

CURRENT AFFAIRS for UPSC

26TH NOVEMBER TO 2ND DECEMBER 2023

DreamIAS

|



INTERNATIONAL

WHERE DOES INDIA STAND ON ISRAEL-HAMAS WAR?

The story so far:

Over the past weeks, India has expressed itself in statements, joint statements, and votes at the United Nations on the ongoing Israel-Hamas conflict, that saw a temporary pause for the exchange of hostages which began on Friday. Prime Minister Narendra Modi hosted two separate virtual summits, the concluding session of India's G-20 and the second edition of the 'Voice of Global South' Summit, and spoke about the ongoing Israel-Hamas conflict, as well as the importance of heeding the concerns of the developing world. External Affairs Minister S. Jaishankar travelled to the U.K. for talks, held along with Defence Minister Rajnath Singh "2+2" dialogues with their counterparts from the U.S. and Australia where joint statements reflected the West's position much more.

What is the position India has articulated?

India's position, as articulated since the October 7 terror attacks along the Israel-Gaza border by Hamas that killed more than 1,200 people, and then on the bombardment of Gaza by Israel where more than 13,000 have been killed, has been multi-layered. The Modi government has condemned terrorism in the strongest language and stood with Israel over the attack, although it hasn't thus far designated Hamas as a terror group. The government has called on Israel for restraint, dialogue and diplomacy and condemned the death of civilians, and along with the U.S. and Australia, called for "humanitarian pauses" in bombardment, but has not so far called for a "ceasefire". At the same time, India has reaffirmed its support for a "two-state solution" including a sovereign, viable state of Palestine existing in peace alongside Israel, supported the "socio-economic welfare" of the Palestinian people, and has sent 70 tonnes of humanitarian assistance including 16.5 tonnes of medicines and medical supplies via Egypt to Gaza in the past month, Mr. Jaishankar said at the BRICS emergency meeting chaired by South Africa this week.

Mr. Modi, however, skipped the BRICS plus summit attended by all other leaders of the 11-nation grouping, indicating a discomfort with the tough line taken by South Africa that has asked for the International Criminal Court to investigate Israel for alleged "war crimes" in Gaza. Meanwhile, at the United Nations, India abstained at a UNGA vote on October 26 that called on Israel for a ceasefire, but voted in favour of other draft resolutions at the UNGA's "Fourth Committee" on November 9 against Israel's settler policies in the occupied territories including the West Bank and Syrian Golan.

Is India's position closer to the West or the Global South?

Traditionally, since its leadership of the Non-Aligned Movement, India's position on the Israel-Palestine conflict has always aligned with the Global South, offering full support for the Palestinian cause. It has called for talks to end the conflict, while building a stronger strategic, defence, counter-terrorism cooperation and trade ties with Israel since 1992, after they established full diplomatic ties. Since the Kargil war, where Israel provided India crucial and timely shipments of weapons and ammunition, a study of India's statements at the UN showed a softening of language against Israel, including toning down "condemnation" of Israeli airstrikes on Gaza, although it voted regularly with the developing world to stop the violence. India's vote on October 26, however, was a departure from that, where it lined up alongside 45 abstentions, mostly from



European countries, rather than the 120 countries, mostly from the Global South, which included nearly all the countries of West Asia, South Asia, Southeast Asia, Africa and South America that voted for the resolution. India also joined the U.S.-led formulation of total condemnation of the October 7 terror attacks and for “humanitarian pauses”, ostensibly to allow food, fuel and water into Gaza in between periods of Israeli bombardment, language that appeared in both its joint statements after the 2+2 dialogues with the U.S. and Australia.

India has stood apart from Western countries in that it has not thus far banned Hamas, or designated it a terror organisation as the U.S., U.K., Switzerland and Germany have moved to do. In an effort perhaps to push India to do so, Israel this week announced it was banning the Lashkar-e-Taiba, the group responsible for the Mumbai 26/11 terror attacks that included Israeli victims, 15 years later.

How will this impact ties in West Asia?

While India’s relations with Israel have been increasingly “de-hyphenated” from its ties with Palestine, many experts have suggested that any change in its stance favouring Israel over all other ties with the Gulf and Arab world, will be watched closely. Each country has a rich history of ties with India. For several years, India has built special ties with the UAE and Saudi Arabia, calculating that the normalisation of ties between them and Israel is only a matter of time, as the Abraham Accords showed. As a result, the India-Israel-UAE-U.S. (I2U2) trade initiative and the recently launched India-Middle East-Europe Economic Corridor hinging on this normalisation could be one casualty of the Israel-Hamas conflict which has led to a strong reaction from the Arab League and Organisation of Islamic Cooperation. When asked this week, the U.S. Ambassador to India, Eric Garcetti, accepted that the conflict could pause infrastructure initiatives, but that in the long term, the logic of such plans would prevail.

India’s ties with Iran, Israel’s chief enemy, that have been strengthened by initiatives like the Chabahar port and the International North-South Transport Corridor to Central Asia and Russia could also be affected, if it seems that the Modi government is choosing one side more clearly than the other. Israeli companies have expressed interest in bringing in nearly a lakh of Indian workers to replace Palestinian workforce in the construction industry; New Delhi has thus far not jumped at the idea, keeping in mind the more than eight million Indians working in Gulf countries that could be impacted as well.

IN GAZA, ISRAEL IS WAGING AN INVISIBLE ENVIRONMENTAL WAR

In October, Israel hit the Jabaliya refugee camp in Gaza with a 2,000-pound bomb twice. The bombs – the second-largest in Israel’s arsenal, according to an investigation by The New York Times– left 40-foot-wide craters in the ground and turned the site into a pile of rubble, killing hundreds.

In the nearly two months since the Israel-Hamas conflict began, Israel has bombarded Gaza without pause, using an array of missiles but also white phosphorus – a compound whose use in densely populated areas violates international humanitarian law, according to Human Rights Watch. In the first month, the Euro-Med Human Rights Monitor recorded that Israel had dropped more than 25,000 tonnes of explosives on 12,000+ targets in the Gaza Strip.

According to the Federation of American Scientists, a body under the U.S. Department of Defence, the 2,000-pound Mk-84 bombs are generally filled with tritonal – a mix of one part aluminium and



three parts trinitrotoluene or TNT. When it detonates, the soil, water, and air in the blast radius are all exposed to these substances.

The chemical components of these bombs are absorbed in the soil or washed into the sea, becoming a dangerous externality that has always languished in the shadow of war. Even the broken buildings – typical of all modern wars – are pollutants.

This means a large quantity of the materials that are used to make buildings lie on the streets, unsorted and undisposed of. According to a study by PAX, a peace organisation in the Netherlands, rubble from broken buildings includes hazardous materials like asbestos, cement, heavy metals, domestic chemicals, and combustion products, which can cause lung irritation or disease, chest pain, or more serious and chronic nervous and respiratory issues in the case of long-term exposure.

This article reports of 'herbicide warfare' in Gaza, where Israeli forces engage in aerial spraying of crop-killing herbicides to create a 'buffer zone.' This practice, documented by Forensic Architecture, involves the use of glyphosate, Oxyfluorfen, and Diuron, adversely affecting arable land and the health of Palestinian farmers. The segmentation of Palestinian territories contributes to biodiversity loss, compounding environmental challenges in the region.

Sewage on the shore

Israel also controls the water supply to Palestinian territories – and cutting access to clean water, to the Palestinian people as well as to the flora and fauna of Gaza, has become another weapon in Israel's arsenal. According to UNICEF, only one in 10 people in the Gaza Strip have direct access to safe drinking water. Dr. Daoudy even accused Israel of deliberately targeting WASH – i.e. Water, Sanitation, and Hygiene – infrastructure.

Just days after Hamas's attack in October, Israel announced that it would cut water and electricity supply to Gaza. Aside from making daily life harder, cutting power also allows contaminants to spread in desalination plants, including *Escherichia coli* bacteria that can cause gastric distress.

When sewage mixes with seawater, the fisheries become contaminated as well, threatening a major source of income for Gazans: fishing. This is setting aside the fact that the waters off Gaza are at risk of overfishing because Israel's blockade prohibits them from fishing beyond six nautical miles in the north and 15 in the east.

The occupation proceeds

"The weaponization of hunger, the weaponization of water and security, and the use of the ecological infrastructural basis of life to deprive a population," Dr. Ranganathan said, is often how a colonial occupation proceeds. "One of the first ways you colonise and seize territories is not just to syphon off those resources for yourself but also to make sure that the so-called enemy population or the 'other' doesn't have the basis of life to sustain itself."

In this sense, damage to the environment inflicts losses on the planet and its elements as well as affects the people – a double whammy, so to speak.

After the U.S. pulled out of Afghanistan, for example, doctors found people living in areas exposed to the effects of repeated bombing, burn pits, disposed military waste, and other sites of intense military activity afflicted by a variety of diseases – from rashes to kidney stones to cancer.



Similarly, studies have shown that in the occupied Palestinian territories, heavy metals in the environment and persisting in wounds have increased the rate of congenital birth defects as well as premature births. An April 2020 study, published in the International Journal of Environmental Research and Public Health, concluded that the “bodily accumulation” of heavy metals – many of which are carcinogens (cancer-causing) and teratogens (interfering with foetal development) – “following exposure whilst residing in attacked buildings” is one factor that predisposes women to negative birth outcomes.

But just like the herbicides sprayed over the buffer zone, the consequences of the ecological violence aren’t restricted to the Palestinian people. “We all share the same air,” Dr. Daoudy said. “Despite the wall, when the coastal aquifer is contaminated in Gaza, it’s an aquifer which is shared with Israelis. It’s not in their interest when there’s saline water coming into the coastal aquifers.” The same goes for the air “polluted with phosphorus bombs”.

WHAT ARE THE ELGIN MARBLES, AT THE CENTRE OF THE ROW BETWEEN BRITAIN AND GREECE?

British Prime Minister Rishi Sunak cancelled a meeting with his Greek counterpart Kyriakos Mitsotakis over the status of the Parthenon Sculptures housed at the British Museum, sparking a diplomatic row sparked between Greece and the UK on Monday (November 27).

Athens has accused London of trying to avoid discussing the contested sculptures, more popularly known as the Elgin Marbles. Over the years, Greece has repeatedly asked for the sculptures’ permanent return to Athens, but Britain and the British Museum have refused to do so.

Now, King Charles has seemingly waded into the controversy, sporting the blue and white tie and handkerchief — the colours of the Greek flag — on Friday, at the COP28 summit in Dubai. While Buckingham Palace insists that the choice of accessories was random, Prince Charles notably has a close relationship to Greece, with his father Prince Phillip coming from the Greek royal family.

Here is what you need to know about the Elgin Marbles, how they came to Britain, and the controversy surrounding them.

What are the Elgin Marbles?

The Parthenon Sculptures at the British Museum are more than 30 ancient stone sculptures from Greece that are more than 2,000 years old. Most of them originally adorned the walls and grounds of the Parthenon temple on the rocky Acropolis hill in Athens. Completed in 432 BC, the temple is dedicated to the goddess Athena and is seen as the crowning glory of Athens’ Golden Age. While one notable sculpture, which is 75 metres long, depicts a procession for the birthday of Athena, others show gods, heroes or mythical creatures.

How did the sculptures reach Britain?

They were removed from the Parthenon in the early 19th century by Thomas Bruce, the 7th Earl of Elgin and then-British ambassador to the Ottoman Empire. The marbles were taken to Britain and purchased by the British Museum in 1816.

Were the sculptures stolen?

While Athen accused Lord Elgin of theft, he insisted he had permission to remove the marbles from the Ottoman Empire, which used to control Athen at the time. The original letter giving him

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



permission, however, has been lost and its text remains disputed, according to a report by the BBC.

Athens has been demanding the return of the sculptures since it became independent in the early 1830s. The campaign gained momentum in the 1980s after Greek Oscar-nominated actress Melina Mercouri launched a movement for their return when she was culture minister between 1981 and 1989.

How did Britain respond?

The British Museum, the caretaker of the sculptures, claims that they were acquired by Elgin under a legal contract with the Ottoman Empire and has rejected the demands of their return.

Moreover, it also said that “the public would benefit more from having the sculptures divided between two museums, that bringing them back together into a unified whole is impossible as some parts were lost or destroyed, and that the sculptures could not be safely returned,” according to Reuters.

In March, Sunak said the marbles are a “huge asset” to the UK and ruled out changing a law that would allow the sculptures to be given back to Greece.

What happens now?

A day after the meeting was cancelled between Sunak and Mitsotakis, Greek officials said they would continue talks with the British Museum about the return of the Parthenon Sculptures.

Reports suggest that although the Tory government insists that Britain owns the marbles, the Labour party, expected to win next year’s national elections, will allow a loan agreement between the British Museum and the Greek government.

FAR-RIGHT TURN

The victory of Geert Wilders, a far-right, anti-Islam populist, in the parliamentary elections has put the Netherlands, long seen as one of the most socially liberal countries in Europe, at a crossroads. According to the preliminary results, Mr. Wilders’s Party for Freedom (PVV) has emerged as the single largest party with 37 seats in the 150-member lower house. The Labour-Green coalition won 25 seats, while the incumbent People’s Party for Freedom and Democracy (VVD) secured 24. While the PVV is far from the 76 seats needed for a majority, its formidable performance (it won three more seats than what the VVD won in the last elections) puts Mr. Wilders in a position to start coalition talks and on a potential path towards becoming the country’s first far-right Prime Minister. Over the years, Mr. Wilders has built an image of himself as one of the most radical far-right populists in Europe. He has called for “de-Islamising” the Netherlands, shutting down mosques, banning the Koran, and closing the borders to migrants from Muslim-majority countries. He made the influx of migrants a strong political issue during the campaign, which appears to have helped him deal the greatest blow to the political establishment.

The PVV’s victory is neither surprising nor isolated. Mr. Wilders, a member of the House of Representative since 1998, split from the conservative VVD in 2004 to form the PVV. Since then, he has been pushing his brand of populism in Dutch politics. In the past, the VVD, led by outgoing Prime Minister Mark Rutte, avoided tying up with the PVV because of the latter’s controversial views. But by grabbing the highest number of seats in the House, the PVV has now placed itself at



the centre of Dutch politics. It is not certain whether Mr. Wilders will be able to put together a governing coalition. But even if he is kept out of power, the leader of the largest party in Parliament cannot be ignored. His rise is in line with the rise of far-right parties and populists across Europe. In France, Marine Le Pen finished a close second in the 2022 presidential elections. In Italy, a party with neo-fascist origins is in power. In Germany, the AfD, which has neo-Nazi roots, is the second most popular party. This should be a wake-up call for the establishment parties in the West. The far-right is using the immigration and the cost-of-living crises to mobilise the public under its exclusive, ethno-nationalist brand of politics, while the political centre is struggling to hold. Establishment parties should have a clear economic agenda and political vision to arrest the rising tide of far-right politics, which echoes Europe's dangerous and not-so-distant past.

WHY FINLAND IS BLAMING RUSSIA FOR A SUDDEN INFLUX OF MIGRANTS ON ITS EASTERN BORDER

When Finland joined NATO earlier this year, Russia threatened retaliation. Now, hundreds of migrants from the Middle East and Africa have appeared at Finland's border from Russia, seeking entry into the Nordic country. Finnish officials say the sudden surge in asylum-seekers is no coincidence. They accuse Russia of driving the migrants to the border to sow discord as payback for Finland's membership in NATO.

Here is a look at the migration challenge playing out along parts of Finland's 830-mile (1,340-kilometer) border with Russia.

WHAT HAPPENED?

There has long been a trickle of asylum-seekers showing up at border checkpoints in Finland, which is the European Union's easternmost member. But this month saw a sudden surge. According to official statistics, more than 900 migrants have arrived in Finland so far since August, more than 800 in November alone. Finnish authorities say they hail from countries including Syria, Yemen, Somalia, Iraq and Afghanistan, and that unlike in the past, the Russian authorities let them get that far even though they lack documents.

They arrive in sneakers in Finland's harsh winter conditions, most riding bicycles. "We have proof showing that, unlike before, not only Russian border authorities are letting people without proper documentation to the Finnish border, but they are also actively helping them to the border zone," Finnish Foreign Minister Elina Valtonen told The Associated Press on Wednesday.

HOW IS FINLAND REACTING?

Finnish authorities quickly closed four checkpoints and then three more, leaving just one Arctic crossing point open for asylum-seekers. They sent Finnish soldiers to erect barbed wire and concrete barriers along the frontier. Finland also asked for help from EU border agency Frontex, which said it would send dozens of officers and equipment as reinforcements to the Finnish border.

Prime Minister Petteri Orpo said there has been a "serious disruption of border security," but authorities also insist that they have the situation under control. The Kremlin denies encouraging the migrants, and says it regrets the Finnish border closures. Russian Foreign Ministry spokeswoman Maria Zakharova argued Wednesday that Helsinki should have instead tried to "to work out a mutually acceptable solution or receive explanation."



HYBRID WARFARE

Western countries have for years accused Russia and its ally Belarus of using migrants seeking safety and economic opportunity in Europe as pawns to destabilize Western democracies.

European leaders called it a form of “hybrid warfare” that Moscow deploys against them, along with disinformation, election interference and cyber attacks. Finnish Foreign Minister Valtonen told the AP that there is no doubt that Russia “is instrumentalizing migrants” as part of its “hybrid warfare” against Finland following the nation’s entry into NATO — a decision prompted by Russia’s full-scale invasion of Ukraine. Other Western experts agree.

DEJA VU

EU Home Affairs Commissioner Ylva Johansson said this week that the challenges on Finland’s border gave her a feeling of “deja vu.” Finnish President Sauli Niinistö noted this week that Russia, in 2015 and 2016, permitted asylum-seekers to approach border checkpoints in northern Finland. It was seen as a response to Finland increasing training activities with NATO.

He recalled previously warning that Finland should prepare for a “certain malice” from Russia and said that “we are now constantly being reminded every day that Finland joined NATO.” The NATO nations of Poland, Lithuania and Latvia have also faced migration pressure on their borders with Belarus — an ally of Russia — for more than two years.

A trickle, and then a sudden surge of migrants from Belarus came after the EU imposed sanctions on Belarus for a 2020 election that authoritarian leader Alexander Lukashenko claimed to win, but which was widely viewed as rigged. Latvian Prime Minister Evika Silina told the AP on a visit to Finland this week that the Baltic nation recorded a rise in attempts by migrants to cross the Belarus-Latvia border in September, prompting it to close all checkpoints on the 107-mile (173-kilometer) border except one left open for asylum-seekers.

Silina said it was impossible to know the thinking of Lukashenko and Russian President Vladimir Putin. “That’s the bad thing,” she said. “We cannot predict it. We have to react and be proactive like in an emergency situation.”

WHY DOES MIGRATION PRESSURE CAUSE INSTABILITY?

Migration pressure pushes democracies to abandon some of their democratic commitment to giving people seeking asylum the right to seek protection, thereby exposing fragility of democratic systems. Europe has been under heavy migration pressure for years, triggering a backlash in many places against migrants that has also strengthened far-right parties. The latest case is in the Netherlands, where anti-Islam politician Geert Wilders won an electoral victory this week.

In Poland, the border crisis deepened preexisting social divisions, pitting those seeking a tough stance on migration against those favoring a more accepting approach toward migrants and refugees. The government accused those of siding with migrants as unwittingly helping hostile foreign powers.

New walls and barriers now crisscross Europe as a result of migration and Russia’s aggression. But they don’t fully work. Poland’s Border Guard has detected 25,500 attempts this year to illegally get through the border from Belarus, where a large steel wall was completed last year.



