23,556 crore in 2026-27.

The Reserve Bank of India provided major fiscal support in the form of dividends, which were transferred to the Centre in May 2026. As a result, 77% of the budgeted dividends and profits for the full year had already been covered in the first three months. We expect the budgeted amounts for non-tax and non-debt capital receipts to be realised.



The Centre's non-tax revenues contributed 37% of its net revenue receipts in the first quarter of 2026-27. During the quarter, major subsidies had to be increased by 37.4% due to the unexpected rise in global crude oil prices, although the growth in revenue expenditure was contained at 7.4%. The Centre was able to front-load its capital expenditure in the first quarter of 2026-27, which grew by 23.7%, compared with a contraction of (-)23.3% in the fourth quarter of 2025-26.

For the year as a whole, the crisis in West Asia is likely to continue keeping global crude oil prices under pressure. If the major subsidies in the first quarter are extrapolated to estimate the annual subsidy requirement, realised subsidies are expected to exceed the budgeted amount by about ₹50,000 crore.

Debt and deficit

Using first-quarter data, the Centre's fiscal deficit accounted for 18.2% of the annual budgeted magnitude, while the corresponding share of the revenue deficit was 0.4%. The impressive revenue account balance is mainly due to the contribution of non-debt receipts.

Fiscal deficit, calculated as the increment in debt, is estimated at ₹18.16 lakh crore. If this is realised, the fiscal deficit-to-GDP ratio, with respect to the new GDP series, is estimated at 4.6%. Correspondingly, the debt-to-GDP ratio is estimated at 55.8%. This is close to the budgeted level, taking into account the impact of the new GDP series. Some slippage may still occur due to a shortfall in tax revenues, an unbudgeted increase in revenue expenditure arising from additional subsidies, and a slightly higher external debt amid sustained pressure on the Indian rupee. As of now, significant deviations from the budgeted fiscal outcomes appear unlikely. However, an escalation of the war could deliver a major jolt to the economy and central finances.

DECODING INDIA'S GROWTH IN MERCHANDISE EXPORTS

Data released by the Ministry of Commerce and Industry on August 13, 2026, showed India's exports gaining momentum, despite the ongoing war in West Asia, driven in particular by the growth in export of merchandise (goods).

In July 2026, India exported \$44.2 billion worth of goods, up nearly 20% compared to July 2025. Though the growth in the goods exports was encouraging, India's merchandise trade deficit widened from nearly \$28 billion in July 2025 to \$32 billion in July 2026 due to higher growth in imports. Analysis showed that the growth in exports was largely driven by an increase in the export of petroleum products, whose prices have gone up since the U.S. launched its attack on Iran in the last week of February.

India exported \$7.26 billion more merchandise in July 2026 than it did in July 2025. Petroleum products accounted for nearly \$2.8 billion of that increase (39%). Electronics added another \$2.16 billion (30%), while engineering goods contributed \$1.84 billion (25%). The growth in petroleum products in April-July 2026 compared with the same period in 2025 was 42.6%. India exported \$30 billion worth of petroleum products in April-July this year as against \$21 billion in the same period last year.

Export of engineering goods grew by 18.2% from \$39.2 billion to \$46.4 billion, while electronic goods' exports grew by 30.7% from \$16.2 billion to \$21.2 billion

A few other sectors also reported strong growth. Marine product exports rose nearly 18%. Meat, dairy and poultry products increased 41%, while handicrafts grew 16%.



The share of the top six commodity groups in India's total merchandise export shows that the majority of fluctuations came from petroleum products, hugely influencing the value of goods exported by the country. The share of engineering goods and drugs and pharmaceuticals have largely remained the same while the share of electronic goods nearly doubled in April-July 2026.

Despite the impact due to tariffs imposed by U.S. President Donald Trump, the country remained India's largest market for merchandise export. The U.S. accounted for about a fifth of India's exports between April and July 2026-27, almost unchanged from its share in the previous two financial years. Singapore's share has risen more noticeably from 2.7% in 2024-25 to 4.7% in the first four months of 2026-27.

China's share, which saw an increase from 3.3% to 4.4% between 2024-25 and 2025-26, has remained around the same level as of the April-July period in 2026-27. The UAE's share in India's exports came down from 8.5% to 6.5% in the same period due to the West Asia crisis.

A country-wise breakdown showed that the highest growth came from countries such as South Africa, Tanzania, Sri Lanka, Malaysia and Kenya. Tanzania nearly doubled its share in India's total goods exports from 1.1% to 2%. However, an analysis of commodity groups showed that the majority of the increase in export to these countries came from refined petroleum products.

India also showed promising increase in exports to countries such as Vietnam (\$2.6 billion) and Taiwan (\$0.8 billion) in April-July 2026, which were not driven primarily by petroleum goods. An easing of the West Asia crisis will reveal the true extent to which India is diversifying its exports.

EMPLOYMENT GUARANTEE HAS SLIPPED INTO LIMBO

Rural workers are paying a heavy price for the Union Government's ill-conceived tinkering with India's employment guarantee law. Indeed, evidence is mounting of an unprecedented crash in employment generation under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and its successor, the Viksit Bharat-Guarantee for Rozgar and Ajeevika Mission (Gramin) alias VB-G RAM G Act.