DEBATE INSIDE FINLAND AND ARCTIC CROSSINGS

Finns are now debating whether national security — an absolute priority for any government in the country of 5.6 million because of its proximity to Russia — exceeds human right concerns. Under international agreements and treaties valued in the Nordic countries, at least one checkpoint on a country's borders should remain open for asylum-seekers.

Orpo's government decided to comply with this by leaving open the Raja-Jooseppi checkpoint in the Arctic north. It is the northernmost Finland-Russia border point located in the middle of wilderness in the Lapland region, about 155 miles (250 kilometers) from Russia's Arctic city of Murmansk. Despite the remote location, about 55 migrants arrived to the checkpoint on Saturday, more than usual.

NEPAL'S FIRST OFFICIAL QUEER MARRIAGE: A BEACON OF CHANGE FOR SOUTH ASIA

Four months before India's Supreme Court nudged open the door, for making available fundamental rights and freedoms to the embattled LGBTQI+ minority, but stopped short of legalising marriage equality, a neighbouring country had taken momentous strides in that direction.

In its landmark June 27 verdict, Nepal's Supreme Court, responding to a writ petition, legalised same-sex marriage. The court's interim order directed the government to make arrangements to "temporarily register" the marriages of "sexual minorities and non-traditional couples". The order made Nepal the first south Asian nation — and only the second in Asia after Taiwan — to institutionalise marriage equality.

This week, Maya Gurung and Surendra Pandey, who have been together for 10 years and had a temple ceremony in 2017 with the blessings of their families, became the first queer couple in the country to officially register their wedding.

Gurung and Pandey's dream of a life together, finally recognised and enabled by the law, is one that will resonate within their country, and also outside it, including in its neighbourhood — in south Asia and in India where the October 17 verdict had left many disheartened.

In a world that is more interconnected than ever before, and where ideas travel much more quickly and strike sparks even in distant places, it can be hoped that what has happened in Nepal won't just stay in Nepal.

In the aftermath of a verdict that did not go far enough in India, the news of a queer couple's marriage in Nepal raises hopes of the next step being taken here in the not-too-distant future, now that a model is available in the neighbourhood.

After all, the power of a good idea to set an example and cross a border has been seen before — for example, with India's Right to Information (RTI) law, which grew from a grassroots movement for greater accountability and transparency in governance to a 2005 Act that subsequently became a model for other nations in the region. After India, Bangladesh passed its own RTI law in 2008, followed by Sri Lanka in 2016.

Ideas that drive change in the direction of greater equality and freedom can make a larger difference, set off wider ripples and echoes. A wedding in Nepal today can become the signpost in South Asia for a more equal tomorrow.



NATION

A LOT AT STAKE

The impact of the 15-page indictment filed by the U.S. Department of Justice against an Indian national, believed to be directed by an Indian government official for attempting an assassination plot against U.S.-based Khalistani separatist Gurpatwant Singh Pannun, is likely to be felt in more than just the U.S. and India. The indictment is based on details of communications between the accused, an illicit drugs and arms dealer, Nikhil Gupta, with a serving senior Indian government intelligence officer, who is identified but unnamed, as well as with two men in the U.S., who were allegedly engaged to kill Mr. Pannun. The twist in the tale, unreported on so far in the U.S., or Canada, is that the two U.S.-based men were working for U.S. law enforcement, making it clear that American agents have been following the investigation since at least May. There have been meetings between the U.S. President Joseph Biden and Prime Minister Narendra Modi — other senior officials have met too — since then. The allegations raise troubling questions about how much was shared between the two countries, and whether the Modi government, which had been outraged by similar allegations made by Canadian Prime Minister Trudeau, has been less than honest about what it knows. If the government had knowingly authorised the targeting of Sikh separatists who are on India's UAPA terrorist designation list, then that implies a dramatic change in Indian policy, which it should be more upfront about. If top officials had no inkling about the "plots", and as the Ministry of External Affairs has stated this is not "government policy", it is also a matter of grave incompetence and 'rogue' officers. If, however, the U.S.'s and Canada's allegations are unfounded, and Indian officials are not linked to the plots, then the government needs to furnish evidence. In any case, the management of public messaging in the matter, especially India's reaction to Canada versus the U.S., appears inconsistent.

Whatever the factors behind the government's responses thus far, it is significant that it has now instituted a high-level inquiry committee to look into the U.S.'s allegations. Much hinges on its outcome. To begin with, India's U.S. ties could be impacted by what transpires, as White House expects India's full cooperation. India too, must ask the U.S., which is rightly placing such emphasis on the plot, why it is not keen on extraditing to India a man facing terror charges. Second, the U.S. and Canadian allegations will directly impact India's ties with all "Five Eyes" intelligence partner countries, which must not be overshadowed by this one case. Finally, it is India's reputation as a consistent and credible power — one which has earned respect worldwide for its sagacity and principled approach on such issues in the past — that hangs in the balance, and New Delhi must judge its next steps in the case extremely wisely.

T.N. GOVERNOR CANNOT REFER RE-ENACTED BILLS TO PRESIDENT, SAYS SC

A three-judge Bench headed by Chief Justice of India D.Y. Chandrachud said the Governor, having withheld his assent to the Bills on November 13, cannot now refer the Bills, re-passed by the legislature, to the President.

The CJJ said once the Governor withholds assent, he cannot stultify the Bills. He has to send them back to the Assembly under the first proviso of Article 200. Consequently, if the Assembly re-passes the Bills, with or without amendments, the Governor has no choice left but to grant his assent to the Bills in the re-enacted form. The Chief Justice said this law has already been settled by the top court in its November 10 judgment.



“...Once the Assembly has re-passed the Bills, you [Governor] cannot say ‘now I will refer it to the President’. The first proviso’s last line is very clear. It says the Governor ‘shall not withhold assent’ to re-enacted Bills sent back to him for consent,” the Chief Justice observed.

Attorney-General R. Venkataramani, appearing for the Governor, countered that the Governor had “simply withheld assent” on November 13. He had not sent back the Bills, but had only communicated to the Assembly that he had refused consent to the Bills.

The Attorney-General said the first proviso operated at a level where the Governor, without withholding consent, sent a message back to the Assembly suggesting amendments to specific provisions or making recommendations to the Bills. The Assembly was free to reject the Governor’s suggestions, in which case the Governor had no option but to give his consent.

“Now, this was not a case when the Governor had asked the Assembly to reconsider the Bills or had recommended changes. Here, he had only communicated to the Assembly on November 13 that he had withheld assent... The Bills were not technically sent back to the Assembly for reconsideration,” Mr. Venkataramani argued. “So, you are saying the Governor can just withhold consent and virtually kill the Bills?” the Chief Justice asked.

The Attorney-General’s submissions seemed to indicate that the 10 Bills were not re-enacted, but were considered as fresh Bills, in which case the Governor had exercised his option under Article 200 to refer to the President.

Senior advocates A.M. Singhvi and P. Wilson, for the State government, asked whether the Attorney General’s submissions implied that the Assembly had passed “a ghost” on November 18. “There is no fourth category of withholding consent and keeping it hanging. The Governor cannot keep the Bills hanging perennially. That means the Assembly’s re-passage of the Bills on November 18 was a futile exercise,” Mr. Singhvi said.

Mr. Wilson said the Governor was arguing that he had killed the Bills.

Mr. Singhvi said the Governor had never in the past denied in court that he had “returned” the Bills. Mr. Venkataramani said the Assembly’s re-passage of the Bills showed that it did not care for the Governor’s assent.

Chief Justice Chandrachud, towards the end of the hearing, urged the Governor to resolve the impasse with the Chief Minister. “So many things need to be resolved between the Chief Minister and the Governor. Please ask the Governor to engage with the Chief Minister... Let them sit down and discuss,” the CJI told Mr. Venkataramani.

The Attorney-General’s response was a bleak one. He said there were cases when “both do not have any bonhomie”. The court adjourned the case to December 8 even as Mr. Singhvi said the President should not process the Bills by that time. “They know we are here,” Chief Justice Chandrachud assured the State government.

REJECTION BY GOVERNOR DOES NOT MEAN DEATH OF BILL: SUPREME COURT

Chief Justice D.Y. Chandrachud, writing for a three-judge Bench, held that a law proposed by a State legislature is not extinguished merely because the Governor refuses to sign his assent.



The judgment explains that the substantive portion of Article 200 of the Constitution provides the Governor with three options when presented with a Bill — consent to the proposed law, withhold consent, or reserve the Bill for the consideration of the President.

The first proviso of Article 200 goes on to say that the Governor may send the withheld Bill, if it is not a Money Bill, back to the House as soon as possible with a message suggesting amendments or requesting the Assembly to re-consider the Bill or specific provisions of it. The judgment holds that the first proviso does not offer the Governor a fourth contingency.

The court clarified that the Governor cannot choose between letting a Bill die after rejecting it and sending it back to the House for re-legislation.

The Chief Justice held that a Governor should necessarily return a Bill to the House for re-legislation after deciding to withhold consent. The court held that the procedure enumerated in the first proviso was the mandatory follow-up to the Governor's choice of withholding consent. Thus, the court has inextricably linked the withholding of consent with the return of the Bill to the House for reconsideration.

The court had made it clear that the final word belongs to the legislature. Once the House re-passes the returned Bill, with or without amendments, the Governor has no choice but to grant consent.

“The Governor as the unelected head of State would be in a position to virtually veto the functioning of the legislative domain by a duly elected legislature by simply declaring that assent is withheld without any further recourse. Such a course of action would be contrary to fundamental principles of a constitutional democracy based on a parliamentary pattern of governance. The Governor is under Article 168 a part of the legislature and is bound by the constitutional regime,” the court held.

The judgment is based on a petition filed by the Punjab government against its Governor.

RIGHT TO PRIVACY NOT ECLIPSED BY MARRIAGE, SAYS KARNATAKA HC

Relationship by marriage does not eclipse the right to privacy under the Aadhaar Act, and personal data of one of the spouses stored in Aadhaar cannot be disclosed at the instance of the other spouse without hearing the spouse whose information is sought, said the High Court of Karnataka.

The marriage by itself does not do away with the procedural right of hearing conferred under Section 33 of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits & Services) Act, 2016. The relationship by marriage, which is a union of two partners, does not eclipse the right to privacy, “which is protected by the procedure of hearing contemplated under the Act”, the court said.

A Division Bench comprising Justice S. Sunil Dutt Yadav and Justice Vijaykumar rejected the argument made on the wife's behalf that marriage results in merging of identities.

The UIDAI had questioned the direction of a Single Judge Bench to consider the plea of the woman, who had sought under the RTI Act the data form submitted by her husband when he had enrolled for Aadhaar.

The wife, owing to a matrimonial dispute, had approached a family court in Hubballi seeking maintenance from the husband. The court had granted monthly maintenance of ₹15,000 to the woman.



MADRAS HIGH COURT STAYS ED SUMMONS TO FIVE COLLECTORS IN T.N.

The Madras High Court has granted a stay on the Enforcement Directorate's (ED) summons issued to the Collectors of Ariyalur, Karur, Thanjavur, Tiruchi, and Vellore in Tamil Nadu. The ED had sought details on all sand quarry sites in their districts under the Prevention of Money Laundering Act (PMLA). The court supported the Tamil Nadu government's argument that the ED cannot conduct a fishing expedition to identify potential proceeds of crime without evidence of a predicate offense. The judges noted that the ED's request was not based on the existence of a specific offense but aimed at determining whether any offense had been committed. The court found the summons to be outside the ED's jurisdiction and an attempt to investigate potential proceeds of crime from unregistered activities. While granting interim relief, the court scheduled a final hearing for December 21, allowing the ED to present its contentions at that time. The State government's request to stay all further proceedings related to the Enforcement Case Information Report (ECIR) was not addressed in the interim order. The court appreciated the ED for promptly filing a detailed objection affidavit.

IN MANIPUR, A LONG ROAD TO HEALING

The Supreme Court-appointed three-member panel to examine the humanitarian fallout of the ethnic violence in Manipur has flagged a sensitive issue that is indicative of the long road to reparation in the state. The panel, led by former Jammu and Kashmir High Court Chief Justice Gita Mittal, has sought the intervention of the highest court to keep civil-society organisations from exerting pressure on families and relatives to stay away from performing the last rites of their kin claimed by the violence until their demands are met. It has further suggested that the state shoulder the responsibility, should families still fail to come forward. The official death toll in the current crisis stands at 175, of which 169 bodies have been identified. Only 81 bodies have been claimed so far.

The report is a crucial indicator of the work that still remains to be done in the Northeastern state, even for people to feel free to give their loved ones a farewell they deserve and give grieving families the closure they need. The pressure by civil-society groups indicates the trust deficit the state government continues to suffer from, despite tentative steps taken by it. In a welcome move, Chief Minister N Biren Singh has announced the initiation of talks with a Valley-based Meitei insurgent group — the first since the recent bout of ethnic violence broke out in May. This is also the first time that any Imphal-based Meitei group has come to the table. The National Socialist Council of Nagaland had signed a ceasefire agreement in 1997, as did Kuki insurgent groups, Kuki National Organisation and United Progressive Front in 2008. Last year, the Zeliangrong United Front, too, had entered into a ceasefire agreement with the government.

Yet, as sporadic instances of violence continue to break out in Manipur, it reinforces how healing can only be achieved if it is not skin-deep. The missing arms and ammunition, looted from security forces in the months of flagrant violence, continue to be a cause of concern as does the state's history of interminable internet shutdowns. The government needs to step up its efforts and do better by its people — all of them. For the continuing chill between the hill and valley tribes to thaw, outreach programmes that actively involve the ordinary citizen and the rehabilitation of those displaced need to begin in earnest. In this, recommendations by the 2014 Virginus Xaxa committee might provide useful assistance, especially in critical issues of education, health, migration, employment and displacement.



HISTORY OF UNLF, MEITEI INSURGENT GROUP THAT SIGNED PEACE DEAL WITH CENTRE

The United National Liberation Front (UNLF), a Meitei separatist group in Manipur, signed a historic peace agreement with the Indian government, announced by Union Home Minister Amit Shah. Formed in 1964, the UNLF is the oldest valley-based insurgent group in Manipur, distinct from groups in the Naga-dominated and Kuki-Zomi dominated hills. The UNLF demanded secession from India and operated with its armed wing, the Manipur People's Army, responsible for attacks on Indian security personnel.

There are now two factions of the UNLF with an estimated 400-500 cadres, mostly operating from camps in Myanmar with the support of the Myanmar military. The group has weakened over the years but has raised concerns due to increased activity during the ongoing ethnic conflict in Manipur. The peace agreement is considered a historic development, as valley-based insurgent groups (VBIGs) have not engaged in such talks before.

The UNLF's history includes a formal split in the mid-1990s, leading to the creation of the Kanglei Yawol Kanna Lup (KYKL) faction. Leadership changes occurred after the assassination of Arembam Samarendra Singh in 2000. In 2021, another split occurred, resulting in two factions under different chairpersons. The faction led by Khudongbam Pambei has been open to talks, and the process began in 2020.

While the UNLF is the oldest Meitei insurgent group, other groups have emerged over the years. The UNLF faction under NC Koireng remains opposed to talks. Additionally, a Suspension of Operations (SoO) agreement in 2008 included the Manipur government and Kuki-Zomi insurgent groups. However, in March of the current year, the Manipur government withdrew from the agreement with the Zomi Revolutionary Army and the Kuki National Army, citing their influence on forest encroachment-related agitation.

WHY IS BIHAR DEMANDING THE SPECIAL CATEGORY STATUS?

The story so far:

On November 22, the Chief Minister Nitish Kumar-led Cabinet passed a resolution seeking the grant of special category status (SCS) to Bihar. The demand comes in the backdrop of the findings from the "Bihar Caste-based Survey, 2022", which revealed that nearly one-third of Bihar's population continues to live in poverty.

What is a special category status?

It is a classification granted by the Centre to assist the development of States that face geographical or socio-economic disadvantages. The SCS was introduced in 1969 on the recommendation of the fifth Finance Commission (FC). Five factors such as (i) hilly and difficult terrain (ii) low population density and/or sizeable share of tribal population (iii) strategic location along international borders (iv) economic and infrastructural backwardness and (v) non-viable nature of state finances, are considered before granting SCS. In 1969, three States — Jammu & Kashmir, Assam and Nagaland — were granted the SCS. Subsequently, eight more States including Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim, Tripura, Himachal Pradesh, and Uttarakhand were given the SCS by the erstwhile National Development Council.



What are the benefits attached?

The SCS States used to receive grants based on the Gadgil-Mukherjee formula, which earmarked nearly 30% of the total central assistance for States to the SCS States. However, after the abolition of the Planning Commission and the recommendations of the 14th and 15th FC, this assistance to SCS States has been subsumed in an increased devolution of the divisible pool funds for all States (increased to 41% in the 15th FC from 32%). Additionally, in the SCS States, the Centre-State funding of centrally sponsored schemes is divided in the ratio of 90:10, far more favourable than the 60:40 or 80:20 splits for the general category States. Besides, there are several other incentives available to the SCS States in the form of concession in customs and excise duties, income tax rates and corporate tax rates to attract investments to set up new industries etc.

Why is Bihar demanding the SCS?

The demand for SCS for Bihar has been made by various political parties of the State time and again. The poverty and backwardness of the State are argued to be because of the lack of natural resources, continuous supply of water for irrigation, regular floods in the northern region and severe droughts in the southern part of the State. Simultaneously, the bifurcation of the State led to the shifting of industries to Jharkhand and created a dearth of employment and investment opportunities. With a per-capita GDP of around ₹54,000, Bihar has consistently been one of the poorest States. Highlighting the same in his fresh demand for SCS, CM Nitish Kumar, said that the State is home to around 94 lakh poor families and the granting of SCS will help the government get about ₹2.5 lakh crore required to fund various welfare measures over the next five years.

Do other States also want SCS?

Since its bifurcation in 2014, Andhra Pradesh has asked for a grant of SCS on the grounds of revenue loss due to Hyderabad going to Telangana. Additionally, Odisha has also been requesting for the SCS, highlighting its vulnerability to natural calamities such as cyclones and a large tribal population (nearly 22%). However, the Central government citing the 14th FC report, which made a recommendation to the Centre that no State be accorded the SCS, has repeatedly denied their demands.

Is Bihar's demand justified?

Although Bihar meets most of the criteria for the grant of SCS, it does not fulfil the requirement of hilly terrain and geographically difficult areas, which is considered to be the primary reason for difficulty in infrastructural development. In 2013, the Raghuram Rajan Committee set up by the Centre, placed Bihar in the "least developed category" and suggested a new methodology based on a 'multi-dimensional index' for devolving funds instead of a SCS, which can be revisited to address the State's backwardness.

NOT A PANACEA

In a sign of significant socioeconomic churning in various parts of India, there have been demands for reservation by communities that are known to be politically dominant and are not traditionally classified as "backward". The agitation for reservation by members of the Maratha community in Maharashtra is one such. The community has had significant representation in positions of political power — over 35% of MLAs since 1967 and 12 of 18 Chief Ministers in the State. It has also traditionally been economically influential in rural areas due to landowning — over 75% of the cultivable land in the State — besides controlling an overwhelming majority of sugar factories.

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



Data from the India Human Development Survey (IHDS) in 2011-12 in the State have shown that Marathas had a per capita consumption expenditure only lower than that of Brahmins; poverty incidence among Marathas was comparable to that of other forward communities and significantly lower than that of Scheduled Castes and Scheduled Tribes and marginally lower than that of Other Backward Classes. It is evident why the Supreme Court in 2021 struck down the 16% quota provided under the Socially and Economically Backward Classes for Marathas in jobs and education.