One aspect of this crash has been widely noted: the 50% decline in employment generation under VB-G RAM G in July 2026, vis-à-vis MGNREGA in the same month last year. The 50% estimate is actually based on a premature figure of 7.7 crore person-days for July 2026. The latest figure is 8.3 crore, and the final figure is likely to be around 9 crore according to the Ministry of Rural Development. But even if we accept this anticipated total for July, the decline vis-à-vis July 2025 would be above 40%, which is a massive setback.

Misleading excuse

The Ministry of Rural Development made a lame attempt to attribute this setback to the fact that a few States explicitly suspended VB-G RAM G in parts of July 2026 under Section 6 of the Act, but this is the mother of all red herrings. For one thing, these States account for a small share of total MGNREGA employment, and the July 2026 decline looks much the same in proportionate terms when these States are left out. For another, the July decline is just the continuation of a crisis that began earlier.

Some background may help. A Bill paving the way for the replacement of MGNREGA with VB-G RAM G was rushed through Parliament in December 2025. The Rural Development Minister announced, at that time, that the replacement would take place on April 1, 2026. However, nothing



of the sort happened on April 1. Evidently, the Ministry was not ready for the transition. The Rules, in particular, had not been framed. MGNREGA continued, by default.

On May 22, 2026, the Ministry released draft VB-G RAM G Rules for public consultation. These Rules are mainly a rehash of MGNREGA rules and orders. Release of the final Rules began at the end of June, just on time for the official replacement of MGNREGA with VB-G RAM G on July 1. VB-G RAM G wage rates were also notified on June 30, with a minimum norm of ₹300 per day — much the same as the earlier MGNREGA norm of ₹100 per day at 2009-10 prices.

The transition, the ground reality

During the first three months of this financial year (April to June), confusion prevailed. To paraphrase Gramsci, the old world of MGNREGA was dying, and the new world of VB-G RAM G was struggling to be born. In some districts, MGNREGA functionaries refused to open new works. In many areas, there was no MGNREGA work at all. This was a serious lapse, as MGNREGA is normally at a peak during these summer months (a slack agricultural season in large parts of India). The limbo continued in July 2026, when VB-G RAM G made a faltering start.

In 2024-25 and 2025-26, the first four months of the financial year (April to July) accounted for nearly 50% of annual employment generation — 128 crore and 119 crore person-days, respectively. In 2026-27, however, MGNREGA and VB-G RAM G generated only 70 crore person-days of employment in the same months — a decline of 43% from the average of the preceding two years.

Employment declined in all major States, but the decline was far from uniform across States. It 'was relatively small in a few States (example, Andhra Pradesh, Assam and Telangana), but larger than 40% in most States. In 10 out of 19 major States, the decline ranged between 60% and 85%. States where employment generation came to a virtual standstill in April-July 2026 include Madhya Pradesh, Uttar Pradesh and Jharkhand, some of India's largest and poorest States.

This crash in employment is all the more startling as the transition to VB-G RAM G was supposed to lead to a huge increase in employment generation. The VB-G RAM G allocation in the 2026-27 Union Budget is ₹95,692 crore — a little more than the actual MGNREGA expenditure in 2025-26. The total VB-G RAM G budget, inclusive of State contributions (40% of the total for most States), was due to shoot up to ₹1.5 lakh crore or so — an increase of about 70% vis-à-vis MGNREGA expenditure in 2025-26. With wages more or less unchanged in real terms, one would expect this enhanced budget to trigger a big increase in employment generation. Instead, the first four months of 2026-27 witnessed an unprecedented crash.

An uncertain road ahead

It is, of course, too early to pass judgement on VB-G RAM G. But the launch is certainly a damp squib as things stand. The fact that employment generation has been virtually nil for months in some of India's largest and poorest States is particularly alarming.

The situation may improve in the next few months, but it is hard to see how the projected VB-G RAM G expenditure of ₹1.5 lakh crore in 2026-27 is going to materialise. Wage payments may face serious problems too, with the imposition of facial recognition at the worksite and Centre-State cost-sharing. The outlook is bleak.



THE ROAD TO E20 IS NOT WITHOUT BUMPS

India's rapid transition to a nationwide E20 fuel regime (petrol blended with 20% anhydrous ethanol) has triggered a complex multidimensional debate at the intersection of macroeconomic energy policy, automotive engineering, supply-chain quality control, and consumer protection. While championed by the Government of India to reduce crude oil import dependency, save foreign exchange, and reduce carbon emissions, the rollout has ignited widespread friction regarding real-world mileage drops, mechanical vulnerabilities in legacy vehicles, chemical contamination risks, and the elimination of unblended petrol (E0) as a user choice at retail pumps.

The regulatory baseline

The Government of India notified on February 17, 2026, that, effective April 1, 2026, all States and Union Territories must sell petrol blended with up to 20% ethanol and a minimum Research Octane Number (RON) of 95. It replaces the earlier 2021 notification that permitted blending of up to 10% ethanol.

Earlier, the government mandated that all automobile manufacturers comply with the Bharat Stage 6 Phase 2 Real Driving Emissions (BS 6 Phase 2 RDE) norms starting in April 2023.

Vehicles manufactured to comply with Real Driving Emissions (RDE) norms were factory-engineered with ethanol-resistant fluorinated rubber (FKM/Viton), upgraded fuel pump seals, and recalibrated Powertrain Control Modules (PCMs).

The legacy fleet, built before April 2023, was factory-calibrated for E5 or E10 configurations, featuring traditional Nitrile Butadiene Rubber (NBR) and metallic fuel system components lacking chemical shielding against higher alcohol concentrations.