And yet the demand is not difficult to fathom. Despite the relative dominance, there are significant intra-community variations in terms of income and educational outcomes. The IHDS survey showed that the highest quintile of the community had an average per capita income of ₹86,750, while the per capita income of the lowest quintile was one-tenth of this. This disparity, besides the predominant rural nature of livelihoods among the poorer Marathas amid the prolonged nature of the recurring agrarian crisis in the State, has given rise to resentment and the demand for reservations. The Eknath Shinde government bowed to the demands of the latest agitation and set up a committee led by Justice Sandeep Shinde to help expedite the issue of Kunbi certificates to all Marathas so that they could benefit from reservations as part of the OBCs. But this has led to tensions with OBC leaders, including from the ruling coalition, demanding that the government scrap the committee. The need for a comprehensive socio-economic survey across States, instead of knee-jerk responses to agitations, is a must to evaluate the implementation of reservation, its outcomes, and to find out which group deserves it based on constitutional provisions. More importantly, with government jobs shrinking to a mere fraction of overall employment, reservations cannot be a panacea for the uplift of the poor among Marathas.

MUSLIM STUDENT STRENGTH IN HIGHER EDUCATION FELL BY 1.79 LAKH IN 2020-21

The enrolment of Muslim students in higher education in India, aged 18-23, witnessed a significant decline of more than 8.5% in the academic year 2020-21, according to a report analysing data from the Unified District Information System for Education Plus (UDISE+) and the All India Survey of Higher Education (AISHE). The number of Muslim students in higher education dropped from 21 lakh in 2019-20 to 19.21 lakh in 2020-21.

The report, titled "The state of Muslim education in India," prepared by Arun C. Mehta, a former Professor of the National Institute of Educational Planning and Administration (NIEPA), highlighted a concerning trend. It noted that the enrolment percentage of Muslim students in Classes 11 and 12 is lower than in previous classes, emphasizing the need for financial assistance and support to students from the Muslim community.

The decline in Muslim enrolment in higher education is seen across all states and Union Territories. The report revealed that the representation of Muslim students gradually decreases from Class 6, reaching its lowest point in Classes 11 and 12. While Muslims make up around 14.42% of total enrolment in upper primary (Class 6-8), this percentage decreases to 12.62% in secondary (Class 9-10) and further declines to 10.76% in higher secondary (Class 11-12).

The report also highlighted the relatively low Gross Enrolment Ratio for Muslim students in states such as Bihar and Madhya Pradesh, indicating that many Muslim children in these states are still out of the education system. The dropout rate for Muslim students at the secondary level is 18.64%, higher than the 12.6% dropout rate for all students. The report recommends implementing targeted support and inclusive policies to address these challenges, including



increasing financial assistance through scholarships and grants for deserving Muslim students facing financial constraints.

WHAT IS BEHIND THE HALAL CERTIFICATE BAN IN U.P.?

The story so far:

On November 18, the Uttar Pradesh Government's Food Security and Drug Administration banned the "manufacture, sale, storage and distribution of halal-certified products with immediate effect". Halal, an Arabic term, means 'permissible', as opposed to notions of haram (prohibited) in Islam. A halal certificate means the product is fit to be consumed by followers of the faith. It is particularly relevant for meat items and is considered essential while exporting meat to Muslim countries. Following the order, units of police raided various malls across U.P. to seize any halal products.

Why was it banned?

The quick action to raid malls followed a complaint lodged in Lucknow by an office bearer of the youth wing of the Bharatiya Janata Party (BJP) wherein the complainant accused several halal certifying outfits of issuing "forged" certificates to "increase their sale among a certain community". They, in the process, violated "public trust" and created "social animosity", it was alleged. Though many read in the government's step, yet another action aimed at marginalising the State's Muslim community, the government insisted it had acted according to the law and fair trade practices.

How are halal certificates issued?

Halal certificates are given by the Jamiat Ulama-i-Hind's Halal Unit and the Halal Shariat Islamic Law Board, both of whom have been cleared by the National Accreditation Board for Certification Bodies. While the Shariat Islamic Law Board enjoys permission for certifying food products, the Jamiat's unit can certify only meat.

These agencies have slammed the decision to ban Halal-certified products. Leading the way, the Jamiat claimed the government had not sent "any notice or circular before the move" and dubbed it "ridiculous and unfortunate". Expressing a desire to explore legal options, including considering the government's action as an infringement upon citizens' fundamental right to eat what is permissible by faith, the Jamiat insisted it ticks all the boxes when it comes to fulfilling the norms set by the government for issuing halal certificates. "We adhere to government regulations, as emphasised in the Ministry of Commerce and Industry notification, requiring all Halal certification bodies to be registered with NABCB (National Accreditation Board for Certification Bodies under Quality Council of India), a milestone that Jamiat Ulama-i-Hind Halal Trust has achieved. Collaborating closely with APEDA (Agricultural Products Exports Development Authority of India) and Indian embassies worldwide, we promote Indian Halal certified products in global markets... It's essential to note that all financial transactions are duly accounted for, with proper GST and income tax payments and thorough auditing, ensuring complete legality and transparency in our operations," the Jamiat said in a written statement.

What about export products?

Significantly, the ban was imposed only on sales, manufacture and storage within Uttar Pradesh and not meant for export products. "As of now, there is no ban on Halal certification for export



products. Our Halal unit has been giving certificates only for export purposes,” a Jamiat official said, adding, “It is a misconception that we give Halal certificates for vegetarian products. It is aimed at maligning us.”

Meanwhile, the retailers, whose business was thrown into a chaos due to the hastily imposed ban, revealed that while many vegetarian food items carry Halal certificates when exported to Muslim countries, at times, the packages exceeded the number of export items. Those extra packages were at times used in the domestic market. The products were vegetarian anyway, and hence unlikely to hurt anyone’s sentiments.

What has the government done?

Within a week of the announcement of the ban, the State government gave a belated breathing period to all concerned. It allowed retailers 15 days to withdraw any such food items from their shelves. It asked the 92 state-based manufacturers who had been getting halal certification from non-certified organisations, to recall and repackage their products.

A NON-STARTER

Good intentions do not always make for sound policy. President Droupadi Murmu’s suggestion that the creation of an All-India Judicial Service (AIJS) will help diversify the judiciary by allowing bright youngsters from varied backgrounds to become judges through a merit-based process revives the debate on whether a national system of recruitment at the district judge level is desirable. The idea has been mooted and discussed in the past, and has been part of discussions on official policy in the Union government for years. However, as the Union Law Minister disclosed last year in the Rajya Sabha, there is no consensus on the proposal. Only two High Courts agreed to the idea, while 13 were against it. The AIJS may not be the panacea it appears to be. The current system of recruitment of district judges through the respective High Courts and other subordinate judicial officers through public service commissions is more conducive to ensuring diversity, as there is scope for both reservation and a clear understanding of local practices and conditions. Unlike the civil service, judges are not assisted by an experienced lower bureaucracy in decision-making, and they require to be well-versed in the issues involved for judicial functioning.

Article 312 of the Constitution, as amended by the 42nd Amendment, provides for the creation of an AIJS, and requires a resolution adopted by the Council of States with two-thirds majority, and a parliamentary law. This Constitution recognises that rules governing the subordinate judiciary in the States will have to be superseded by a central law for this proposal to achieve fruition. It is unlikely that all States will agree to one more subject from their domain being consumed by centralisation. On the face of it, it may appear that a national service for judges not inferior to the post of district judges, with a superannuation age of 60, will be an attractive proposition for young lawyers to apply for it. However, it cannot be forgotten that legal education lacks country-wide uniformity. After enrolling, lawyers typically consider judicial service based on practical experience rather than academic brilliance. Toppers, especially from the few elite law schools, are unlikely to sit for a national judicial service recruitment examination. In comparison, options such as litigation, joining law firms and going into the corporate sector will appear more beneficial. Further, given that the number of district judges elevated to the High Courts is much lower than those from the Bar, the lack of certainty on career progression may also render a national judicial service unattractive.



A BETTER MODEL

The Model Code of Conduct (MCC) that parties and governments are expected to follow during election campaigning is well-meaning, but not easy to enforce. The MCC is largely dependent on the cooperation of parties and governments and the vigilance of the Election Commission of India (ECI). Some of its clauses are declarations of intent, such as maintaining the “purity of the election process”. In recent days, the ECI has wielded the MCC against the Assam Chief Minister Himanta Biswa Sarma of the Bharatiya Janata Party, and its Delhi unit president; Congress leaders Rahul Gandhi and Priyanka Gandhi; Aam Aadmi Party (AAP) leader and Delhi Chief Minister Arvind Kejriwal, Bharat Rashtra Samithi (BRS) supremo and Telangana Chief Minister K. Chandrashekar Rao and his son and cabinet colleague K.T. Rama Rao following alleged violations of various kinds. In a more consequential move, the ECI has withdrawn its permission for the Telangana government to credit cash to farmers under the Rythu Bandhu scheme ahead of voting on November 30. The ECI found statements made by State Finance Minister T. Harish Rao to be in violation of the MCC. But curiously, the Congress government in Karnataka has been served notice for issuing advertisements that might influence voters in Telangana. The Gandhis were served notices for using allegedly derogatory words against Prime Minister Narendra Modi based on the BJP complaints.

This catalogue of ECI actions might give an appearance of even-handedness, but issues that it did not address too require attention. Congress complaints against Mr. Modi and Home Minister Amit Shah, for charges comparable if not more serious than those against Opposition leaders, have been ignored. The ECI has not responded to a Congress complaint that the Enforcement Directorate tried to tilt the scale in Chhattisgarh by making a public accusation against Chief Minister Bhupesh Baghel, in the midst of elections, that he had received kickbacks from a fugitive. The merits of this case apart, weaponisation of investigations by central or State agencies for political purposes during an election can be an unfair interference. It is doubtful that the ECI has proven itself up to the task and demonstrated its capacity to act fairly and objectively. In this context, a government move to legislate the supremacy of the executive in the appointment of the members of the ECI is worrisome. Under the proposed scheme, the ruling party at the Centre will solely control the composition of the ECI. That is not good news for free and fair elections in India.

THE NEED TO DISCLOSE POLITICAL DONATIONS

With the hearings in the Supreme Court on the electoral bonds challenge having concluded, it is a good time to discuss how important the outcome of this challenge will be to democracy and rule of law in India. Political parties in any country play an indispensable role in the democratic process. They form the government and have the responsibility under our constitution of holding the government to account. It is thus essential that the parties are adequately funded in a manner which enjoys public confidence.

The amendments made to the Representation of the People Act 1951 and other laws which provide for electoral bonds, provide complete anonymity to political donors. The requirement all over the world on this issue on the other hand has been the diametrical opposite — requirement of full disclosure on donations to political parties, either by individuals or corporations.

Regulating political funding

As far back in 1910, the United States of America enacted the Publicity Act, which not only made all funding of political parties and candidates to be disclosed, it also imposed limits on political



contributions. There were also other laws which regulated these limits, and imposed limits on campaign spending. These conditions were challenged and the U.S. Supreme Court in *Buckley versus Valeo* in 1976, not only upheld the public disclosure requirements of funding of political parties, but also upheld the limits on contributions to be received, as being constitutional. It held that to the extent that large contributions are given to secure a political quid pro quo from current and potential office holders, the integrity of the system of representative democracy is undermined. The danger, is not of actual quid pro quo arrangements but of the appearance of corruption and the opportunities for abuse inherent with large financial contributions, even when the identities of the contributors and their contributions are fully disclosed. The mere impression of misuse may be sufficient to erode confidence in the political system and democracy.

In 2014, the European Union enacted a Regulation of the European Parliament and of the Council on the funding of European political parties and European political foundations. Under this Regulation, there were limits set on the value of donations that parties and foundations may accept per year and per donor. While donations from natural persons under a certain value can be anonymised, all donations exceeding that value have to be disclosed. Large donations above a certain value require not just disclosure but immediate reporting to the authority. Further, political parties are also required to file annual financial statements of their revenue and expenditure, their list of donors and corresponding donations.

In the U.K., under the Political Parties, Elections and Referendums Act 2000, there are restrictions on the donations and loans a political party can accept, and requirements for the declaration of the source of the donations.

There are thus two distinct requirements that most legal regulations have for funding of political parties — complete disclosure of donors above certain minimal amounts and limits or caps on donations.

The need for disclosure

We need public disclosure of funding because political parties are the pillars of representative democracy and transparent accounts are the key to preserving citizens' trust in parties and politicians, maintaining the rule of law and removing corruption in the electoral and political process. Limits on donations are imposed because unchecked large donations to political parties and their allies have the effect of bringing democracy into disrepute. The outcome of elections should not depend on which party has more money to campaign and woo, or buy voters. The separation of wealth from power is a basic condition of a democratic system.

The road ahead

A key element of democracy is electoral justice. Electoral justice ensures that every action, procedure and decision related to the electoral process is in line with the law and that the enjoyment of electoral rights are protected. An electoral justice system upholds the rule of law and guarantees the democratic principle of holding free, fair and genuine elections.

Electoral bonds which keep donor details undisclosed are violative of the democratic requirements of transparency and will undermine free and fair elections. Therefore, merely holding them unconstitutional is not enough.

For a healthy democracy, it is absolutely necessary that we have a law that ensures full publication of all donations made to political parties.



We need a separate legislation that mandates public disclosure of the identity of donors to political parties, candidates or political foundations which are above a certain nominal limit, the immediate reporting of large donations to the election commission, mandating that political party accounts be made public and reported to the election commission, auditing of accounts of political parties by an independent authority, setting limits on funding and expenditure by political parties and mechanisms on enforcement of the law.

We need to make our democracy healthy by enacting legislation that regulates political party funding and mandates public disclosure.

UNDERSTANDING SIMULTANEOUS ELECTIONS

The story so far:

In September, the Union Government notified the formation of a six-member panel to 'examine and make recommendations for holding simultaneous elections' in the Lok Sabha, State assemblies and local bodies. For this purpose, the panel has been entrusted with the task of proposing specific amendments to the Constitution and any other legal changes necessary to enable simultaneous elections. The panel also has to give its opinion on whether the proposed amendments shall require the assent of half of the State assemblies, as stipulated in Article 368. On October 25, the panel had an interaction with the Law Commission to discuss the roadmap to synchronise Parliamentary and Assembly elections by 2029.

Demand for simultaneous elections

The first four general elections involved simultaneous elections for the Lok Sabha and State Assemblies. It was possible then as the Congress was in power both at the national and State levels. The bifurcation of elections happened due to the advancing of Lok Sabha elections by the Congress, which after suffering a split in 1969 was looking to secure a majority of its own, riding on the populist appeal of Former Prime Minister Indira Gandhi. As of now the Lok Sabha elections coincide with the Assembly elections in four States namely Andhra Pradesh, Odisha, Arunachal Pradesh, and Sikkim.

The proposal to hold simultaneous elections has been pushed by the BJP since it came to power in 2014. After the NITI Aayog backed the proposal in 2017, it was mentioned next year in then President Ram Nath Kovind's address to the joint session of Parliament. He asked parties to have a 'sustained debate on the subject of holding simultaneous elections'. The Law Commission also released a draft report on August 30, 2018, examining the legal-constitutional aspects related to the proposal. Prime Minister Narendra Modi reiterated the need to hold simultaneous elections in his Independence Day speech in 2019. Most recently, the proposal received support in the Law Commission Report, which is reportedly exploring the feasibility of a common electoral roll.

The case for common elections

The following arguments are being pushed in favour of holding simultaneous elections. First, holding separate elections incurs massive recurring expenditure for the State and the Central government. In case of simultaneous elections, there would only be one electoral roll for all elections and the government would need the services of security forces and civilian officials only once. This would save public money and human resources that can be put to other public causes.



Second, the dense electoral cycle involves prolonged deployment of security and police forces on election duty, thus posing a concern for national security and maintenance of law and order. The administration comes under strain due to the mass-scale transfers of officials within the State, either by the government looking for pliable officers in key positions or by the order of the ECI once code of conduct comes into force. High-ranking officers from other States are also deputed as observers in the poll-bound State. There is a climate of political uncertainty, wherein officials remain perpetually in election mode. Third, holding separate elections comes in the way of development as the enforcement of the code of conduct for a longer period leads to the stoppage of ongoing development work. No new projects can be started during this period and even ongoing projects suffer from inertia. Looking to reap the electoral dividend, parties in power invariably indulge in populist schemes and do not commit to long-term investment in primary sectors. This happens frequently, burdening the state exchequer.

Fourth, simultaneous elections would lessen the role of money in elections as campaign finance of parties' would come down. The monitoring of election expenditure by the ECI will also become more effective due to a concerted effort at the national level. Fifth, given the increasing role of divisive politics for electoral gains, the 'one nation-one election' plan would help in reducing the pernicious role of regionalism, casteism, and communalism in mobilising electorates. It would help in bringing issues of national importance on the electoral agenda. And finally, it is being argued that having too many elections creates a sense of fatigue among electorates. Voter turnout at the national level has stagnated in recent elections.

Against simultaneous elections

These are the arguments against the implementation of simultaneous elections. First, the Centre's initiative is being viewed as being antithetical to the federal spirit as there has not been wider consultation with constituent States, especially the ones that are being ruled by non-BJP parties. Second, holding simultaneous elections would most likely push local and regional issues to the periphery. There would be a 'national constituency phenomenon' favouring polity-wide parties due to their comparative advantage in terms of their claim to better serve 'national interest/national security/national unity' rather than regional parties who will be sidelined for focusing on 'narrow, parochial' issues. Simultaneous elections in a federal polity, would incentivise regional discontent. Third, as far as cost saving is concerned, holding simultaneous elections would require large-scale purchase of Electronic Voting Machines (EVM) and Voter Verifiable Paper Audit Trail Machines (VVPAT). Moreover, biennial elections to Legislative councils/Rajya Sabha and by-elections would still be held, costing money and resources. Fourth, frequent elections rather than sagging the enthusiasm of voters keep them enthused, as evident in the comparatively higher percentage of voting in State and local elections. Frequency of elections at different layers also helps in increasing accountability as elected representatives and their parties remain on their toes.

Legal and constitutional issues

Even if the proposal to hold simultaneous elections were to be adopted in principle, it would require a complex and lengthy legal process to implement.

First, at least five Articles in the Constitution shall need amendment. These articles are Articles 83(2) and 85(2) that relate respectively to the duration and dissolution of the Lok Sabha. Also, on the legislative agenda would be Articles 172(1) and 174(2), which provide for the duration and dissolution of the State Assemblies. Article 85 (1) and 174 (2) allows the President and the



Governor to dissolve the Lok Sabha and Vidhan Sabha before the completion of their tenure of five years, under the circumstances mentioned in the Constitution. Article 83(2) allows the tenure of the Lok Sabha to be extended for one year at a time in case of an Emergency being proclaimed under Article 352. Article 172(1) makes a similar provision for State assemblies. These provisions would need to be repealed. As of now, after the passage of the anti-defection law enshrined in the 10th Schedule (52nd Amendment Act, 1985) and later the Supreme Court judgment in S.R. Bommai case (1994) followed by the High Court judgment in Rameswar Prasad (2006), the decision to dissolve the Vidhan Sabha and impose President Rule under Article 356 is subject to judicial review. The Court can revive the Assembly and restore the government if it does not find the grounds of the President's rule to be constitutionally valid as has happened in recent years in the case of Nagaland, Uttarakhand and Arunachal Pradesh.