Consumer surveys highlight widespread friction: over 66% of pre-2023 vehicle owners report mileage loss exceeding 10%, and 55% cite higher maintenance frequency and component wear-out.

In a written reply in Rajya Sabha, the Minister of State for Petroleum and Natural Gas, Suresh Gopi, informed the House that the Ministry of Heavy Industries had not conducted any formal assessment to determine the share of India's vehicle fleet that is genuinely E20-compatible. India's active petrol-powered vehicle pool is estimated at roughly 310 million units.

While about 70 million post-April 2023 vehicles possess certified factory-level E20 compatibility, the remaining 240 million legacy vehicles, most of which are two-wheelers, rely on fuel delivery sub-assemblies built for E5 or E10 parameters.

Engineering realities

Ethanol functions as a powerful polar solvent and natural detergent. In older legacy vehicles, steel fuel tanks inevitably develop microscopic oxidised scale, rust layers, and varnish residues from years of standard petrol usage. When E20 is introduced, the alcohol scours and dislodges these dormant rust particles, suspending them in the fuel stream. This suspended particulate sludge quickly clogs inline fuel filters, chokes fuel pump strainers, and abrades high-pressure fuel injector nozzles, causing erratic spray patterns and engine misfires.

Being strongly hygroscopic, Ethanol draws ambient moisture directly from the air. In humid environments or during prolonged parking, the absorbed water reaches its saturation point,

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



causing the ethanol-water mixture to separate from the gasoline (phase separation) and settle at the bottom of the fuel tank. This stagnant, acidic water-alcohol layer directly attacks the bare metal base of legacy steel tanks, accelerating severe internal pitting and bottom-tank perforation.

In pre-2023 fuel circuits, conventional NBR rubber hoses, O-rings, and pump diaphragms absorb ethanol, leading to swelling, premature hardening, embrittlement, and fuel leaks.

Because ethanol contains roughly 30-35% less energy per unit volume than petrol, unadjusted ignition timing in older engines results in reduced thermal efficiency, mileage penalties, and localised carbon/soot accumulation on spark plugs and valves.

Major vulnerabilities

The physical risks of ethanol blending are not limited to vehicle fuel tanks; they represent a major operational challenge at the retail dealer storage level.

Most retail petrol pumps in India utilise Underground Steel Tanks (UST). During heavy monsoons, waterlogging, or due to aged manhole gaskets, surface run-off can seep into UST vent pipes and inspection pits. While pure petrol floats on top of water with minimal mixing (allowing water to be pumped out from the bottom), E20 absorbs water instantaneously. When moisture ingress in a dealer's UST exceeds the critical saturation threshold (typically around 0.5% water content), catastrophic phase separation occurs within thousands of litres of fuel. The separated, low-octane, highly corrosive water-ethanol layer is drawn by the submerged suction pumps directly into the dispensing nozzles, leading to catastrophic engine stalling and immediate fuel system failure in customer vehicles.

Beyond retail seepage, fuel quality is vulnerable to chemical contaminants introduced during distillation, dehydration, and transit.

Originating from agrochemical residues in sugarcane/grain feedstocks or chemical reagents used during distillery processing, trace chlorides form hydrochloric acid during combustion, causing severe corrosion in high-pressure fuel injectors and cylinder walls.

If dehydration units (molecular sieves) falter at distilleries, or transport tankers fail to maintain hermetic seals, excessive water content enters the supply chain prior to retail delivery.

Scientific divergence

The controversy deepened following a report from the Engine Research Laboratory at IIT Kanpur, asserting that E20 fuel causes no notable engine damage and that efficiency drops are restricted to under 5%. The institute attributed minor mileage fluctuations primarily to driving behaviours, localized traffic congestion, and variable ambient conditions rather than fuel chemistry alone.

However, these institutional findings have met with profound scepticism from independent automotive experts and consumer communities. Forums like r/CarsIndia have actively documented structural discrepancies, noting that labelling legacy, E10-calibrated engines entirely safe for E20 overlooks material science limitations. Reports highlight that auxiliary peripheral systems experience catastrophic wear even if engine blocks remain intact. Real-world logs from independent mechanics highlight premature fuel pump and injector failures, which they attribute to ethanol's low lubricity and aggressive solvent properties.



Adding significant weight to the technical debate are the leaked internal industry communications reviewed by Reuters and subsequent industry clarifications. The data reviewed by Reuters revealed that top automakers harboured deep private anxieties regarding chemical contaminants in E20 fuel, referencing tests of over 250 fuel samples across 21 States.

While official standards specify a maximum ceiling of 3 ppm, industry samples logged readings from 6 to 570 ppm in Rajasthan, 1.4 to 420 ppm in Delhi, and 10 to 357 ppm in Maharashtra. Automakers noted modern high-pressure injectors have a tolerance threshold near 1 ppm. Water content was found to reach up to 12,500 ppm in Uttar Pradesh and 13,000 ppm in Andhra Pradesh (against standard operating thresholds). Internal emails warned that organic chlorides could ruin engine components “within 200 km”.

Following the leak, the Society of Indian Automobile Manufacturers (SIAM) issued detailed media clarifications on August 4 and August 13. SIAM clarified that the withdrawn document contained preliminary data collected by very few OEMs intended solely for internal discussion, which had not been authenticated or reviewed by the broader membership. SIAM announced plans to conduct a comprehensive, validated scientific study, in collaboration with members and technical experts to guide future policy submissions.

The Ministry of Petroleum and Natural Gas confirmed that State-run fuel networks adhere to stringent testing, treating contamination reports as localised anomalies.

Need for balancing

To bridge the gap between national macro-economic ambitions and ground-level realities, a pragmatic, multi-pronged corrective framework is required.

Fuel retail outlets must be mandated to maintain dual-dispensing infrastructure, reintroducing lower-blend or unblended fuel (E0/E10) as a “protection-grade” option. This restores informed consumer choice under the Consumer Protection Act for owners of legacy two-wheelers and older passenger cars.

Clear, standardised visual labelling must be enforced at every retail fuel dispenser indicating ethanol content. Furthermore, oil marketing companies (OMCs) should publish regular batch-level quality metrics regarding moisture and chloride limits to prevent infrastructure-led contamination.

Regulatory bodies should incentivise the development and certification of affordable, aftermarket retrofit kits (such as ethanol-resistant fuel lines and reinforced seals) for legacy vehicles. Simultaneously, structured service guidelines should be issued to help vehicle owners mitigate the risks of phase separation and corrosion.

Moving beyond controlled laboratory trials, an independent, transparent, and multi-year empirical study tracking real-world pre-2023 fleet performance across diverse geographic and climatic conditions must be commissioned to permanently settle the scientific debate.

Brazil, one of the global leaders in biofuels, also faced similar bumps, but they steered clear of them successfully using shock absorbers. India can learn from their biofuel journey.



The way forward

The E20 mandate requires a consumer-centric pivot. To protect the interests of consumers who own over 240 million legacy vehicles, the government may introduce dual-fuel dispensing, ensuring unblended petrol accessibility as a user choice at petrol outlets. Beyond laboratory trials, independent field audits, clear pump labelling, and subsidised retrofit support, particularly for two-wheelers, are essential. Balancing macroeconomic energy goals with consumer protection measures is critical to regaining public trust.

NOT JUST TURBULENCE

India's aviation should not have to depend on chance for safety

The August 4, 2026, incident involving Air India flight AI 2379, from Phuket to Delhi, with 137 passengers and eight crew, now has two tracks. The first concerns its reclassification: the initial 'event of turbulence' is now a "serious incident" after inflight technical issues and a significant deviation in aircraft altitude caused injuries to more than 20 passengers and crew, quickly drawing in the Directorate General of Civil Aviation (DGCA). The subsequent probe by the Aircraft Accident Investigation Bureau, along with France's investigation authority, BEA, and technical representatives from Airbus, should unravel the multiple anomalies that briefly overtook the Airbus A320N — fault warnings across the hydraulic systems, elevator flight-control faults, autopilot disconnection, emergency-exit door indications and an engine anti-ice warning. Airbus's initial data is said to support the evidence of technical errors. However, it is the second track that has received much attention: the result of the pilot-in-command's post-flight screening for psychoactive substances.

The Tata Group-Singapore Airlines joint venture airline has been prodded into commencing the immediate and mandatory screening of its flight deck crew 'for any substances or unprescribed medications'. But the deeply discomfiting discovery has exposed the weak link in crew screening — the greater emphasis on pre- and post-flight breathalyser checks for alcohol than on testing for psychoactive substances, which falls under the Civil Aviation Requirements (CAR) Section 5-Air Safety Series F Part V. In fact, the CAR — which applies to Air Traffic Controllers also — leans more towards random and post-flight/post-shift testing, with graded disciplinary action. With India's air carriers expanding operations, crew citing stress-related issues, and, separately, the availability of substances for medicinal or recreational use, the regulator must ensure stringent psychoactive substance testing and operational compliance. The DGCA's Medical Circular No. 02 of 2021, on 'over-the-counter (OTC) drugs and self-medication', highlights pilot cognitive/psychomotor skills impairment, drawing on the Mangaluru (2010) and Kozhikode (2020) fatal air accidents. Further, documented cases from the West reveal that even small levels of impairment can affect crew judgement, reaction time, coordination, and decision-making, the critical skills needed in the flight deck. Ensuring that fit crew are behind the controls is an aviation industry bedrock, and every Indian operator, large or growing, must uphold the highest standards. This was a lucky escape, but luck cannot be allowed to become a safety strategy.



LIFE AND SCIENCES

ISS TO HOST FIRST SPACEWALK BY FRENCHWOMAN

Sophie Adenot is set to become the first French female astronaut to venture outside the International Space Station for a spacewalk on Tuesday, accompanied by American astronaut Anil Menon.

The spacewalk is scheduled to start at 1235 GMT and last six and a half hours, with the goal of replacing a space-to-ground antenna on the orbital complex, according to NASA.

Ms. Adenot, 44, will be the second European woman to conduct a spacewalk, after Italian astronaut Samantha Cristoforetti's mission in 2022. She has been preparing for the operation for several days aboard the ISS, 400 km above the Earth.

The antenna being replaced is key to high-speed communications and data transmission between the ISS and mission control in Houston, she added. Flight engineer Jack Hathaway and station commander Jessica Meir will monitor the spacewalkers and operate a robotic arm from inside the ISS, NASA said.

"While the spacewalkers are the ones out in the spotlight, (extravehicular activities) are very much a team effort, and it's always a privilege to support the crew from within," Ms. Adenot wrote after the previous spacewalk, when she supported Ms. Meir and Mr. Menon.