Moreover, such amendments need not only the two-third-majority support of both Houses of Parliament but also ratification by at least half of the State Legislatures under Article 368. Currently, no party has even simple majority in Rajya Sabha while the States have different parties in power, many of which are not in favour of such amendments.

It would also be much more complex and difficult to link general elections with local bodies elections. This is because local government is a State subject (seventh schedule, List II) and all the State Legislatures have passed separate Panchayati Raj Acts and Municipal Acts, fixing the tenure of these bodies (five years) as per Article 243(E) and 243 (U) respectively. Since all 28 States have their own specific Acts, it would require changes in 56 sets of legal provisions.

What next?

Given the complexity of the issue, likely focus is going to be on how Lok Sabha and Assembly elections can be held simultaneously. Even for that, multiple amendments would be required. Since the proposal involves Centre-State relations, judicial review of the amendment acts shall be a major block. What seems doable is to make an attempt to club as many Assembly elections as possible to be held together or with the Lok Sabha elections in one go and hope that the verdicts favour formation of a stable government. Even for realising this, there is a need for wider consultation across parties and constituent States.

PATRONAGE POLITICS MURMURS RESURFACE AS GURMEET RAM RAHIM PLOUGHS HIS OWN FURLOUGH

Sirsa's Dera Sacha Sauda chief Gurmeet Ram Rahim Singh headed to his ashram in Uttar Pradesh's Baghpat last Tuesday after he was granted a 21-day furlough from Rohtak's Sunaria jail, his eighth temporary release in the past four years and once again coinciding with a State Assembly election.

This time, the dera chief was released ahead of the Assembly poll in Rajasthan, his home State as he hails from Sri Ganganagar district. Frequent paroles and furloughs to him have evoked charges from several quarters of a "quid pro quo" for getting votes of his followers as he wields considerable influence among Dalits in Punjab, Haryana and Rajasthan.

Set up in 1948, the dera claims to have 65 million followers across the globe and runs 12 educational institutes and three hospitals. It has several ashrams, mostly in northern India. The social media accounts of the organisation on Facebook and X (formerly Twitter) have over 8 lakh followers.



Political analysts say Ram Rahim's following had declined after he was convicted in rape and murder cases. The ability to influence elections also waned, as reflected in the BJP's loss in the Malwa region, a Dera Sacha Sauda stronghold, in the Punjab Assembly polls last year. But his popularity has improved gradually with the dera successfully building a narrative projecting him as a victim of the drug mafia's conspiracy, they say. Allowing him to hold virtual satsangs (spiritual discourses) during his temporary release also helped.

"Call it coincidence or not, he is released from the jail when the elections are around the corner, be it the Punjab Assembly poll, Haryana panchayat election the previous year, or the Rajasthan election this year," said Anshul Chatrapati, the son of slain journalist Ramchander Chatrapati, in whose murder case Ram Rahim was convicted along with three others in January 2019.

Timely amendment

He said in initial days of his jail term, the dera chief's applications for parole were turned down for want of sufficient grounds. Later, Mr. Chatrapati said the law dealing with it was amended. "The need to give a reason for the grant of parole or furlough was done away with," he said, adding that he is mulling to challenge the change in court.

According to the Haryana Good Conduct Prisoners (Temporary Release) Act, 2022, a convicted prisoner can be granted 10 weeks of parole in a calendar year on the completion of one year of sentence and it can be availed in two parts. The convicted prisoner can himself submit the parole application now.

Mr. Chatrapati also alleged that Ram Rahim sought political patronage to protect his vast empire when threatened by his misdeeds and the politicians supported him with an eye on the huge vote bank in the form of his followers and it continued even after his conviction.

"While his followers are blinded by their faith, the politicians, instead of making the people understand that he is a convict, continue to support him. Election or no election, why to release such a criminal from jail without a reason?" he said.

'No special treatment'

However, Dera Sacha Sauda spokesperson Jitender Khurana denied the allegations of any special treatment to Ram Rahim.

"His release from the jail during elections is a mere coincidence. When he was released in January and June this year, there were no elections," argued Mr. Khurana. He also denied the charge that the dera chief offered support to different political parties over the years during the elections. "Guru ji had nothing to do with politics," he stressed.

However, BJP Ministers and around a dozen party MLAs in Haryana led by senior party leader Kailash Vijayvargiya had met the dera chief after the 2014 Assembly poll victory on an apparent "thanksgiving mission". A few months before his conviction in a rape case in 2017, Haryana Chief Minister Manohar Lal had launched a special cleanliness drive with the dera chief at his constituency in Karnal.

Mr. Khurana also said the devotees were not allowed to meet Ram Rahim during his temporary release, but he held a satsang every morning, which was streamed live at the Sirsa dera, the organisation's headquarters. "He also launched a song to create awareness among the youth against the drug menace during his parole period," he added.



15 YEARS AFTER 26/11: A TRAGEDY THAT COULD HAVE BEEN AVERTED

In the history of terrorism, the Mumbai 26/11 terror attacks were as innovative as the 9/11 attacks on the US. While passenger airplanes were used for the first time as weapons of destruction during 9/11, the Mumbai attacks saw an unprecedented feature of live operational control of terrorist acts from foreign soil.

Also significant during 26/11 was the terrorist handlers' capability in utilising the target country's free electronic media for further killing and live feedback. Competitive Indian visual media covering the Mumbai attacks beamed minute-to-minute details to the domestic audience which served as a barometer of the damage inflicted on the Indian psyche and resultant panic, the two vital aims of any terrorist group. It enabled the Pakistani handlers to calibrate attacks using the cell phones of ground-level terrorists.

Simultaneous attacks on targets totally confused an unprepared Mumbai police and public, much like the September 2001 attacks on Americans. The elaborate subterfuge which the handlers had planned in setting up their communications through Voice Over Internet Protocol (VOIP) by utilising foreign cell phone numbers was yet another new feature.

This was perhaps the first time in major urban terrorism history that terrorists had engaged police teams in live combat at five locations. There was no live battle during 9/11. It was not there in the Madrid Railway bombing (March 11, 2004) which killed 191 or in London 7/7 (July 7, 2005) attacks, resulting in 52 deaths. In fact, the Mumbai 26/11 attacks became a template for the November 2015 Paris attacks with live combat on six targets, which killed 130.

Like the 9/11 attacks, the Mumbai attacks also spurred panic, especially in the US. that was because the US Department of Homeland Security (DHS) had prepared a Coastal Protection Scheme in April 2008 after recognising the presence of 17 million small boats around the US coastline and the fear that some of them could be used by al-Qaeda to commit terrorist acts. Thus when 26/11 took place, it was seen as a dress rehearsal for a similar attack on the US as Lashkar-e-Taiba (LeT) was closely aligned with al-Qaeda.

Well before India initiated any inquiry on the major terrorist attack on our soil, the US Senate Homeland Security Committee had held a hearing on the Mumbai 26/11 attack on January 9, 2009, to discuss how similar tactics would affect US security. One of the first persons to depose before the Committee was the then New York Police Commissioner Raymond Kelly who underlined the key features of 26/11. He said that the US counter terrorist agencies would need to rework their methodology on how panic could be curbed even in a free media ambience, how to disrupt terrorists' communication network without adversely affecting the free milieu and how to re-deploy forces in the US since the 26/11 attacks had taken over 60 hours to terminate, a situation US had never experienced in urban areas. Stephen Tankel, a well-known expert on the LeT, said in 2018, that the Mumbai operation "began as a relatively small operation involving only one target and a few terrorists but expanded considerably during summer 2008". One of the reasons why it mounted the 26/11 attack was "enhancing its Jehadi credibility".

Whatever might have been the reason, it only resulted in humiliating India and its stature as a growing power. Edward N Luttwak, senior security specialist at the Center for Strategic & International Studies, wrote a scathing piece on December 5, 2008, in The Los Angeles Times ridiculing our police, intelligence organisations and paramilitary groups. The US think tank Rand highlighted the astonishing failures of our defence forces through their occasional paper 'The



lessons of Mumbai', as the army columns came after five hours while the naval commandos (Marcos) came still later. It was only at 0850 hours the next day that the elite National Security Guards arrived.

15 YEARS OF 26/11: 3 WAYS IN WHICH INDIA'S STRATEGY GAME HAS PLAYED OUT SINCE MUMBAI ATTACKS

Pakistan President Asif Ali Zardari, while addressing a conference in New Delhi on November 22, 2008 through a video-link, quoted Benazir Bhutto that every Pakistani had a 'little bit of India' within them, just as every Indian had a little bit of Pakistan. This was viewed in India that ills plaguing the India-Pakistan ties would rapidly disappear if civilian authority gained strength.

But as TCA Raghavan, former Indian High Commissioner to Pakistan, wrote in his book *The People Next Door: The curious history of India's relations with Pakistan* (2017), "Within days, this debate was itself history as on 26 November 2008."

India had witnessed many terror attacks over the years but the one that rocked Mumbai in 2008 was a turning point, fundamentally transforming India's strategy, and relationships in the world. Here are the three ways in which the strategic game has played out from India's point of view over the last 15 years.

1. Pakistan as a perpetrator

While 9/11 had, for the first time, given the world the prism to view terrorism, for India, 26/11 was a major 'I-told-you-so moment'. For more than two decades since the 1980s, India had suffered from scourge of terrorism — the Sikh militancy and the LTTE had claimed the lives of two Indian Prime Ministers as well as many other citizens, and the militancy in Jammu and Kashmir lifted the curtain on the harsh reality of Pakistan-sponsored cross-border terrorism.

While Delhi's concerns were always drowned out by Islamabad's counter propaganda, 26/11 brought home to the world the threat of terrorism from the turbulent South Asian region. The fact that victims of those who were killed were from 16 nationalities, apart from India, and another seven countries' whose citizens were injured, made 26/11 — the first truly global attack on Indian soil.

Importantly, this put the spotlight on Pakistan's record on terrorism. India was now able to portray, with evidence, that Pakistan's ISI and military was plotting and perpetrating terrorist attacks on India. And, that has been Delhi's calling card after all the terror attacks — Uri, Pathankot and Pulwama in recent years.

2. US and the West on India's side

Every G7 country had a victim, with six Americans killed, in the 26/11 attacks. This was a major factor behind the sympathy India gained from the western world. Moreover, the attack occurred while New Delhi and the Washington were in a strategic embrace — the Indo-US nuclear deal had just been signed a month ago, in October 2008.

The attack, thus, really got Delhi the leverage and the logic for a strategic alignment with the West to get a boost. While after the 9/11 attacks, the US was forced to undertake a dramatic shift in its policy towards Afghanistan and Pakistan, 26/11 brought it closer to India.



Historian Srinath Raghavan, in his book, *The Most Dangerous Place: A history of US in South Asia* (2018) wrote how coincidentally, ISI chief Lt General Mahmud Ahmed was in Washington DC when the 9/11 attacks had happened and Musharraf had sent him a couple of days earlier to persuade the Bush administration to engage with the Taliban.

On Sept 12, Mahmud was summoned to the US State department for a meeting with Deputy Secretary of State Richard Armitage. “Pakistan faces a stark choice... Either it is with us or it is not; this was a black-and-white choice with no grey” Armitage said sternly, adding that Pakistan had “no manoeuvring room,” Raghavan wrote.

While Musharraf yielded half-heartedly, as many have since pointed out, the Parliament attack in December 2001 showed that its ways had far from changed.

However, after 26/11 attacks by Pakistan-based Lashkar-e-Taiba (LeT) operatives, and the assassination of Osama bin Laden in the Pakistani cantonment city of Abbottabad, “Pakistan could do little to protest that it was not a breeding ground for jihadi terrorism,” former Foreign Secretary Shyam Saran wrote, in his book, *How India sees the world: Kautilya to the 21st century* (2017). “The current level of counter-terrorism cooperation between the US and India would have been unthinkable a decade ago,” he wrote.

“The Mumbai attacks lost Pakistan the Bush administration’s sympathy for good,” journalist-turned-diplomat Hussain Haqqani wrote in his book *Magnificent Delusions: Pakistan, the US and an epic history of misunderstanding* (2013). “US Secretary of State Condoleezza Rice told then Pakistan NSA Mahmud Durrani that there were continued contacts between LeT and ISI... [that] there is material support to LeT, and the LeT has just recently killed six Americans’,” Haqqani, then Pakistan’s envoy to the US, wrote.

“ISI chief Shuja Pasha visited the US for a meeting with CIA director Michael Hayden. He admitted that the planners of the Mumbai attacks included some “retired Pakistani Army officers”. According to Pasha, the attackers had ISI links, but this had not been an authorised ISI operation,” Haqqani, who was Pakistan envoy’s wrote.

This trust deficit only widened after the Abbottabad raid — a clear reminder that Pakistan was not playing straight with the Americans.

3. India’s strategic restraint and its dividends

In the immediate aftermath of the 26/11 attack, a familiar debate took place that had taken place after the attack on the Indian parliament in December 2001 recurred — what kind of action should be taken?

In his book, *Choices: Inside the Making of India’s Foreign Policy* (2016), former National Security Advisor Shivshankar Menon wrote on the India’ restrained response: “The simple answer to why India did not immediately attack Pakistan is that after examining the options at the highest levels of government, the decision makers concluded that more was to be gained from not attacking Pakistan than from attacking it.”

The real success, as he noted, was in organising the international community, in isolating Pakistan, and in making counter-terrorism cooperation against the LeT effective. “India began to get unprecedented cooperation from Saudi Arabia and Persian Gulf countries, and China too began to respond to requests for information on these groups,” Menon wrote.



This shift was notable after the Modi government came to power and has continued to reap dividends since then. The surgical strikes after the Uri attack in 2016, or the Balakot air strike in 2019 were possible without much international criticism, only because Delhi had shown strategic restraint in 2008.

A CENTRALISED WEBSITE TO TRACK, RECOVER YOUR LOST MOBILE FASTER

The Centre for Development of Telematics (C-DOT), a telecommunications technology development centre under the Department of Telecom claims that its citizen centric portal, Sanchar Saathi, has received impressive responses from those who lost their mobile devices since the portal's nationwide launch in May.

According to data available on the portal (<https://sancharsaathi.gov.in/>), almost 11 lakh mobiles were blocked after citizens reported loss/theft, of which about half the mobiles were traced back and 55,160 phones have been recovered and handed over to the owners.

If someone lost a phone, the person must first obtain a duplicate SIM from the service provider, file a police complaint and enter details about the mobile, police complaint, address and an alternative call back number on the portal.

System alerts

Once the case is reported, the system alerts the concerned police/cybercrime station and telecom service provider, a C-DOT spokesperson said. The moment anyone uses the old SIM or mobile, the platform alerts everyone on the network making traceability faster.

Delhi reported the highest number of mobile phone thefts/lost cases at 4,40,618 followed by Karnataka with 1,68,296 cases.

A TOUCHSTONE OF RISK

Sunday went by, and while a day of rest for many, it marked two weeks since 41 construction workers, building a tunnel as part of an ambitious road widening project, got trapped inside. There is a massive rescue operation under way. When reports of the mishap first came in, nothing in the preliminary assessment by state authorities suggested that this would be such a drawn-out and challenging exercise. The Silkyara Bend Tunnel is a part of the Char Dham Pariyojana (project) in Uttarakhand that aims to improve connectivity to the religious pilgrimage sites of Gangotri, Yamotri, Kedarnath, and Badrinath. The trapped workers were extending National Highway 134 to cut travel time by an hour. Now, hundreds of hours have been spent in what so far appears to be a slapdash rescue operation. The entrapped workers and their families are undergoing extreme psychological stress. In hindsight, all this suggests that this was a project that ought not to have commenced in the first place.

Even prior to this mishap, environmentalists, scientists, and local residents had raised concerns about the Char Dham Pariyojana. The project, which involves widening 900 km of roads via tunnels, culverts, by-passes and bridges, has long been criticised because it involves carving through Himalayan mountains in ways that greatly increase the chances of landslides and associated disasters. While the project was finally approved by the Supreme Court, in the interests of "national security", the government adopted the unusual measure of avoiding a comprehensive environment impact assessment (EIA) of the Char Dham Pariyojana by breaking it up into smaller, independent ventures. The peril of doing so is precisely what has unfolded: that the risks involved

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



in engineering projects, in fragile ecosystems, are not properly accounted for. This is certainly not to suggest that engineering projects in the Himalayas are in principle flawed. The smoother roadways and newer economic opportunities that they may bring are worthwhile considerations and it is precisely to weigh the risks against the benefits that the EIA exists. Despite several instances of roads being washed away and dams breached, there is still the lack of an awareness that infrastructure development in fragile terrain requires much greater scrutiny, expertise and project-monitoring skills — and therefore much higher costs — than similar exercises in the plains and cities. The Silkyara tunnel disaster must serve as a touchstone against which future projects will be evaluated.

UNDERSTANDING RAT-HOLE MINING

The story so far:

Two scientific methods of mining — vertical drilling and auger or horizontal drilling — were employed to rescue 41 workers on November 28 after 17 days of being trapped in the partially-collapsed Silkyara tunnel in Uttarakhand. The last leg of the rescue involved rat-hole mining, once used extensively in Meghalaya.

What is rat-hole mining?

Among the rescued workers were Ramprasad Narzary and Sanjay Basumatary, both from the Ramfalbil area of western Assam's Kokrajhar district. Locals could not help mark the irony of the rat-hole method being applied to rescue them from the Silkyara tunnel, because a few lives from that part of Assam were lost in the coal mines of Meghalaya dug using this crude method, before and after the National Green Tribunal (NGT) banned it in April 2014. Rat-hole mining, of two types, is so named as it involves digging tunnels 3-4 feet deep, barely allowing workers to crawl in and out. They have to squat while extracting coal with pickaxes. The side-cutting type of mining is usually done on hill slopes by following a coal seam — dark brown or black-banded coal deposited within layers of rock— visible from the outside. The second type called box-cutting entails digging a circular or squarish pit at least 5 sq. metre in width up to a depth of 400 feet. Miners who drop down in makeshift cranes or using rope-and-bamboo ladders dig horizontally after finding the coal seam. The tunnels are dug in every direction from the edge of the pit, resembling the tentacles of an octopus.

Why is such mining banned?

The government has little control over the land in Meghalaya, a Sixth Schedule State where the Coal Mines Nationalisation Act of 1973 does not apply. The landowners are thus also the owners of the minerals beneath. Coal mining boomed after Meghalaya attained statehood in January 1972. However, the terrain and expenses involved discouraged mine owners from employing advanced drilling machines. So, labourers mainly from Assam, Nepal, and adjoining Bangladesh risked the hazards of rat-hole mining — asphyxiation because of poor ventilation, collapse of mines due to lack of structural support, and flooding — to earn thrice or four times as much as working in farms or construction sites. Apart from issues of safety and health, unregulated mining led to land degradation, deforestation, and water with high concentrations of sulphates, iron, and toxic heavy metals, low dissolved oxygen, and high biochemical oxygen demand. At least two rivers, Lukha and Myntdu, became too acidic to sustain aquatic life. These factors led to the NGT banning rat-hole mining in Meghalaya in 2014 while observing: "...there is umpteen number of cases where, by virtue of rat-hole mining, during the rainy season, water flooded into the mining areas resulting



in the death of many..." Illegal mining and transportation of coal, as mentioned in the interim reports of a one-man committee appointed by the High Court of Meghalaya, has continued despite the ban and the loss of lives. At least 17 miners were drowned in an illegal mine in the East Jaintia Hills district's Ksan in December 2018 after water gushed in from a river.

What led to the NGT ban?