An engineer by training and a former test pilot, Ms. Adenot became in February the second Frenchwoman in history to fly into space, after pioneer Claudie Haignere.

The last French person to walk in space was Thomas Pesquet, who did so six times over two stays aboard the ISS.

'DANGEROUS MISINFORMATION': EXPERTS DECRY AI WILDLIFE VISUALS

The black-and-white image appears to show the unlikely of interactions: an orangutan cradling endangered leopard cubs deep in the jungles of Malaysia's Sabah state. But the viral image is not just unlikely, it is fake, part of a trend of wildlife images generated by artificial intelligence that experts warn endanger animals and people.

Fact-checkers have debunked scores of similar synthetic visuals, from an elephant climbing a tree to escape flooding in Myanmar to a pink dolphin leaping out of water in the Philippines.

They may seem more like feel-good fiction than dangerous misinformation, but experts warn hyper-realistic visuals of wild animals behaving like pets, or even like humans, can distort public perceptions of wildlife and harm conservation efforts.

"This misunderstanding can lead people to approach animals too closely or interact with them in unsafe ways," Jose Guerrero-Casado, a zoology professor at Spain's University of Cordoba, said. He cited a widely reported incident in China's northwest Xinjiang region in January, where a woman was attacked by a rare snow leopard after trying to get closer for a photo.

China's forestry department said it stepped up patrols after the incident and warned the public to maintain a safe distance when encountering wild animals.



Conservationists say AI visuals portraying wild animals as cute or cuddly make it harder for social media users to discern what is real and can fuel exploitation. They increase demand for certain species “to be used in the tourism industry as photo props, exploited to make social media content or to be kept as pets”, said Chris Lewis, a researcher at the international wildlife charity Born Free.

And while the visuals could encourage some people to support animal protection, “the negative impacts outweigh that completely,” said Jenny Roberts of conservation group WWF. “People could get hurt,” she said.

WWF uses real images for its fundraising efforts, but fake content online “desensitises” people to even the most incredible original visuals, she said.

“When you do have something remarkable, people question it,” Roberts said, recounting an incident where a camera trap set up by her charity captured a tiger with five cubs in China. Such footage had never been filmed before in the East Asian country, she said. “But when we put the content out there, we were questioned on social media: ‘Is this AI-generated?’”

A September study in the journal *Conservation Biology*, co-authored by Guerrero-Casado, concluded that the rapid spread of AI misinformation and its potential to harm environmental efforts is a “major threat” to society. The researchers highlighted another challenge for those working in conservation: AI images “could affect the ability of people to identify species” and cause misunderstandings about the abundance and distribution of wildlife.

Scientists often mine data from citizen science platforms that accept photos and recordings of wildlife submitted by users. But AI generation and manipulation could lead to flawed research, several experts warned in a recent commentary in the journal *Nature*.

Meta, Facebook’s parent company, and TikTok require users to label realistic visuals that have been generated or significantly altered using AI. They also say their platforms have tools that automatically label content as AI-generated. However, fact-checkers spotted multiple wildlife posts without clear labels.

UNDERSTANDING ANTHROPIC’S MOVE TO WATERMARK CLAUDE AI CONTENT

The story so far:

As part of its measures to comply with the European Union’s AI Act, the Google and Amazon-backed Anthropic announced that Claude content in the future will carry a machine-readable marking to better enable AI content labelling.

Adding a watermark to AI images and videos is not a new concept. However, the update that made waves was Anthropic announcing that it would add a watermark to Claude text as well, potentially forcing millions to reconsider their use of AI tools. This update will be globally implemented.

What is the new watermarking system by Anthropic?

The new policy was introduced after Anthropic signed the EU AI Act’s Article 50(2) Code of Practice on Transparency of AI-Generated Content.

In order to better identify content that Claude has generated and/or processed, Anthropic is set to add watermarks embedded in text content, as well as signed provenance metadata attached to supported files in formats such as .svg, .png, or .jpg.



Regarding the text-based watermark applied at the model level, users will not be able to see it and Anthropic has confirmed that it will not affect Claude's response.

However, one statement in particular caught the attention of AI users: "Because the watermark is part of the text, it will travel with the text when it's copied and pasted elsewhere, and may persist through some editing."

In essence, this update forces millions of Claude customers to entirely reconsider their use of AI tools. Professional emails, personal messages, school assignments, workplace deliverables, and other types of written content that could once be passed off easily as human-made, may soon come with an AI watermark — even if Claude's involvement was close to negligible.

How exactly the watermarking technology works in the case of Claude text is not yet clear, as the rollout announcement did not reveal the full technical details.

Furthermore, Anthropic is still working on letting external parties detect the Claude AI markings. More information is expected in the future.

Output from the Claude Platform (API), Claude, Claude Code, Claude Cowork, and Claude Tag are set to get the embedded watermarks. The same applies when Claude models are accessed through AWS, Google Cloud, and Microsoft Foundry.

Why are Claude users and non-users concerned?

While some praised Anthropic's marking policy in the hopes of seeing more clearly labelled AI-generated content, critics argued that Claude adding a watermark even to lightly edited text could put reputations at serious risk.

For example, if a human-made file is proofread, translated, summarised, or even converted by someone else using Claude, the final output could still carry a mark, according to Anthropic's update. Naturally, this has put both AI users as well as non-users on edge.