Environmentalists and human rights activists began flagging the hazards of rat-hole mining in Meghalaya two decades ago. The campaign intensified after Impulse, a Meghalaya-based NGO, began addressing the issue of human trafficking and child labour in such mines.

Three reports prepared by the NGO, first with the Nepal-based Esther Benjamin Trust in May 2010, the second with Aide et Action in December 2010, and the last with Human Rights Now in July 2011, estimated that about 70,000 children mostly from Bangladesh and Nepal were employed in these mines because they were the right size to work in them. The State's Department of Mining and Geology refuted the claim but, under pressure from the National Human Rights Commission, admitted in June 2013 that 222 children were employed in rat-hole mines, specifically in the East Jaintia Hills district. The NGT ban came a year later.

What is the way forward?

Unlike in Chhattisgarh and Jharkhand, coal seams in Meghalaya are very thin. This, miners say, makes rat-hole mining more economically viable than opencast mining. The State has an estimated reserve of 576.48 million tonnes of low-ash, high-sulphur coal belonging to the Eocene age (33-56 million years ago). The stakes for a section of locals have been so high that the State government has been under pressure to facilitate the resumption of mining legally.

In May 2023, Meghalaya Chief Minister Conrad K. Sangma said the Coal Ministry approved mining leases for four of the 17 prospective licence applicants. This would lead to the commencement of 'scientific' mining ensuring minimal environmental impact through sustainable and legally compliant extraction procedures. Anti-mining activists, who are assaulted by miners off and on, said that 'scientific' would eventually be a fancy tag in a State where profit has driven coal mining.

EL NINO, OTHER FACTORS TO CAUSE WARM WINTER

The India Meteorological Department (IMD) has forecast a warm winter season across the country, saying minimum temperature could remain higher than normal. This follows an overall warming trend experienced globally, including India, which witnessed the third warmest November since 1901.

With February, August and November being the warmest months since 1901 in India, 2023 is on its way to becoming the warmest year ever recorded on Earth. "Due to large-scale features like the El Nino, in addition to the regional factors like western disturbances and the upcoming cyclone developing in the Bay of Bengal, there are chances of higher-than-normal minimum temperatures, making it a warm winter season in the country," said Mrutyunjay Mohapatra, Director General, IMD.

Fewer and less intense cold waves could further keep the December to February period warm, he said.



At present, the El Nino condition — the warmer than usual sea surface temperatures recorded over the equatorial Pacific Ocean — is inching to its peak. As per the recent observations, the Nino 3.4 region remained 2.4 degrees Celsius above the threshold, he said.

Among other reasons likely to contribute to warm winter are the cloudy conditions caused by the western disturbances, pushing up the minimum temperature, he said.

“Further, the soon-to-develop cyclone will also cause cloudiness and the minimum temperature over the south peninsular India and eastern coastal India will remain above normal during the upcoming days,” the IMD chief said.

During December, too, no significant drop in the mercury is expected and the minimum temperature over most parts of the country, except east and northeast India, is expected to remain above normal, Mohapatra said.

Meanwhile, the impending cyclone “Michaung” in the southwest Bay of Bengal moved towards southern coastal Andhra Pradesh and northern Tamil Nadu.

The IMD has issued a “red” alert and warned of extremely heavy rainfall (over 200 mm) on December 3 and 4 over coastal Andhra Pradesh. Along with coastal districts of Andhra Pradesh and north Tamil Nadu, including Chennai, the cyclone shall affect Telangana and southern Odisha in the coming days, the IMD has warned.

WHAT EXPLAINS THE UNSEASONAL RAINS AND LIGHTNING STRIKES IN GUJARAT?

The unseasonal and sudden heavy rainfall, thunderstorms, hailstorms, and lightning strikes in Gujarat on November 26 have resulted in 27 fatalities. The India Meteorological Department (IMD) attributes the phenomenon to three weather systems—cyclonic circulation over the Northeast Arabian Sea and adjoining Saurashtra and Kutch, Western Disturbances, and an Easterly trough. These weather systems, occurring simultaneously, are not uncommon and have been reported during monsoons. Western disturbances, originating over the Mediterranean Sea, bring rainfall to north-western India in winter.

The lightning strikes were influenced by the interaction between the weather systems and Western Disturbances. The first spell of activity after a long dry period leads to convective activity and lightning. The presence of more moisture interacting with the Western disturbance intensified the thunderstorms. The active Intertropical Convergence Zone (ITCZ) in the equatorial region provided sufficient moisture to enhance the thunderstorm activity.

Warnings for lightning were issued by the IMD, but the Gujarat State Disaster Management Authority (GSDMA) does not have a specific mechanism for warning against lightning. GSDMA focuses on pre-warning mechanisms for heavy rainfall and earthquakes. The IMD argues that a specific warning for lightning was issued in advance, but people often do not pay heed to it. The GSDMA is working on an early warning system for cyclones, and communication systems are being developed for coastal areas and cities against calamities like flash floods.



IS INDIA LAGGING IN MEASLES VACCINATION?

The story so far:

A new report from the World Health Organization and the U.S. Centers for Disease Control and Prevention (CDC) said measles cases in 2022 have increased by 18%, and deaths by 43% globally, compared to 2021. This, the report states, takes the estimated number of measles cases to nine million and deaths to 1,36,000, mostly among children. The Union Health Ministry has refuted a part of the report which said that globally 22 million children did not get their first measles shot in 2022 and that half of them live in 10 countries including India, where an estimated 1.1 million infants did not get the first dose of the vaccine. India's Universal Immunisation Programme is one of the largest public health programmes in the world targeting close to 2.67 crore newborns and 2.9 crore pregnant women annually.

What is the Union Health Ministry saying?

The Health Ministry maintains that just over 21,000 Indian children did not get the shot and said that the WHO data is based on an estimated number, reported under the WHO UNICEF Estimates National Immunization Coverage (WUENIC) 2022 report, which covers the time period from January 1, 2022 to December 31, 2022. A total of 2,63,63,270 children out of the eligible 2,63,84,580 children received their first dose of measles vaccine in FY 2022-23, according to the Health Ministry. It added that 21,310 children missed their first dose in 2022-23; and that initiatives have been undertaken by the Centre in coordination with the States to ensure that all children receive all missed/due doses of the measles vaccine.

"The recent reports based on data released by WHO-CDC are not based on facts and don't reflect the true picture," the Ministry said. "The catch-up vaccination age for the administration of Measles Containing Vaccine (MCV) has been increased from 15 months/2 years to 5 years. All unvaccinated/partially vaccinated children with missed/due doses of vaccines will be vaccinated," said a Health Ministry official.

What is measles?

Measles is a contagious disease caused by a virus, which spreads through the air when an infected person coughs or sneezes. Measles starts with a cough, runny nose, red eyes, and fever. Then a rash of tiny, red spots break out. It starts at the head and spreads to the rest of the body. According to the WHO, measles vaccination averted 56 million deaths between 2000 and 2021. "Even though a safe and cost-effective vaccine is available, in 2021, there were an estimated 1,28,000 measles deaths globally, mostly among unvaccinated or under vaccinated children under the age of five. Additionally in 2022, about 83% of the world's children received one dose of measles vaccine by their first birthday through routine health services — the lowest since 2008," it said.

Measles can be prevented with the MMR vaccine. The vaccine protects against three diseases — measles, mumps and rubella. Two doses of MMR vaccine are about 97% effective at preventing measles; one dose is about 93% effective. "This viral disease affecting mainly children causes significant morbidity and mortality. In an unimmunised population, the disease can rapidly break into an epidemic," cautioned Dr. Neeta Kejriwal, a paediatrician at Manipal Hospital, Dwarka. "Three doses are recommended at 9 months, 15 months and one dose through 4 to 6 years. Due to interruption of routine vaccination during and post-COVID pandemic, India did see several outbreaks of measles in different parts of the country. The stakeholders of children's healthcare



must take extra measures for routine and catch-up measles vaccination to contain the disease in India. Also vaccination campaigns are going on across the country in different States for catch-up vaccination to cover children from 9 months to 15 months for elimination of measles and rubella," she explained.

What has been the impact of COVID-19 on the vaccination programme?

The WHO notes that the pandemic has led to setbacks in surveillance and immunisation efforts across the globe leaving millions of children vulnerable to diseases like measles. "No country is exempt from measles, and areas with low immunisation encourage the virus to circulate, increasing the likelihood of outbreaks and putting all unvaccinated children at risk," it notes. In India, as recently as late last year, Maharashtra and Kerala saw a spike in cases of measles. While Maharashtra recorded over 800 cases and over 10 deaths linked to the disease, Kerala's Malappuram district reported 160 cases of measles. The spread caused enough alarm to prompt the Indian Academy of Paediatricians to step in and appeal for vaccination.

EIGHT MONTHS ON, STATES WAIT FOR 3HP TB PREVENTIVE DRUG

Eight months after Prime Minister Narendra Modi launched the pan-India rollout of a shorter TB Preventive Treatment (TPT) in March 2023 called the 3HP —once-weekly isoniazid-rifapentine for 12 weeks — States are yet to receive the 3HP combination drug from the Central TB Division. Tamil Nadu and Kerala have already begun using 3HP for TB preventive treatment despite not receiving the drug supply.

Currently, all household contacts of a person who has been recently diagnosed with pulmonary TB are tested for TB disease and those who do not have TB disease but have been infected with the bacteria are offered treatment to prevent the progression from latent infection to TB disease. Daily dose of isoniazid for six months, which is the current treatment protocol, translates to 180 pills. In contrast, the 3HP regimen of one combination drug a week for three months translates to 12 pills in all.

"Since treatment with 3HP involves only 12 doses, compliance is better, adverse effects of the drugs are less and treatment completion is better compared with 180 doses of isoniazid monotherapy," says Dr. Padmapriyadarsini, C, Director of the National Institute for Research in Tuberculosis (NIRT), Chennai. "TB disease should be ruled out before starting a person on preventive therapy. Also, other health conditions that may be contraindicated should be ruled out before starting on 3HP." According to the latest guidelines, all household contacts immaterial of age are eligible for TB preventive therapy once TB disease has been ruled out. The 3HP regimen has been associated with a higher completion rate in all subgroups — adults with HIV, adults without HIV, and children and adolescents. According to the 2021 Guidelines for programmatic management of tuberculosis preventive treatment in India, the use of the shorter regimen was associated with "at least 20% greater treatment completion rate (82% vs 61%)".

Also, TPT using the 3HP drug is cheaper than isoniazid monotherapy for six months.

"No studies have shown that TB preventive therapy leads to drug resistance. But if active TB disease is not ruled out before starting TB preventive treatment, there is a risk of drug resistance setting in," says Dr. Padmapriyadarsini.

While no head-to-head comparison trial between isoniazid for six months and 3HP has not been carried out in India, a trial has compared the two drug regimens in people living with HIV in South



Africa. The trial found that the incidence of TB disease was the same in both the drug regimens. However, serious adverse reactions — hepatotoxicity — was significantly lower in people treated with 3HP.

While some States offer TB preventive therapy to those about to undergo organ transplantation, all States offer it to household contacts. “Though household contacts are considered at high risk of getting infected, less than 20% of infections can be attributed to household exposure, while the remaining infections could be attributed to community transmission,” says Dr. Soumya Swaminathan, former Chief Scientist at WHO.

About 30-40% of the Indian population has latent TB infection, and 5-10% of those with latent infection will develop TB disease over the course of their lives. About half of those who develop TB disease will do so within the first two years of infection. According to the WHO, TB preventive therapy “can halt progression to TB disease very effectively for many years”, thus preventing a large number of people from developing TB disease within two years of infection. In high-burden countries such as India, the chances of reinfection after completing the TB preventive therapy are high, and such reinfection “may reverse this protection”. Despite the likelihood of protection being reversed on reinfection, a WHO spokesperson tells The Hindu in an email that countries like India should invest in TB preventive therapy.

“Yes, they should [invest in TPT]. Reinfection with TB after a course of TPT is certainly possible, but M.tuberculosis less infectious than many other microorganisms so this eventuality should not stop programmes from investing in TPT,” he says.

With smear microscopy forming the bulk of TB testing (despite its low sensitivity) and molecular testing constituting just 23%, should India prioritise molecular testing for all or should it also invest its finite resources into TB preventive therapy?

The WHO spokesperson says India should invest more in TB screening using digital chest X-rays and molecular testing for TB disease confirmation. “TB preventive treatment like 3HP is an important accompaniment to this strategy, to protect TB-free individuals at risk from progressing to disease,” he says. “Even if all this requires resources to reach the required scale, the return on investment is typically high, saving costs to both the services and society given the high price of undetected TB.”

CENTRE DIRECTS STATE GOVTS. TO CLOSELY MONITOR CASES OF RESPIRATORY ILLNESS

The Union Health Ministry on Sunday directed the State governments to closely monitor cases of influenza-like illness (ILI) and severe acute respiratory illness (SARI) in the wake of recent reports of a surge in respiratory illness in children in northern China.

The Ministry asked the district and State surveillance units of the Integrated Disease Surveillance Project to keep a watch on the cases.

The States have also been directed to send nasal and throat swabs of patients with such conditions, particularly children and adolescents, to virus research and diagnostic laboratories for testing for respiratory pathogens.

In a letter, the Ministry advised the States to immediately review public health and hospital preparedness measures such as ensuring the availability of trained hands, hospital beds, drugs and vaccines for influenza, medical oxygen, antibiotics, personal protective equipment, testing kits



and reagents, functionality of oxygen plants and ventilators, and infection control practices in health facilities.

“The Health Ministry has decided to review the preparedness measures against respiratory illnesses, as a matter of abundant caution. This is noted to be important in view of the ongoing influenza and winter season that results in an increase in respiratory illness cases. The government is closely monitoring the situation, and indicated there is no need for any alarm,” said a senior Health Ministry official.

A surge in respiratory illnesses across China that has drawn the attention of the World Health Organization is caused by the flu and other known pathogens and not by a novel virus, the country’s Health Ministry said on Sunday.

Recent clusters of respiratory infections are caused by an overlap of common viruses such as the influenza virus, rhinoviruses, the respiratory syncytial virus, or RSV, the adenovirus as well as bacteria such as mycoplasma pneumoniae, which is a common culprit for respiratory tract infections, a National Health Commission spokesperson said.

The Ministry called on local authorities to open more fever clinics and promote vaccinations among children and the elderly as the country grapples with a wave of respiratory illnesses in its first full winter since the removal of COVID-19 restrictions.

“Efforts should be made to increase the opening of clinics and treatment areas, extend service hours and increase the supply of medicines,” a Ministry spokesman said.

He advised people to wear masks and called on local authorities to focus on preventing the spread of illnesses in crowded places such as schools and nursing homes.

BLOWDRY AND VENT: NOW, HAIRDRESSERS WHO ARE QUALIFIED TO COUNSEL

Sometimes, all that is needed is someone who will listen. In the cities of central and west Africa, among the poorest regions of the world, where mental health support is beyond access for many, hairdressers are being trained to provide at-risk people with a sympathetic ear and a shoulder to cry on. Designated as “mental health ambassadors”, they are taught by mental health professionals to spot non-verbal signs of distress as they braid and blow-dry their clients’ hair, gently seek information and give advice.

This creative approach to addressing what is now recognised as a basic need has a lesson for other countries struggling with a similar combination of low awareness and limited access to infrastructure and trained personnel. In India, for example, as noted by the Parliamentary Standing Committee on Health and Family Welfare in August, there are only 0.75 psychiatrists per 1,00,000 population. The Union government’s national tele-mental health programme, called Tele Mental Health Assistance and Networking Across States (Tele-MANAS), providing free and round-the-clock assistance to those in distress, has made some difference — in his address at a Mental Health Day event last month, the Union Minister for Health said that 3,50,000 people had been counselled since the initiative’s rollout in 2022. But in a nation of 1.4 billion, where about 40 per cent of the population has reported mental health distress, more needs to be done.

This could mean more proactive measures, including training people whose work involves daily contact with others, to recognise signs of distress. Salon professionals are particularly well-suited for this, as seen in the African initiative, as well as programmes like Hair 3Rs and Hairdressers



with Hearts in Australia. As long as shame, lack of knowledge and money remain deterrents, creating networks of support within communities and enabling conversations in intimate, non-intimidating settings, can help a lot more people in distress.

NAVY GETS READY FOR ITS BIGGEST NAVAL EXERCISE AMID OCEAN ENGAGEMENTS

As the Indian Navy looks to mark Navy Day on December 4, it is also gearing up to host its largest multilateral exercise early next year. The next edition of “Exercise Milan” is scheduled for February 2024, and is expected to see the participation of over 50 countries, defence sources said while noting that this reflects the significant expansion of the Navy’s engagements as well as capacity to assist countries in the Indian Ocean Region (IOR) as the first responder and Preferred Security Partner.

“These exercises are crucial for honing operational capabilities, sharing best practices, building mutual trust, fostering interoperability, strengthening diplomatic ties, and enhancing maritime security. They not only demonstrate India’s naval prowess but also contribute to the shared goal of ensuring a secure and stable maritime environment.”

Exercise Milan is a biennial multilateral naval exercise which began in 1995, and has since significantly expanded in scope and scale to become the largest exercise held by India. The mid-planning conference of Milan-24 was held in October. The last edition of Milan, which is held off Visakhapatnam, saw participation from over 40 countries.

In addition, since July 2022, the Indian Navy has joined the Bahrain-based Combined Maritime Force (CMF), a U.S.-led multinational naval partnership that aims to promote security, stability, and prosperity across international waters in IOR. “Indian naval ships and aircraft are being deployed for CMF-led operations on regular basis,” sources noted and earlier this month India announced its decision to become a full member of the grouping.

This year, the Navy Day is will be held at the Sindhudurg Fort on the western seaboard, built in 1660 by Chhatrapati Shivaji. The operational demonstration will witness participation of 20 warships along with 40 aircraft such as MiG 29K and LCA Navy along with combat beach reconnaissance and assault demo by the Marine Commandos. This is the first time that the Navy will be organising a mega event which is not taking place at any major naval station. December 4 is observed as Navy Day to commemorate the Navy’s daring attack on the Karachi harbour during the 1971 India-Pakistan War under ‘Operation Trident’.

India has also significantly expanded assistance in capacity building to countries in the region. This includes giving platforms, regular training as well as routinely deploying Mobile Training Teams (MTT) overseas to facilitate capacity development. “Recently, MTT from Indian Naval Work up teams undertook operational sea checks of ships of two friendly countries – Sri Lanka and South Africa – at Trincomalee and Cape Town respectively where they worked alongside the ship’s crew to achieve very high standards of operational readiness as well as safety compliance,” a defence source said.

Similarly, INS Nireekshak conducted mix gas diving training for Sri Lankan Navy personnel in Trincomalee, Sri Lanka, both in 2022 and 2023.

To date, Indian Navy has trained over 15,000 personnel from over 40 countries from the IOR, the first source stated.



INDIA SET TO LAUNCH X-RAY POLARIMETER SATELLITE, SAYS ISRO

In a recent update on its website, the ISRO said that while space-based X-ray astronomy had been established in India focusing on imaging, time-domain studies, and spectroscopy, the XPoSat mission marked a major value addition. This research, supplementing traditional time and frequency domain studies, introduced a novel dimension to X-ray astronomy, generating anticipation and excitement within the scientific community. The satellite will be launched by the Polar Satellite Launch Vehicle from the Satish Dhawan Space Centre in Sriharikota. The date has not been revealed.

The XPoSat is designed for observation from a low earth orbit (non-sun synchronous orbit of 650-km altitude, low inclination of approximately six degrees) and will carry two scientific payloads. With these two payloads, the mission is capable of simultaneous studies of temporal, spectral, and polarisation features of the bright X-ray sources.