Anthropic also warned about the possibility of false positive and false negative results: detecting a Claude mark does not confirm that the work was created by AI, while the lack of a mark does not mean the work was 100% human-made.

Some factors that can throw off results include short text lengths, content changes after Claude processing, metadata being stripped by converting the file format, and the use of a Claude offering that does not yet support AI marking.

In the days following Anthropic's announcement, multiple dubious websites claiming to offer Claude AI watermark "removal" or "clean up" services have come online.

These concerns are not new. The earlier rise of a market for AI text detectors — and subsequently, AI text humanisers designed to deceive these same detectors — has resulted in multiple authors and bloggers being accused of passing off AI content as original creations.

Despite AI text detection tools being experimental, fallible, and prone to errors, they have been involved in cases that led to cancelled book deals and social media trolling.

Claude users now fear that their own AI tool could end up damaging their credentials.

Are watermarks effective at stopping fake AI content?



Watermarks certainly help simplify the jobs of regulators, fact-checkers, and journalists by giving them a reliable way to verify the origin of an image or a video and even trace it back to a specific provider. But accurately detecting AI-generated text is uncharted territory.

What's more, AI-generated content often travels far and can be circulated thousands of times on social media unchecked, as content moderation rules have been loosened across Mark Zuckerberg's Meta family of apps and Elon Musk's X.

The average internet user distractedly scrolling through media on their phone often misses even visible AI watermarks, let alone invisible markings.

Tech providers and regulators will need to work hand-in-hand to make sure that the AI watermarks lead to a tangible reduction in misinformation, deepfakes, or AI content being passed off as human-made.

For now, however, Claude users are rethinking their workflows and debating at what point human content turns into AI content. Anthropic's watermarking initiative for AI text is an intriguing concept, but it is too soon to tell if this approach to labelling will lead to more clarity or create more confusion.

WHAT DOES ANTHROPIC STAND TO GAIN AND RISK WITH ITS IPO?

The story so far:

Anthropic is reportedly planning a \$2 trillion initial public offering (IPO) by September, according to a Financial Times report. Since the AI product Claude already rakes in billions of dollars, this would likely be a blockbuster IPO were it to be held today. Anthropic's product is incredibly popular, with software engineers handing off increasingly large amounts of advanced coding work to agents built with the AI tool.

Who does Anthropic compete with?

Along with Claude, ChatGPT and Codex continue to compete neck and neck with Anthropic's tools. For coding-focused tasks and processes where AI tool use is needed, firms such as Cursor, recently acquired by SpaceX, could also pose a threat. And then there is the rapidly growing open source model ecosystem, where AI tools that can run on sufficiently advanced PCs are able to manage increasingly complex tasks just fine locally.

What threat do Chinese and open source models pose?

Anthropic faces significant risks in terms of the competition it faces both from other companies and countries. Fuelled by several years of research and capacity-building pushes, Chinese firms are gaining ground on AI, with open source models like Alibaba's Qwen shocking users with low hardware requirements and competitive performance.

So-called open source "harnesses," which provide an interface for running the AI, have also emerged, like Bionic. These harnesses mimic the approachable interfaces of ChatGPT and Claude, even though they are — like all LLMs — just next-word prediction tools. If these tools get sufficiently advanced, the potential disruptions to subscription- and usage-based tools like Claude could be significant.



Does Anthropic's size protect it?

This is no reason to write off a firm as large as Anthropic. While size is no guarantee of success in entering the AI space — Microsoft, for instance, has had more luck in being an infrastructure platform for AI rather than an “inference” (AI query-response) provider on its own merit — there is a significant advantage for a company in having its AI tools being used widely.

Early stumbles by Google (whose Gemini model and other AI tools have caught up in the last few months) show that resources and AI lab size are no guarantee of dominance, especially when there is months of financing and reputational advantages to moving early.

How could continual learning decide the race?

The AI blogger Dwarkesh Patel said earlier this month that so-called continual learning, where an AI tool's real world use is fed back into its training, could make a major difference in how good it is. “Right now, there are less than five prominent AI minds, and they are all quite similar to each other on account of being trained on roughly the same data,” Patel says. “But if AIs are learning from experience, and that experience is different between different AIs, we could see actually different AIs come out the other end.”

He adds, “When deployment becomes part of training, the returns to being ahead will accelerate. If you have the best model, and more people use your AI for more complicated and useful work, and give it lots of feedback that it can integrate beyond the session window, then your model will become even smarter.”

What does RL mean for the IPO?

Since Claude's models are not open source, those real world recursive learning gains would be significant, and give Anthropic pricing power. Then again, that is assuming that it leverages its current dominance to improve future models at a breathless pace, and assuming that open models and competitors don't collectively erode its ability to self-improve in the coming months.

A major focus of all the AI labs going forward is likely to be token cost, which is how much they charge enterprises for each unit of reasoning. As corporates move through their experimentation and controlling costs more (as they did with so-called finops for the cloud computing era), firms that are able to get the most reasoning out of their models, such as by leveraging more efficiency out of their tokens, will see the most investor interest.

HARA MANGROVE FORESTS

The Hara forests are a vital ecological treasure of the Persian Gulf. Spanning the Strait of Hormuz, these mangrove forests consist mainly of grey mangrove trees (*Avicennia marina*), which have a special filtration system in their roots that allows them to thrive in saline conditions. The same roots also protect the coast against erosion and are voluminous carbon sinks, sequestering significantly more carbon than terrestrial forests.

The forests are a UNESCO Biosphere Reserve and serve as an important nursery for marine life as they shelter shrimp, crabs, and numerous fish species that sustain the region's fisheries. Up from the water's edge, the Hara forests' canopy is also a major migratory hub for birds like the great stone-curlew and various herons. The mangroves are the backbone of the sustainable tourism



programmes of Qeshm, an Iranian island in the Persian Gulf, and draw visitors to their labyrinthine waterways.

Protecting these forests is crucial for the lives and livelihoods of Qeshm's local communities and for efforts to preserve the Gulf's natural heritage. Environmentalists have said losing them would trigger a catastrophic collapse of the local food chain and coastal defenses.

Recent satellite images have revealed a major environmental threat to just these forests: an oil spill off Qeshm's southern coast. Experts have identified the source to be a bulk carrier named Minoan Pioneer, which has been leaking heavy fuel oil after being struck by a projectile. The slick stretches 160 km long, with dark liquid already washing ashore. The ongoing West Asia conflict is also hindering cleanup efforts, leaving the mangroves at great risk of devastation.

BOTH SUGAR AND MEAT POWERED EXPANSION OF BRAIN IN HUMANS, FINDS STUDY

Was it meat or glucose that fuelled the growth of the human brain? If evolutionary science told us, hitherto, that human brain expansion relied on meat to grow, a new study has an interesting addition to this theory. Published in a recent issue of Science, the study posits a dual fuel strategy — sugar and meat — as having powered brain expansion in humans.

Multi-centre study

The multi-centre study by Jennie Brand-Miller et al, does not discount the role of meat in brain expansion, but argues that natural sugars and starch found in fruits and honey delivered the required glucose to power a rapidly-expanding human brain. "What foods enabled the evolution of the large human brain? Currently, that diet is usually framed around increasing intake of animal foods: meat, protein, fat, and omega-3 fatty acids," the authors explain, but go on to model the glucose needs of humans and their ancestors from four million years ago, until recently.

Over a period of four million years, the size of the human brain is said to have increased from around 300 grams in early hominins (bipeds) to about 1,500 grams in modern humans. As brains grew, so did demand for glucose, which is required by other tissues including red blood cells, kidneys and reproductive organs.

"The human brain is unusually large for our body size and requires substantial amounts of energy," Jennie Brand-Miller, professor of human nutrition at the University of Sydney Charles Perkins Centre and School of Life and Environmental Sciences, said.

The study does not dismiss the importance of hunting or animal protein; rather, it establishes that human brain expansion relied on a balanced, dual-fuel strategy. Meat provided critical amino acids and micronutrients, while natural sugars and starches delivered the essential glucose required to power a metabolically expensive brain.

These findings discover a new glucose pathway to brain development — natural sugars may have supplied the energy needed to support brain metabolism before the advent of cooking which made starch-rich foods easier to digest. The paper is co-authored by archaeologist Karen Hardy, professor of prehistoric archaeology at the School of Humanities, University of Glasgow.

A quarter of dietary energy

Prof. Brand-Miller explained that raw starch will not release glucose, meaning that early humans likely relied on naturally-sweet foods long before cooked grains became a regular part of the diet.



The modelling employed by the researchers suggests that sugars provided over 25% of dietary energy, fulfilling the obligatory glucose demand. Pounding and cooking (grains) releases glucose specifically, not merely energy. The evolution of a bigger brain is therefore a story of carbohydrate foods as much as animal foods. "While animal foods were important, the brain's need for glucose has largely received little attention from anthropologists," she added. Explaining the element that the modelling brings to current evolutionary theory, Prof. Hardy, said: "The human evolutionary diet has a strong focus on meat eating and the need for protein. But we also require energy and this is best provided by glucose obtained from plants."

The earliest hominins such as 'Lucy', whose brain was the same size as a chimpanzee, as well as Homo habilis and Homo erectus, were therefore likely highly reliant on carbohydrate-rich foods, particularly fruit, the modelling establishes. It was only later, as the use of fire and cooking became more widespread, that starch from underground food sources such as wild yams, water lily rhizomes and African potato contributed to glucose intake. This might also explain to some extent why humans crave sweet foods.

FEEDBACK LOOPS

How does the human brain's biological clock track a 24-hour day?

The brain's biological clock is a network of genes and proteins whose concentrations rise and fall in a roughly daily cycle.

There is a cluster of neurons in the hypothalamus called the suprachiasmatic nucleus (SCN). Inside SCN neurons, certain genes are switched on to produce certain proteins. At one point, these proteins accumulate enough to suppress the same genes. Later, as the proteins are broken down, the genes become active again, beginning the next cycle.

This cycle takes more or less 24 hours, and takes the help of outside cues to adapt day to day. In particular, light-sensitive cells in the retina have a pigment called melanopsin that is sensitive to daylight and sends information directly to the SCN. So when you 'experience' daylight, the brain adjusts the timing of the SCN clock. Specifically, when daytime photons, which are rich in blue light, enter the retina, they 'activate' the cells containing melanopsin, which signal the SCN, which renders molecular changes in its clock machinery.

HELICASE: THE DNA SEPARATOR

Helicase is an enzyme that unwinds the two strands of DNA so that the cell can copy the genetic information stored in them.