The mission objectives include the measurement of X-ray polarisation in the energy band of 8-30 keV emanating from X-ray sources and long-term spectral and temporal studies of cosmic X-ray sources in the energy band of 0.8-15 keV.

The mission life is expected to be approximately five years.

The primary payload, POLIX (Polarimeter Instrument in X-rays), is designed to measure polarimetry parameters, specifically the degree and angle of polarisation, in the medium X-ray energy range of 8-30 keV photons originating from astronomical sources. The payload was developed by the Raman Research Institute, Bengaluru, with support from ISRO centres.

The secondary payload is the XSPECT (X-ray Spectroscopy and Timing) payload, which will provide spectroscopic information within the energy range of 0.8-15 keV.

The payload was developed by the U.R. Rao Satellite Centre, ISRO.

TOP ISRO SCIENTIST V R LALITHAMBIKA CONFERRED WITH HIGHEST CIVILIAN FRENCH HONOUR FOR SPACE COOPERATION INITIATIVES

A distinguished scientist at the Indian Space Research Organisation, whose interest in space programmes was triggered by the sounding rocket launches by the ISRO she had viewed as a child with her grandfather was on Wednesday conferred with a top French civilian honour.

Lalithambika VR, 60, was conferred the 'Légion d'Honneur' for her engagement in space cooperation between France and India by the Ambassador of France to India, Thierry Mathou in Bengaluru on Wednesday.

The scientist, who was the director of the Human Spaceflight Programme at the ISRO, has been recognised by France for her role in the signing of the first joint agreement for cooperation between the French National Space Agency CNES and the ISRO on human spaceflight in 2018 where the two agencies agreed to work in the area of space medicine.

Lalithambika is also credited for coordinating another Indo-French agreement on the Indian astronaut programme in 2021. Under this agreement, the CNES will train India's flight physicians and the CAPCOM mission control teams for human spaceflights in France at the CADMOS centre



for the development of microgravity applications and space operations at the CNES in Toulouse and at the European Astronaut Centre (EAC) in Cologne, Germany.

Lalithambika is the second ISRO scientist after former ISRO chairman A S Kiran Kumar to be awarded the Legion d'Honneur of France for promoting Indo-French space cooperation. Kumar was awarded the honour in 2019.

The Légion d'Honneur (the Legion of Honour) is the highest civilian award given by the French Republic for outstanding service to France irrespective of nationalities. It has been in existence for over 200 years since it was created in 1802 by Napoleon Bonaparte.

Lalithambika, who grew up and studied in Kerala, developed her early interest in the space programme by watching the sounding rocket launches from Thumba near her hometown with her grandfather M N Ramakrishnan Pillai, a mathematician.

'WE COULDN'T TELL OUR WIVES': REMEMBERING OPERATION GANGOTRI, THE TOP-SECRET EXPEDITION THAT FIRST TOOK INDIA TO ANTARCTICA

Operation Gangotri was the first Indian scientific expedition to Antarctica. The expedition was code-named after the Gangotri Glacier in the Himalayas and was carried out in 1981-82.

Operation Gangotri was a top-secret mission, with the Indian government keeping the public in the dark about the expedition until after it had returned safely. This was because the government was concerned about the potential for international backlash, as India was not a signatory to the Antarctic Treaty at the time.

The expedition was led by a 21-member team of scientists, who travelled to Antarctica on a chartered Norwegian vessel called the Polar Circle. On January 9, 1982, the team set foot on Antarctica and hoisted the Indian flag, marking a historic moment for the country.

The members of the expedition, who recall the challenges and excitement of the mission. Dr. Amitava Sengupta, one of the scientists on the team, describes Operation Gangotri as "a top secret operation, organised in record time" He also mentions that the expedition was "very secretive" and that the team members were not allowed to tell their wives about it.

Another member of the team recalls the challenges of living and working in Antarctica, such as the lack of fresh water and the extreme cold. However, he also describes the experience as "very exciting" and says that it was "as if we had come back from the moon or something."

J&K FACES 30 DAYS WORTH OF POWER CUTS IN A YEAR

The Union Territory of Jammu and Kashmir is facing significant challenges related to power cuts, with reports indicating durations extending to over 18 hours a day. Power outages in the region have been a persistent issue, impacting both urban and rural areas. The System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) are used to measure the scale of power outages. In 2021-22, Jammu and Kashmir's power distribution companies, KPDCL and JPDCL, recorded high SAIDI values, with 889 and 489 hours worth of interruptions per customer, respectively. The SAIFI values were also high, indicating a large number of interruptions. The poor power situation continues, with recent data from September 2023 showing high SAIFI and SAIDI values for KPDCL. Prolonged power outages have



significant economic and social implications, affecting household income, study time for girls, and employment opportunities for women.

A COASTAL FLAVOUR, KAMBALA MAKES A SPLASH IN BENGALURU

The Bengaluru Kambala, a traditional buffalo race event from the coastal region of Karnataka, took place at the Palace Grounds in the city. This two-day event, the first-ever Kambala in the state capital, featured over 180 pairs of buffaloes and jockeys competing across various categories, including speed contests and displays of force. Kambala is a folk sport rooted in the agrarian practices of coastal Karnataka, where buffaloes race in slushy paddy fields. The event aimed to popularize Kambala among the urban population and promote buffalo breed conservation. The race is known for the unique bond between buffalo owners and their animals.

The word Kambala comes from 'gampa kala', where gampa refers to wet mud or slush. A vast slushy paddy field was called a kambala gadde. The first-ever documented kambala was held on February 2, 1970, in Bajagoli near Karkala in Udupi district. The Kambala season usually begins after the southwest monsoon between November and March, at the end of the tilling season.

WHEN JINNAH ASKED SAM MANEKSHAW TO JOIN THE PAK ARMY

Field Marshal Sam Hormusji Framji Jamshedji Manekshaw (1914-2008) is one of the most storied figures in Indian military history, and now the subject of a biopic, Sam Bahadur, which hit theatres today.

Known for his valour and humour alike, Manekshaw's military career spanned nearly four decades and five wars, from World War II to the 1971 war against Pakistan, where he led Indian forces to a decisive victory.

History, however, could have been very different had Manekshaw chosen differently in 1947. Here is the story.

Partition of the army

The Partition divided much more than just the subcontinent's landmass. From the railways to the government treasury, the civil services to government assets down to chairs and tables, everything was split between the two nascent countries.

Also partitioned, was the British Indian Army, nearly 400,000 strong in 1947. All assets and indigenous personnel were split between the two countries, with India allotted approximately 260,000 men and Pakistan the rest. Like much else in 1947, this was a complicated, oft-bloody partition, with individual units split up on religious lines.

"They had this terrible problem of getting the Hindu squadrons out [of the northwest frontier] without them being murdered by the Pathans... the Muslim Punjabi Squadron protected... and smuggled them out one night," Edward McMurdo Wright, a British major who firsthand witnessed the Partition, wrote in his memoir in 1991.

Officers' choice

While enlisted men did not have a say in which army they would join, that was not true for officers, at least formally.



“Officers received a form on which to record their choice,” historian Brian Lapping wrote in *End of Empire* (1985). “Most Hindus and Sikhs had no option. Pakistan would not have them. But for those Muslims whose homes lay in what was to be India ... many convinced of the need for a secular army in a secular state, chose India,” he wrote. Christian and Parsi soldiers too were faced with a similar choice.

Sam Manekshaw, a Major at the time, was a Parsi born in Amritsar, although his family originally hailed from Bombay (now Mumbai). He spent his early years in the city in Punjab before being sent to Nainital to study at Sherwood College. His parent unit, the 12th Frontier Force Regiment, became part of the Pakistani Army. Thus, Manekshaw was faced with a choice.

Manekshaw denies Jinnah’s request

In fact, Muhammad Ali Jinnah, Pakistan’s founding father, himself requested Manekshaw to join the Pakistani Army. Thankfully for India, Manekshaw turned Jinnah down, despite Pakistan providing rosy career prospects for a talented officer such as him. “Agreeing with Jinnah would have resulted in faster promotions in the Pakistan Army, but Sam preferred to remain in India,” Colonel Teja Singh Aulakh (then a Major) said, as quoted in Hanadi Falki’s biography of Field Marshal Manekshaw.

A large chunk of the British Indian Army’s top leadership comprised British officers. Thus, in 1947, armies of both India and Pakistan stared at a major leadership vacuum. This was especially true for Pakistan, with most native officers being Hindu or Sikh and staying on in India. Consequently, for young Pakistani officers, a rapid rise up the ranks beckoned.

Manekshaw was transferred first to the 16th Punjab Regiment for a very brief while, and later, as Lieutenant Colonel, to the 5th Gorkha Rifles. He would, however, not serve with Gorkha troops, being assigned to the Army Headquarters’ Military Operations Directorate during the 1947-48 Kashmir War.

Years later, after his retirement, Field Marshal Manekshaw was asked about his decision in 1947. He, in jest, responded, “Jinnah had asked me to join the Pakistan army in 1947. If I had, you would have had a defeated India [in 1971].”

EXPRESS VIEW: HENRY KISSINGER WAS A MAN OF THE WORLD

Henry Kissinger, the best-known American diplomat of modern times, is deeply associated in the Indian mind with the American tilt to Pakistan during the 1971 war to liberate Bangladesh. Many in India also view Kissinger as the one man responsible for the rise of China by drawing it into a long-term partnership with the United States against the Soviet Union. But Kissinger is more than the “villain” of the 1971 war and a lifelong “friend of China”. His contributions towards shaping American foreign policy and the evolution of the post-war world in the second half of the 20th century are immense and consequential. As Delhi reflects on Kissinger’s celebrated but controversial legacy, his statecraft holds lessons for a rising India seeking a larger role in the world.

The US tilt to Pakistan in 1971 did not involve firing an American shot against India, nor did it affect the outcome of the Bangladesh war. In criticising Kissinger’s China policy, it is easy to forget that New Delhi was a much bigger political champion of China in the 1950s when America was trying to isolate it. Large countries like India can’t be obsessed about specific moments in history and lose sight of the larger geopolitical dynamic. In Kissinger’s realpolitik, protecting an important



Cold War ally — Pakistan — and turning an adversary like Communist China into a strategic partner was driven by a deep consideration for US interests in the 1970s. That world has now gone. There is now a robust India-US partnership no longer tied to Pakistan and aimed at securing an Asia that an assertive China has destabilised. As an exponent of power politics, Kissinger had no hesitation in accepting later that he would have done precisely what PM Indira Gandhi did in 1971 — seize an opportune moment to break up Pakistan and establish India's primacy in the Subcontinent.

After the Cold War ended in 1991 and Delhi embarked on economic reforms, Kissinger became an ardent supporter of the US-India partnership. After India's nuclear tests in 1998, he was among the first to urge Washington to recognise the reality of an atomic India and find a political accommodation with Delhi by putting aside the non-proliferation ideology. In an interview earlier this year, Kissinger said India's foreign policy under PM Narendra Modi comes closest to his statecraft based on realpolitik. Kissinger's praise is not surprising, given the profound reorientation of Indian diplomacy in recent years. Yet, Delhi also needs to learn from the tragedy of Kissinger's worldview. While he sought to nudge the US towards pragmatism and away from the twin extremes of isolationism and ideological crusades, he had to repeatedly sacrifice the moral imperatives of justice in the pursuit of order and stability — from Indo-China to South Asia and Latin America. That made him a hated figure within left-liberal circles in the US and beyond. Delhi may be right to reorient its foreign policy towards realism, but it can't afford to lose the balance between power and principle, between interests and values, in the conduct of its international relations.

HIJRON KA KHANQAH: OFFERING SAFE SPACE TO A PERSECUTED COMMUNITY FOR CENTURIES

There is a popular folklore in the gullis of Mehrauli: There once lived a wise albeit mysterious woman named Miyan Saheb. One day, as she sat on the steps of her dargah, a grand procession of the king happened to pass by. Miyan Saheb's gaze met the eyes of the king and intrigued by her beauty, the king commanded his guards to bring her over. At the dargah, though, the guards found only an elderly woman, leaning on a crooked stick, who insisted she was the sole inhabitant of the place. The king decided to personally inspect the premises and demanded an explanation from the elderly woman. Looking straight into the king's eyes, she said, "O king, the youthful maiden you seek can never be possessed by you. Marriage is not destined, ownership eludes you..."

Driven by a longing to see the mysterious beauty once more, the king pledged that he would never marry her. At this, the old woman underwent a miraculous transformation, revealing herself to be the radiant Miyan Saheb. The king had learnt his lesson: Some treasures are meant to be cherished in bonds beyond the confines of marriage.

Today, while no one can tell who the king, or Miyan Saheb, was, the dargah steps where their first encounter took place continues to exist. Nestled in the chaotic, narrow by-lanes of Mehrauli, the Hijron ka Khanqah houses the graves of Miyan Saheb and 49 other unidentified eunuchs. The khanqah's origins go back to the 15th century. Since then, it has remained a sacred space for Delhi's eunuch community where they can gather, pray and celebrate without fearing persecution.

Kokila Haji, the proprietor, has overseen the flourishing of this sacred space, while the dedicated caretaker, Shri Pal, 70, has maintained the shrine for the past 32 years, spanning three generations of ownership.



This unassuming shrine becomes a vibrant meeting point for the community during significant events such as Muharram and Shab-e-Baraat. During Shab-e-Baraat, the community organises a grand langar in which 30 kilograms of mutton, 300 rotis, and copious amounts of halwa are prepared and distributed among the poor, says Pal.

Thursday is regarded as the most auspicious day to offer prayers at Miyan Saheb's grave when people from diverse religious backgrounds converge and seek blessings for marriages, childbirth, and general prosperity. A relic from the Lodhi era, the Hijron Ka Khanqah also serves as a testament to a period when eunuchs, now often marginalised, played vital roles as integral members of the royal court.

In the Mughal era, for example, court eunuchs held responsibilities such as guardians of the female quarters within the palace, administrators, military commanders, envoys, intelligence agents, collectors of land revenue, and managers of various business ventures. Chronicles such as Babur Nama and Akbar Nama provide compelling evidence of the acknowledgment of hijras as a distinct third gender, exercising considerable political and social influence within the Mughal courts.

As Kulsoom Bi, in Arundhati Roy's *The Ministry of Utmost Happiness*, succinctly puts it, "That is us. That is our ancestry, our history, our story. We were never commoners, you see, we were members of the staff of the Royal Palace."

EXPRESS VIEW: FROM KOHINOOR TO PARTHENON SCULPTURES FEUD – WHO OWNS TREASURES?

Processions of merry-makers, scenes of feasts and a motley group of guests. The birthday celebrations of Greek god Athena come alive in a burst of revelry on marble friezes and sculptures on display at the British Museum. But the Parthenon Sculptures have managed to strike a discordant note, once again, in diplomatic relations between Greece and the UK. Greek Prime Minister Kyriakos Mitsotakis has accused his British counterpart Rishi Sunak of cancelling a scheduled meeting in London, where Greece's persistent demand to return the 2,500-year-old sculptures that British ambassador to the Ottoman Empire, Thomas Bruce, the seventh Earl of Elgin, had moved out of the Parthenon between 1801 and 1805, might have been discussed. The UK has maintained that Elgin's action was completely above board — he had acquired a firman sanctioning the acquisition from competent authorities. That firman, however, has been lost.

The Parthenon Sculptures episode is, of course, only the latest amid growing demands for repatriation of antiquities to their rightful owners by nations colonised by European powers. In 2009, Egypt had demanded that France return painting fragments from the tomb of Tetaki; Nigeria has long asked for a return of the Benin Bronzes from the British Museum. The question of rightfulness, though, is a double-edged sword. To whom do treasures such as the Parthenon Sculptures or the Kohinoor — demands for whose restitution had reached a peak in the early 2010s — really belong? History records Nadir Shah's invasion of Delhi and seizure of the Kohinoor from the Mughals. It reached the British after the Anglo-Sikh wars, ostensibly as an act of reparation. Competing claims of ownership diffuse the injustices of colonial appropriation and threaten to derail conversation around them.

The question of troubled provenance apart, countries such as France have begun recognising the empire's role in this displacement and initiated a process of limited transfer or loans. Decolonising the museum might not be entirely possible, but accountability and a willingness to come to the table might be a good starting place.

**BUSINESS & ECONOMICS****CAN DOLLARISATION SAVE AN ECONOMY?**

Another election, another victory for the global right. Javier Milei, the recent winner of Argentina's presidential election, has drawn attention for his unconventional and worrying views, such as his opposition to abortion and his ambivalent attitude towards the torture and undemocratic excesses of Argentina's military government.

Mr. Milei's economic proposals have also drawn much debate and scrutiny. The self-confessed "anarcho-capitalist" pledged in his campaign to replace Argentina's currency — the peso — with the dollar, to eliminate the Central Bank and to slash government spending. Suffering under inflation in excess of 100%, and with nearly two-thirds of the population falling below the poverty level as purchasing power of wages and salaries have eroded, the electorate has chosen to throw their weight behind Mr. Milei's idiosyncratic policy proposals.

However, the president-elect has already begun walking back on some of his campaign promises, claiming dollarisation as a "medium-term" goal and ruling out the immediate lifting of currency controls when he takes office. Whether dollarisation can be achieved immediately and painlessly is an important question, given the scarcity of dollar reserves with the Argentinian Central Bank. Regardless, the question of whether dollarisation is a solution to an economy undergoing runaway inflation is an important one.

Why dollarisation?

Dollarisation can act as a solution to hyperinflation by breaking the feedback link between rising prices and rising money supply. If the domestic currency is replaced by dollars, so the theory goes, money supply can no longer be controlled by vested political interests who can increase spending for political ends. The incessant rise of prices would be forced to moderate since consumers would no longer be able to access currency easily, thus slowing down consumption demand.

Dollarisation can also have positive effects on growth. Since a small economy can only access dollars through foreign trade and/or capital inflows, it would incentivise the economy to focus on export successes and easing conditions for foreign capital, who would be more willing to invest in an economy with a stable currency. The stable value of the dollar would ensure that economic agents — both foreign and domestic — would be able to make long-term plans regarding economic activity, plans that would otherwise not be possible under a currency that rapidly lost value.

There are some potential problems. The adoption of dollars as a currency implies that economies lose an important source of policy leverage, with monetary policy now unable to control money supply. On the foreign trade front, countries would no longer be able to take recourse to depreciation to boost exports, focusing only on export promotion to stave off downturns. Some proponents of dollarisation see this as a positive outcome, since it would ensure the government resorts to productivity boosting methods to combat recessions, instead of changing exchange rates.

The experience of Ecuador

Theory aside, the experiences of some countries hold out promise for the project of dollarisation. Three fully dollarised economies — Ecuador, Panama and El Salvador — have had successful economic outcomes following dollarisation, with Ecuador a useful case study. The Ecuadorian

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



economy suffered a series of debilitating crises in the late 1990s, with economic output contracting by almost 7%, inflation at roughly 67%, and the domestic currency, the Sucre, depreciating by almost 200% in 1999. President Jamil Mahuad announced the adoption of the dollar in January 2000; widespread protests following the move forced him to resign two weeks after the announcement. Despite this political upheaval, Ecuador persisted with dollarisation.