DNA is normally a double helix, i.e. two long strands held together by bonds between bases on each strand, spiralling around each other. When a cell divides, it needs to make a copy of the DNA, which requires these strands to be separated.

Helicase does this. First, the enzyme attaches to a particular region of DNA and moves along the molecule. It uses energy from ATP — the cell's main chemical energy source — to change its shape and force apart the two DNA strands. As it travels, the bonds between the bases on bases on each strand are broken.

The result is a Y-shaped region called the replication fork, where the two strands are exposed, much like a zipper separates two parts on a clothing item into a Y shape.



However, DNA tends to become increasingly twisted ahead of the replication fork as helicase moves along it.

Other enzymes called topoisomerases relieve this twisting and prevent the DNA from becoming tangled or breaking.

Once helicase has separated the strands, other replication machinery can use each exposed strand as a template to make a new complementary strand.

In a recent study in Nature Communications, scientists from the U.K. found how cells make sure they start copying DNA only at the right time: a molecular safety catch keeps the copying machine inactive until a chemical signal releases it.

SCIENTISTS FIND WHY AN ENERVATING DISORDER AFFECTS ONLY EURASIANS

Friedreich's ataxia, or FRDA, is a genetic disorder that progressively damages the nerves and the heart.

The affected individuals typically begin to show symptoms between the ages of 5 and 15. They become unsteady and their coordination is impaired. Their speech slows down and slurs. Swallowing becomes difficult. Hearing and vision deteriorates. They feel fatigued, lose sensation, first in the arms and legs, then in the trunk and other parts of the body, and the spine curves to one side. Eventually, most patients die relatively young, of heart disease. There is no cure.

According to Ashwin Dalal, a medical geneticist at the Nizam's Institute of Medical Sciences in Hyderabad, the institute diagnoses one case of FRDA every month on average — and almost all of these individuals come from consanguineous marriages. That is, marriages between relatives, such as uncles and nieces, or between cousins. Many Indian communities practise consanguinity — and it greatly increases the risk of genetic diseases that are otherwise rare. Friedreich's ataxia is one such disease.

Curiously, so far, FRDA has not been reported in people from sub-Saharan Africa, North America, and China, Japan, and Southeast Asia. For a long time, scientists have only found it in individuals of European, North African, West Asian, and South Asian descent.

A new study from researchers at the University of Oklahoma Health Sciences Center in the U.S. has finally cracked the puzzle. Their findings were reported in June 9 in the journal Human Molecular Genetics.

Inefficient powerhouses

FRDA is caused when a gene called FXN becomes mutated.

The FXN gene codes for a protein called frataxin. Frataxin is essential for mitochondria, which are our cells' powerhouses. The chemical ATP, which is the cell's energy currency, is made mostly in the mitochondria. Nerve, spinal cord, brain, and heart muscle cells use a lot of energy. When their frataxin levels become abnormally low, the mitochondria produce ATP less effectively and also accumulate toxic by-products. This renders the cell dysfunctional, leading to the symptoms of FRDA.

The most common disease-causing mutations occur in a part of the FXN gene called the intron. A mutation takes the form of modifying the number of times a particular sequence of bases is



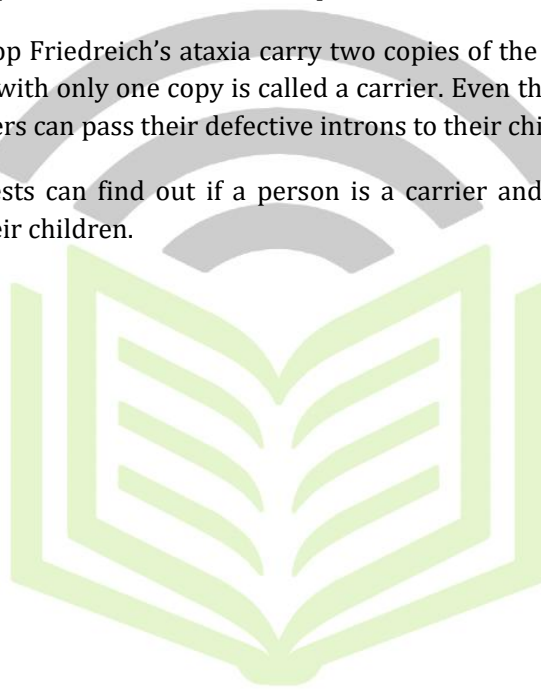
repeated in the intron. Normal variants of the FXN gene contain 5-11 or 12-33 repeats. They're called the short normal and long normal variants. The short-normal variant is common in Europe and South Asia (85-90% of the population), sub-Saharan Africa (90%), and East Asia (over 99%). The long-normal variants are absent in East Asia and make up most of the rest in sub-Saharan Africa and in Europe and South Asia.

However, the DNA sequences of people with Friedreich's ataxia revealed their FXN alleles variants had 100-1,500 repeats. The researchers called them expanded variants.

The short-normal and long-normal variants have an open structure in the chromosome that allows cells to make frataxin as needed. However, the expanded variants forced the chromosome to assume a closed shape that reduced frataxin expression.

Individuals who develop Friedreich's ataxia carry two copies of the expanded variant, one from each parent. A person with only one copy is called a carrier. Even though they themselves won't have the disease, carriers can pass their defective introns to their children.

Fortunately, genetic tests can find out if a person is a carrier and whether they passed their extended variant to their children.



DreamIAS