The economy has shown considerable progress since then, on parameters measuring both economic growth and social welfare. The World Bank estimates a growth of 4.5% in real GDP between 2001 to 2014. The poverty rate fell from 36.7% in 2007 to 22.5% in 2014, with inequality, as measured by the Gini index, falling by 9 percentage points over this period. During the 2008 recession, the economy lost only 1.3% of GDP, reaching its 20-year growth trend only two years after the onset of the recession. The inflation rate in Ecuador hit a high of 108% in September 2000. Following dollarisation, the inflation rate averaged around 4% between 2003 to 2006, a remarkable achievement for an economy experiencing double-digit inflation rates since the 1970s. The ratio of foreign debt to GDP also reduced from 55% in 2000 to 21.5% in 2006.

The role of policy

Dollarisation is not, however, the sole reason for success.

Ecuador is helped by significant reserves of oil and gas. The commodity price boom of the 2000s greatly aided the growth of the economy and allowed for a greater inflow of dollars. Subsequently, the reduction in oil prices after 2014 saw a reduction in economic growth and rising debt and deficit levels, bringing new challenges to the economy.

The government of Rafael Correa — from 2007 to 2017— oversaw an expanded role for the State in a dollarised economy, with government expenditure and deficits rising significantly. New contracts with oil exploration companies operating within Ecuador — such as Brazil's Petrobras — were negotiated, giving the Ecuadorian government greater revenue, using nationalisation of oil fields as leverage against foreign oil companies. They also restructured some of Ecuador's foreign debt, defaulting on certain bonds it deemed "illegitimate" that provided unfair gains to private parties. This freed up fiscal space which was used for social spending, which increased from roughly 5% of GDP in 2006 to 10.3% in 2011. Moreover, the Central Bank was not independent of the executive throughout this time, bucking an important mainstream consensus regarding the conduct of monetary policy.

The achievement of economic prosperity is a complex affair that requires sustained engagement with policy-making and perhaps a little bit of luck to navigate economic shocks. Rising oil prices brought windfall gains to the Ecuadorian economy, with a government that ensured these gains were translated into social spending.

Dollarisation may have broken the back of inflation, but active fiscal policy played an important role in ensuring sustainable growth. Several economists have decried a return to austerity economics in Ecuador, with the International Monetary Fund (IMF) insisting on the independence of the Central Bank as a pre-condition for receiving financial assistance.

The dangers of adopting an external currency without the ability to chart independent policy can be seen in the case of Greece. The adoption of the euro fuelled growth in Greece, with capital inflows rising and tourism booming on the back of a stable currency.



However, in the wake of the Eurozone crisis, Greece was bereft of both fiscal and monetary policy space, with monetary policy being determined by the European Central Bank (ECB) and fiscal policy restrained as a pre-condition for adopting the Euro. The Greek economy saw no alternative but to adopt crushing austerity in exchange for financial assistance from the IMF and the ECB.

Dollarisation, therefore, is not a silver bullet, but if used well in conjunction with nimble domestic policy, can offer a route to success. But with a president-elect that brandishes a chainsaw to indicate his desire to slash government spending, and who has asserted that he will abolish the Central Bank, policy in Argentina might find its sphere reduced under the Milei administration. The world awaits the results of yet another macroeconomic gamble played out on the backs of a suffering populace.

FINANCE MINISTERS OF JAPAN AND SOUTH KOREA AGREE TO RESUME CURRENCY SWAP AGREEMENT AS TIES WARM

Japan and South Korea agreed Thursday to revive a currency swap agreement for times of crisis, in the latest sign of warming ties as the countries work to smooth over historical antagonisms.

Japanese Finance Minister Shunichi Suzuki announced the agreement after meeting with his South Korean counterpart, Choo Kyungho. It was the first time the two countries have held annual financial talks in seven years, though Suzuki and Choo also met in South Korea in May.

Suzuki told reporters that the 3-year currency swap agreement would help reinforce trust in the financial stability of the two countries as a fallback in an emergency. But he emphasised that Japan is fully prepared to deal with fluctuations in the Japanese yen, which has weakened sharply against the US dollar in the past year.

The USD 10 billion swap arrangement expired in 2015 and had not been renewed. Largely symbolic, it allows the South Korean and Japanese central banks to exchange currencies for each country's reserves of US dollars to provide extra liquidity, or cash supplies, in case of a crisis. The two major Asian economies, both US allies, have recently mended ties as they contend with challenges posed by China and North Korea, despite tensions over issues left over from Japan's 35-year occupation of the Korean Peninsula before and during World War II.

From July 21, Japan plans to reinstate South Korea as a preferred nation with fast-track trade status. That will essentially end a four-year trade dispute that began in July 2019 when Japan removed South Korea from its "white list" of countries given fast-track approvals in trade as ties deteriorated over compensation for Japanese wartime actions.

Japan's tightening of trade controls against Seoul was in apparent retaliation for South Korean court rulings in 2018 that ordered Japanese companies to compensate Korean workers for abusive treatment and forced labour during World War II. Japan also tightened export controls on key chemicals used by South Korean companies to make semiconductors and displays, prompting South Korea to file a complaint with the World Trade Organisation and remove Japan from its own list of countries with preferred trade status.

South Korean President Yoon Suk Yeol and Japanese Prime Minister Fumio Kishida met in March in the first formal summit between the two countries since 2015. Japan colonised the Korean Peninsula between 1910 and 1945, imposing Japanese names and language on Koreans and conscripting many into forced labour or prostitution in military brothels before and during World War II.



Japan gave USD 800 million to South Korea's then-military-backed government under a 1965 accord to normalise relations which was mainly used on economic development projects driven by major South Korean companies. A semi-government fund set up by Tokyo offered compensation to former "comfort women" when the government apologised in 1995, but many South Koreans believe the Japanese government should take more direct responsibility for the occupation.

The two sides also have a longstanding territorial dispute over a group of islands controlled by South Korea but claimed by Japan.

WHY HAS BINANCE BEEN FINED BY THE U.S.?

Binance, the world's largest cryptocurrency exchange, has been fined \$4.3 billion by the U.S. government for serious protocol failures, including frequent violations of U.S. sanctions. CEO Changpeng Zhao resigned after pleading guilty to violating the Bank Secrecy Act by not maintaining an effective anti-money laundering program. The charges against Binance include not maintaining a working anti-money laundering program, running an unlicensed money transmitting business, and violating the International Emergency Economic Powers Act. The U.S. Treasury Secretary, Janet Yellen, stated that Binance failed to report suspicious transactions, allowing illicit actors to transact freely, including those involved in activities such as child sexual abuse, illegal narcotics, and terrorism. This marked the largest enforcement action in the Treasury's history. Binance has faced legal issues in various countries before, but the recent fine and regulatory scrutiny may impact the crypto sector, leading some exchanges to comply with U.S. regulations or exit the country. Binance is now expected to track and report suspicious activity, implement effective anti-money laundering programs, and undergo strict monitoring for five years to ensure compliance with the settlement agreements.

PATCHY EXPANSION

The latest provisional estimates of GDP for the quarter ended September 30, released by the National Statistical Office, project real economic growth at 7.6%, a slight deceleration from the 7.8% logged in the preceding three months. Gross Value Added (GVA) across the eight broad sectors of the economy also reflected a marginal slowing, with second-quarter GVA registering a 7.4% expansion, 40 basis points slower than the April-June period's 7.8%. Robust double-digit expansions in manufacturing, mining, utilities and construction offset the loss of momentum across the other four sectors and helped ensure that the year-on-year growth in GVA comfortably exceeded the 7% pace for a second straight quarter. Manufacturing, buoyed by a favourable base effect due to the contraction in the year-earlier period, was the strongest performer by registering growth of 13.9%, a nine-quarter high. And construction witnessed its best showing in five quarters, expanding 13.3%. Of the four other sectors, the crucial ones of agriculture and the two services sectors of trade, hotels, transport and communication, and financial, real estate and professional services saw the pace of growth almost halving from the fiscal first quarter. While year-on-year growth in the agriculture, livestock and fishing sector slowed sharply to an 18-quarter low of 1.2%, the sector also experienced a sequential contraction for the third straight quarter, underscoring the precarity plaguing large portions of those earning from farming and allied activities in the rural hinterland.

The slowdown in two key components of the services economy — trade, hotels, transport and communication saw growth slide to 4.3%, from 9.2% in the June quarter, and the expansion in



financial and realty services more than halved from the preceding period to 6% — also merits a closer watch as the post-pandemic rebound in services appears to have lost steam. Adding to the need to view the headline growth number with circumspection is the fact that the lynchpin private final consumption expenditure, the single-largest component of demand in the economy, is struggling for traction. Growth in private consumption spending slowed appreciably to 3.1% in the September quarter, from 6% in the preceding three-month period, as rural demand remained affected by the vagaries of a below-average monsoon. The NSO data also reveal that the recent economic momentum owes its fillip in large measure to front-loaded government spending, both in terms of consumption demand and asset-creating capital investments. The challenge for policymakers will be to help broaden the growth base so as to ensure that all boats are lifted equally, both to sustain the momentum and reduce inequality.

GDP GROWTH SURPRISE: HOW TO READ THE DATA

The Ministry of Statistics and Programme Implementation (MoSPI) threw up a massive surprise Thursday when it released the economic growth data for the second quarter — covering months of July, August and September — of the current financial year (2023-24 or FY24). India's Gross Domestic Product — the measure of economic output — had grown by 7.6% in Q2.

In other words, India's real GDP (that is, after one takes away the effect of price inflation) in Q2 of FY24 is 7.6% more than what it was in the same three months of FY23.

What is the significance?

This is welcome news because not only is this a fairly impressive level of economic growth, it also beats all market expectations. The first significance of the news is that it has triggered a flurry of upward revisions in the GDP forecast for the full financial year.

Secondly, it seems to be vindicating the growth projections of India's central bank. At the start of the financial year, the Reserve Bank of India looked like an outlier when it forecast a full-year GDP growth rate of 6.5% while most other professional economists had pegged it close to 6%; some even lower — as low as 5.5%. With most others now pushing up the FY24 projection to 6.5%, the RBI looks like it got its forecast spot on.

Thirdly, this also means that RBI is unlikely to cut interest rates sooner than expected. Had the growth rate been below market expectations, the probability of a rate cut would have heightened.

Lastly, it is noteworthy that it was exactly three years ago — when MoSPI announced the Q2 GDP data for 2020-21 — that India went into a technical recession. The upside surprise on growth has given hope that India's economic recovery is now gathering momentum.

What to look at: GDP or GVA?

There are two ways to calculate GDP.

One is to look at how people spend their money — the expenditure side of the economy — and the other is to look at the income side of the economy. The former is called the GDP and the latter is mapped by looking at the Gross Value Added (GVA).

According to the RBI, the GVA of a sector is defined as the value of output minus the value of its intermediary inputs. This "value added" is shared among the primary factors of production, labour and capital.



One can get the GDP from the GVA route as well by adding the indirect taxes earned by the government and subtracting the subsidies provided by the government.

The difference in the two ways to calculate GDP is called discrepancy and can sometimes become a major controversy, as it happened when the GDP data for the first quarter was released.

Thanks to the availability of relevant data, the conventional wisdom is to look at GVA numbers more closely when making sense of quarterly trends of economic growth and to look at GDP (expenditure data) when analysing annual trends.

What does the GVA data show?

The table alongside shows the Q2 data for the past five years. It shows how the different sectors and sub-sectors of the economy grew in this particular quarter.

The first thing to note is that the contribution of Agriculture and allied sectors has seen a steady decline. In the current Q2, agriculture grew by just 1.2% — a far cry from the 4.3% it grew in the year of the Covid pandemic, when the rest of the economy contracted. Last year, the same quarter saw 2.5% growth — half of the year before. This year in Q2, it has halved again. This steady deceleration points to a likely increase in economic stress in rural India. Most experts expect farm production to not recover in the second half of the current financial year.

The second noteworthy aspect is the spike in industrial GVA growth rate. It has grown by over 13%. In particular, manufacturing has grown by close to 14%. These spectacular growth numbers are reminiscent of the high growth phase that India witnessed between 2004 and 2008. However, it may be too early to claim that India's manufacturing has completed a revival. For one, the latest growth rates for both industry and manufacturing benefit heavily from a fairly low base. Manufacturing GVA growth was almost minus 4% in the Q2 of last financial year. Improved corporate performance was another reason apart from the low base effect for the overall industrial GVA surprise.

“The (GDP) surprise was largely led by the manufacturing sector, with growth surging to a nine-quarter high of 13.9% in Q2 from 4.7% in Q1, led by a favourable base, an uptick in volume growth and an improvement in profit margins owing to continued deflation in input prices,” stated Aditi Nayar, Chief Economist, ICRA Ltd. Be that as it may, higher GVA in manufacturing, construction and mining auger well for employment, especially of the low-skilled variety.

As one looks at the third sector of the economy — services — the picture again turns. At a growth rate of 5.8%, the services economy has experienced a sharp deceleration over the same quarter last year. Data suggests that businesses involved in sub-sectors such as “trade, hotels, transport, communication and broadcasting services” grew by just over 4% — the kind of growth rate one associates with agriculture, which is typically the slowest-growing sector.

Upshot

While the Q2 data was a pleasant surprise, few economists are convinced as yet to take this as conclusive evidence of a sustained momentum. Most economists expect growth to moderate a bit in the remaining two quarters, and possibly continue to moderate over FY25.



GOVT. PAVES WAY FOR 16TH FINANCE PANEL

The Union Cabinet on Wednesday approved the terms of reference (ToR) for the Sixteenth Finance Commission, which will recommend the formula for sharing revenues between the Centre and the States for the five-year period beginning on April 1, 2026.

The government has set a deadline of October 31, 2025, for the panel to submit its recommendations, the government said in a statement.

Apart from the key recommendation on distribution of net proceeds of taxes between the Centre and States and allocation among States of the respective share of such proceeds, the panel will also prescribe measures needed to augment the Consolidated Fund of a State to supplement resources of the panchayats and local bodies on the basis of recommendations made by the respective State Finance Commissions.

Under the ToR, the panel will recommend principles that should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues. Also, it may review the existing arrangements on financing Disaster Management initiatives and make appropriate recommendations.

The government had established an Advance Cell in the Finance Ministry on November 21, 2022, to oversee the preliminary work pending formal constitution of the panel.

Subsequently, a Working Group headed by Finance Secretary and Secretary (Expenditure) and comprising several senior officials was set up to assist in the formulation of the ToRs. As part of the consultative process, views and suggestions were sought from the State governments and Union Territories (with legislature) on the ToRs and duly deliberated by the group, the government said.

EXPRESS VIEW: BANKRUPTCY CODE'S LOOSE ENDS

In 2016, the Insolvency and Bankruptcy Code ushered in a new resolution framework that has also helped reset credit relations by strengthening the position of both financial and operational creditors. The fear of having to relinquish control over their firms has acted as a strong incentive for promoters to fulfil their financial obligations. At the end of September, 7,058 cases had been admitted under the IBC framework. Another 26,000 applications, where the underlying defaults have been around Rs 9.33 lakh crore, have been withdrawn even before their admission under IBC according to the Insolvency and Bankruptcy Board of India. Of the cases that have been admitted, roughly half continue to be initiated by operational creditors, underlining that the code does provide these firms, which tend to be small and medium enterprises, a tool to help recover their dues.

Of the total cases that have been admitted so far, 1,053 have been closed on appeal/review/settled, while another 947 have been withdrawn under section 12A, due to possibly a settlement with the applicant or creditors. Resolution plans have been approved in 808 cases, while liquidation has commenced in 2,249 cases. In the cases yielding resolution plans, creditors have realised only Rs 3.15 lakh crore or 31.85 per cent of their admitted claims, suggesting that realisations have been lower than expected. The liquidation values have been even lower, at only 6.5 per cent of the claims. However, around 77 per cent of the cases that have ended up in liquidation were earlier with the Board for Industrial and Financial Reconstruction and/or



defunct. As per IBBI, in most of these cases, the economic value had diminished — their asset values were pegged at only 7 per cent of outstanding debt.

The shift to a time-bound resolution process was one of the most appealing aspects of IBC. As per the World Bank Ease of Doing Business report 2016, it used to take 4.3 years to resolve insolvency in India. While the time taken under IBC is lower, it continues to exceed the expected timelines. The average time taken for closure of the resolution process is around 653 days. In cases that are ongoing, more than 67 per cent have crossed 270 days. In cases of liquidation, 55 per cent have crossed two years. While several steps have been taken to tighten the code and improve its functioning over the years, more needs to be done.

UPI AND MANAGING THE SURGE IN DIGITAL FRAUD

Since its launch in 2016, the Unified Payments Interface has transformed the payments landscape in the country. The pace of its adoption has been staggering — in October, 11.4 billion transactions worth Rs 17.15 lakh crore were routed through this system — driven in part by the increase in smartphone usage and access to cheaper mobile internet services. As a significant share of the peer-to-merchants and peer-to-peer transactions routed through this payments architecture are of less than Rs 2,000, it shows how widely this payments system is being used. However, accompanying this surge in digital transactions, has also been a sharp rise in digital/financial frauds. As per the Reserve Bank of India's annual report, in 2022-23, 6,659 digital frauds (card/internet) were reported amounting to Rs 276 crore. This is up from 3,596 fraudulent transactions worth Rs 155 crore reported in the year before. To curb the growing incidence of such online frauds, the government is now planning to introduce some measures.

As reported in this paper, the government is contemplating introducing a minimum time threshold for transactions occurring for the first time between two individuals beyond a prescribed amount. This could entail a four-hour window for transactions above Rs 2,000. This could create friction in payments — as per data from NPCI, in October, 22.5 per cent of peer-to-peer transactions were above Rs 2,000. Government officials, though, view this as warranted for alleviating cyber security concerns. After all, reports have suggested that the fraudsters employ a range of techniques, some quite sophisticated, such as phishing, malware, fake identity frauds and SIM cloning to cheat individuals. In some cases individuals have even been tricked into providing account details or downloading fraudulent apps, which indicates that the frauds have become even more technologically innovative.

India, however, is not the only country that is witnessing a surge in digital frauds. As per a report by TransUnion, across the world, 4.6 per cent of all customers' digital transactions were "suspected to be fraudulent". The report added that the "total volume of such suspected digital fraud attempts has increased dramatically." This issue needs to be tackled at multiple levels. One, it requires that players in the payments ecosystem regularly upgrade not only their IT infrastructure but their protocols as well in order to plug the gaps and minimise the vulnerabilities. Two, as fraudsters tend to prey on the individuals' lack of awareness, improving consumer awareness, educating them about the newer methods of frauds is of critical importance. On Tuesday, finance ministry officials met to discuss the growing incidence of digital payment frauds and financial crimes and the steps needed to counter them. A careful balance needs to be struck between minimising the risk of digital frauds and ensuring minimal frictions in the payments system.



OVER RS 93,240 CRORE OF STRESSED UNSECURED LOANS IN BANK PORTFOLIOS

While banks are blaming non-banking finance companies, especially fintechs which operate digital lending apps, for the sharp rise in unsecured loans, they themselves are sitting on over Rs 93,240 crore of unsecured loans which are in the special mention accounts (SMA) category, or loans which are showing signs of stress or repayment is overdue.

These special mention accounts are almost seven per cent of their total unsecured loan outstanding of Rs 13.32 lakh crore.

Special mention account categories (SMA)—SMA-0, SMA-1 and SMA-2 — of public sector banks stood higher with an SMA of 9.9 per cent in unsecured personal advances as compared to 4.0 per cent for private banks for unsecured retail loans category as on March 31, 2023. At an aggregate level, banks have 7 per cent of their unsecured retail loans in the SMA-0, 1 and 2 categories, according to Care Ratings.

Even the SMA share of secured retail advances also lies in the range of 7 per cent as of March 31, 2023, it said.

According to the RBI classification, in the SMA-0 category, principal or interest payment is not overdue for more than 30 days but account is showing signs of incipient stress. In SMA-1, principal or interest payment is overdue between 31-60 days and in the case of SMA-2, principal or interest payment overdue between 61-90 days. If the repayment is delayed by more than 90 days, it's classified as a non-performing asset (NPA).

The growth of unsecured personal loans (including credit card receivables, consumer durable loans and other personal loans) in banks from March 2017 to March 2023 stood at 21 per cent outpacing the personal loan growth which exhibited a growth of 19 per cent during the same period.

Unsecured personal loans are types of loans that do not require any collateral from borrowers to avail them. Hundreds of legal and illegal digital lending apps are in the forefront of extending unsecured loans.

Several factors have contributed to the substantial increase in the demand for unsecured personal loans, encompassing demographic shifts, the formalization of the economy, elevated purchasing power, the evolution and prominence of fintechs, widespread access to the Internet/broadband and feature phones, the adoption of digital payment systems, the influence of India stack and information collateral, and broader coverage of credit bureaus, etc.

The convergence of technology and finance has reshaped the lending landscape in India, making personal loans more accessible and convenient for a larger segment of the population, thereby contributing to the growth of the personal loan market, Care said.

RBI'S LATEST MOVE TO INCREASE RISK WEIGHTS FOR LENDING

The story so far:

Seeking to rein in an observed rise in unsecured personal loans and credit cards, the Reserve Bank of India (RBI) directed banks and non-banking financial companies (NBFCs) to reserve more capital for risk weights. The mandatory risk weight requirement has been increased by 25



percentage points. This would be applicable to unsecured personal loans, credit cards and lending to NBFCs.

What has the RBI proposed?

The idea is to address the notion of ‘credit risk.’ It refers to the risk entailed by a borrower being unable to meet their obligations or defaulting on commitments. ‘Risk weights’ are an essential tool for banks to manage this risk. This metric, in percentage factors, adjusts for the risk associated with a certain asset type. In other words, it is an indicator of the essential holding the lender should ideally have to adjust the associated risk. This is what the RBI has directed to be increased.

The primary purpose of effective risk management by banks is to maximise their returns by maintaining credit risk exposure within acceptable parameters. Earlier, the RBI had raised concerns about the growth seen in consumer credit and increased dependency of NBFCs on bank borrowings. Now, it has directed that the risk weight for consumer credit exposure be increased by 25 percentage points to 125%, for all commercial banks and NBFCs. This would apply to personal loans (and retail loans for NBFCs), excluding housing loans, education loans, vehicle loans and loans secured by gold and gold jewellery. At present, exposures in this realm mandate a risk weight of 100%. Credit card loans of scheduled commercial banks (SCBs) currently attract a risk weight of 125% while that of NBFCs attract 100%. The apex banking regulator has decided to increase the risk weight to 125% for NBFCs and 150% for SCBs. Lastly, bank credit to NBFCs, excluding core investment companies, also had their risk weights increased by 25 percentage points. This would, however, not apply to housing finance companies and loans to NBFCs classified into the priority sector.

Why were the changes necessary?

While presenting the monetary policy statement in October this year, Governor Shaktikanta Das had flagged concerns about the “high growth” in “certain components of consumer credit.” He advised banks and NBFCs to “strengthen their internal surveillance mechanisms, address the build-up of risks, if any, and institute suitable safeguards, in their own interest.” Ratings agency Moody’s also put forth that higher risk weights are intended to “dampen lenders’ consumer loan growth appetite.” RBI figures stipulate that unsecured personal loans have increased by 23% on a year-over-year basis, as on September 22. Outstanding loans from credit cards increased by about 30% during the same period.

Major concerns emerge for loans below ₹50,000 — these carry the utmost default risk. Delinquencies, defined as loans overdue by more than 90 days, in this segment, as reported by Reuters citing Transunion CIBIL data, stood at 5.4% as of June this year.

What are the chief concerns?

The primary concerns relate to the impact on capital adequacy and the bank’s overall profitability. S&P’s latest report states that slower loan growth and an increased emphasis on risk management will likely support better asset quality in the Indian banking system. However, it adds, “The immediate effect will likely be higher interest rates for borrowers, slower loan growth for lenders, reduced capital adequacy, and some hit on profits.” However, the worst-affected might be finance companies, as their incremental bank borrowing might surge, S&P states.

NBFCs face a “double-whammy” because of higher risk weights on their unsecured loans and on account of the bank lending mandates to NBFCs. Bank lending to NBFCs remained the principal



source of funding for NBFCs — constituting 41.2% of the total borrowing of entities as of March end. It is expected that the increased costs would be passed onto borrowers.

INSURANCE: THE PIE IN THE SKY

Confused thinking between risk protection and investment return plagues the process of deciding about insurance. No financial product is everything for everybody, and insurance certainly isn't. Yet, it is human nature to look at all possible benefits and judge their costs and benefits, comparing them with costs and benefits from other financial instruments.

In this context let us see about the pension policy, or the annuity policy as it is called. You can pay the premium in one shot and start receiving periodic annuity payments immediately. Or you can pay premium in instalments over a chosen period, the accumulated corpus with its returns then becomes the premium leading to annuity payments. The method you choose depends on your stage in life. As typical investors we see this like a fixed deposit or a recurring deposit with the returns coming in instalments over time. The rate of return never compares favourably with FD rates, however, and so the decision stalls.

What we forget is the uncertainty from the side of the insurance company. The premium is set, the annuity quantum is set, but how long the annuity will be paid depends on the remaining lifespan of the investor. One person could receive annuities for 10 years and another for 30 years, at the same premium. For this risk that the insurance company assumes, they charge a cost and that accounts for the difference in return rate between annuities and a simple product like a fixed deposit.

So, what inhibits insurance sales? In the case of annuities, it is the fact that the insurance company covers the risk of us living too long is not clearly articulated. We think an FD will give better returns, but forget there is a reinvestment risk. On renewal, the rate may have gone down and if I need annuities for 30 years, the interest rate cycle could go up and down several times, something individuals just can't manage.

There is another sticking point when it comes to annuities. Your annuity is taxable just like any income and that, in the post retirement years, hurts! The income tax laws may have their own logic. There is some amount of tax deduction on annuity premium, on immediate annuity and annuity through the National Pension Scheme, but otherwise, as prospects point out, they are paying premium out of post-tax money and there is no social security system in India, which means annuities should not be taxed, at least to a certain threshold. Retirement planning options are yet growing and maturing, we need to protect ourselves given the shortcomings of the system as they stand.



LIFE & SCIENCE

COULD DEAD STARS CRASH WITH THE LIGHT OF 500 MILLION SUNS?

Astrophysicists are exploring a new explanation for fast radio bursts (FRBs), powerful radio frequency emissions from distant galaxies. FRBs release energy equivalent to 500 million suns in milliseconds but are short-lived, making their study challenging. While magnetars, neutron stars with strong magnetic fields, were previously considered as the source of FRBs, evidence has been lacking. A recent study suggests that FRBs could result from the collision of two neutron stars, just before their impact. This collision may produce gravitational waves and FRBs, offering a potential explanation for the mysterious phenomena. The study also suggests that future radio telescopes, particularly the Square Kilometre Array expected in 2027, could aid in detecting such events. Additionally, the findings could shed light on the nature of intense radio light observed in the host galaxies of some FRBs. The study aligns with the broader exploration of gravitational waves, with the upcoming Laser Interferometer Space Antenna (LISA) expected to enhance our understanding of cosmic evolution and structure through gravitational wave observations.

WEBB SPACE TELESCOPE SPOTS 'TEENAGE' GALAXIES

Since becoming operational last year, the James Webb Space Telescope has made ground-breaking observations involving some of the universe's earliest galaxies.

But Webb has obtained even better data on galaxies a bit further along in development. Astronomers call these the galactic "teenagers". As new research shows, they resemble human teenagers in certain respects, including by displaying growth spurts along with a bit of immaturity.

The researchers focused on galaxies that formed about 2-3 billion years after the Big Bang (roughly 13.8 billion years ago). The study averaged data obtained by Webb on light across various wavelengths emanating from 23 such galaxies —their "chemical DNA" —to paint a composite picture of teenage galactic characteristics. The gas detected in star-forming regions of teenage galaxies was much hotter, at about 13,350 degrees C, than observed in galaxies today.

The galaxies were observed glowing with eight elements —hydrogen, helium, oxygen, nitrogen, sulphur, argon, nickel, and silicon.

"Oxygen is noteworthy because it's one of the most important components of 'galaxy DNA,' in terms of tracking past growth. Incidentally, oxygen is also the third-most abundant element in the universe, behind hydrogen and helium," Dr. Strom said.

"The nickel was surprising because, even though we expected some amount ... might be present, it usually does not glow brightly enough to see it even in very-nearby galaxies," Dr. Strom added. "So seeing it was a surprise and may indicate that there is something different about the massive stars that cause the gas to glow."

PIEZOELECTRICITY: WHY QUARTZ TICKS

WHAT IS IT?

Ever looked inside a stove lighter and wondered where the spark comes from? The spark is created by piezoelectricity. Piezoelectricity is a remarkable phenomenon whereby some materials



– including quartz, ceramics such as lead zirconate titanate (PZT), and even certain biological substances like bone and the tendons – can generate an electric charge in response to mechanical stress. This property is the result of their unusual crystal structures. Usually, the charges on atoms in the molecules that make them up are symmetric on two sides of an axis. When some stress is applied, the molecule becomes distorted and the asymmetry of charges gives rise to a small electric current. The term “piezoelectric” itself originates from the Greek words “piezein,” meaning ‘to squeeze’, and “elektron”, for amber – a material known for its association with static electricity. Some materials also display an inverse piezoelectric effect, where the application of an electric current induces a mechanical deformation. Both direct and inverse piezoelectric materials are widely used in pressure sensors, accelerometers, and acoustic devices – where their ability to convert mechanical signals into electrical signals is crucial. The piezoelectric effect is also what made quartz watches so common and, over time, affordable.

WHAT FACTORS LED TO THE TURMOIL AT OPENAI?

The story so far:

OpenAI, the company that is at the edge of the AI revolution, almost ceased to exist over the last weekend. Sam Altman, the founder and CEO of the company that runs ChatGPT, was ousted by its board of directors on Friday, November 17 only to be reinstated on Tuesday, November 21, and the board unceremoniously disposed of. The cause of this chaos can be traced to a contradiction that exists at the heart of OpenAI.

How does OpenAI operate?

OpenAI was founded in 2015 as a non-profit organisation by a group that included the then 30-year-old Sam Altman, Elon Musk, and Infosis, among others, with the vision that Artificial Intelligence research must be kept open, safe and available to everyone. A note dated December 11, 2015 on OpenAI’s website reads: “Our goal is to advance digital intelligence in the way that is most likely to benefit humanity as a whole, unconstrained by a need to generate financial return.” Incidentally, this note was penned jointly by Greg Brockman, another co-founder who was also fired from his post of Chairman of the board on Friday, and Illya Sutskever, OpenAI’s chief scientist and board member, who was reportedly a main organiser of the boardroom putsch. OpenAI may have spurned financial returns but AI research is a costly affair. The Generative Pre-Trained Transformers or GPT models that sit at the heart of many AI tools need to be trained on vast amounts of data, which require massive amounts of ‘compute’ or computing power. The compute at the scale required by large AI models can be bought from server farms operated by corporations such as Amazon, Microsoft and Google.

In 2018, OpenAI’s biggest source of funds dried up when Mr. Musk left the board citing a conflict of interest with Tesla. A year later, OpenAI under Mr. Altman’s supervision started a for-profit wing that would go on to build monetisable consumer AI technology such as ChatGPT and Dall-E. Mr. Brockman and Mr. Sutskever put out another note at that time saying that such a venture was necessary so that the company could “invest billions of dollars in upcoming years into large-scale cloud compute, attracting and retaining talented people, and building AI supercomputers”. The for-profit venture essentially reported to the non-profit organisation led by a board that is hypersensitive about the commercial exploitation of AI. This tussle between two opposing principles in the same organisations came to a head with the release of ChatGPT for free in November 2022, and the public got a taste of what AI is capable of. The flood of users that followed brought with it investors as well.



What about Microsoft and OpenAI?

Microsoft was with OpenAI before it had made a name for itself. Between 2019 and 2022, it is reported to have pumped in up to \$3 billion in Open AI — an investment that appeared prescient once ChatGPT appeared on the scene and OpenAI’s valuation shot up to \$29 billion. In January 2023, Microsoft added \$10 billion to the kitty, mostly as much-needed computing power from its Azure cloud computing platform. CEO Satya Nadella was lauded as a visionary for the early investment and Microsoft went on to integrate ChatGPT into its Bing search engine — a move one step ahead of search giant Google, which was once seen as the leader in AI research. Given its level of involvement in OpenAI, the board’s coup attempt on Friday blindsided Microsoft. While Mr. Nadella stated that he will continue to work with OpenAI, he made it abundantly clear that he wanted Mr. Altman back at the helm. When an initial round of negotiation between Mr. Altman and the board the day after he was fired failed, Mr. Nadella announced that he would hire Mr. Altman and Mr. Brockman to run an AI research centre within Microsoft, along with any OpenAI employee that jumped ship. This is exactly what 702 staffers, including CTO Mira Murati who was initially appointed as interim CEO, threatened to do if Mr. Altman and Mr. Brockman were not brought back and the board did not quit. The employees may have been driven by loyalty, as well as the knowledge that their stock options may drop significantly without Mr. Altman’s commercial drive. With OpenAI’s creations sitting exclusively on Azure platforms and all of its employees on board, Microsoft would have essentially “acquired” the most important AI company of the moment. However, that would also mean it would have to take direct responsibility for any AI goof-ups — which government regulators are keenly watching.

When did the board give in?

After its initial CEO pick Ms. Murati sided with Mr. Altman and pushed for his return, the OpenAI board roped in Emmet Shear, a co-founder of the Twitch streaming platform, as interim CEO. However, internal divisions seem to have developed in the board, with Mr. Sutskever repenting his role in the fiasco and signing the employees’ letter demanding Mr. Altman’s return. The pressure from employees and investors and its own divisions seemed to finally have an effect, as the board announced the return of Mr. Altman as CEO on Tuesday and its own reconstitution, with all the coup instigators except one — Quora CEO Michael D’Angelo — having resigned. Mr. Sutskever has been dropped from the board but reportedly remains in his employee position.

Did ‘effective altruism’ play a part?

While it may seem like a place led solely by money and technology, Silicon Valley also has its philosophies, a key one being ‘effective altruism’. Simply put, effective altruism looks at ways in which any intervention, monetary or technical, can be most effective. The practitioners of this philosophy among the Silicon Valley elite have an obsession with the possible negative impacts of AI and reducing the risk associated with it. OpenAI’s charter itself speaks of safely building an AGI, or Artificial General Intelligence, an AI capable of reasoning like humans unlike the generative AIs that we have that only create based on what it has ‘learned’. Effective Altruists tend to push back against the ‘techno optimists’ and ‘accelerationists’, who believe that the benefits of technology outweigh the bad and that all technological developments need to be accelerated as it is the way forward for mankind. The effective altruism proponents on OpenAI’s board seem to have been spooked by the rapid commercialisation of the company and feared that it was deviating from its original purpose, playing into the hands of accelerationists. They may have been trying to recapture the narrative but bungled up the effort.



FIBRE OPTIC CABLES: ITS ORIGINS, WORKING AND DIFFERENT FUNCTIONS

During the unprecedented COVID-19 pandemic, the one thing that connected us virtually was the internet. Because of high-speed internet connections, we can now video chat with a friend, pay online, and attend classes or meetings from home. Have you wondered how these connections work?

What is an optical fibre?

Optical fibres are made of thin cylindrical strands of glass. The diameter of a typical fibre is close to the diameter of a human hair. These fibres can carry information, such as text, images, videos, telephone calls, and anything that can be encoded as digital information, across large distances almost at the speed of light.

Ultra-thin fibres seem very fragile. But when manufactured correctly as a long thread surrounded by protectives, they serve the purpose in a durable way. They are strong, light, and flexible, and ideal to be buried underground, drawn underwater, or bent around a spool. Almost 60 years ago, physicist Charles Kao suggested that glass fibres could be a superior medium for telecommunication, replacing the copper wires of the time. While many people didn't believe him at first, his prediction is a reality today. For his ground-breaking achievements concerning fibre optic communication, Dr. Kao received a part of the 2009 Nobel Prize in physics.

How do optical fibres work?

Light is an electromagnetic wave with a spectrum of frequencies. Visible light, X-rays, radio waves, and thermal radiation (heat) all lie on this spectrum. Humans see the world around us via sunlight, but it took us a long time to control and guide light through fibre optic cables — or “light pipes” — to send coded signals.

When a beam of light falls on a glass surface, it passes through partially while the rest is reflected away. When it passes through, its path bends because the refractive index of glass is different from that of air. The refractive index is the property of a medium that determines how fast light can travel in it. When a beam travels in the reverse direction, that is from glass to air, it's possible that it won't enter the air. Instead, it will be completely reflected back within the glass. This phenomenon, known as total internal reflection, is the basis of guiding light across long distances without a significant loss of optical power. With proper adjustments, the light can be kept bouncing within the glass with very little escaping outside. This is how signals encoded as electromagnetic waves can be fed into one end of an optical fibre, and they will reflect and bounce many times between the glass walls as they traverse several kilometres bearing the information in the signals.

A fibre optic communication system consists of three parts — a transmitter which encodes information into optical signals (in the form of rapidly blinking light pulses of zeros and ones); an optical fibre that carries the signal to its destination; and a receiver which reproduces the information from the encoded signal. Optical waves allow a high data-transmission rate, up to several terabits per second in a single fibre. Unlike radio or copper-cable-based communication, fibre cables are also insensitive to external perturbations such as lightning and bad weather.

Nowadays, glass fibres are manufactured using the fibre-drawing technique. First, a thick glass rod, called preform, of high purity and an engineered refractive index profile is prepared using chemical vapour decomposition. The preform is heated to about 1,600 degrees Celsius until it



melts and is then drawn into a thin, long fibre. The drawing process reduces the fibre's diameter while maintaining its length. The drawn fibre is coated with a protective layer to enhance strength and durability.

In India, the Fibre Optics Laboratory at the Central Glass and Ceramic Research Institute, Kolkata, has a facility to manufacture high-quality silica-based optical fibres. Today's optical fibres have a typical loss of less than 0.2 dB/km.

What is the future of fibre cables?

Fibre optics technology has since been used in telecommunication, medical science, laser technology, and sensing.

With a goal to securing communication and promoting quantum science, the Government of India announced a national mission in the Union Budget of 2020. The proposed budget for this 'National Mission on Quantum Technologies and Applications' is ₹8,000 crore over a period of five years. The possibilities of fibre optic networks are growing at an accelerated rate, reaching all the way into our homes. Along with quantum optics, fibre optic communication stands on the cusp of a new era.

HOW DOES OUR BRAIN LEARN TO READ?

It is estimated that half the people of the world can speak more than one language. In South India, a large percentage of the population is conversant in at least two languages. Thanks to a high rate of literacy, many of them can read and write in those languages too. We humans know a great deal about the languages of the world, and the scripts that they are written in. But we still have a lot to learn about how our brains read and comprehend languages.

The process of learning to read begins with getting acquainted with the letters of the alphabet and understanding how they produce sounds. As reading skills develop, children become increasingly adept at perceiving letter sounds and how these come together to form words. Eventually this becomes a subconscious action. Research has indicated that this progress is aided by the development of the visual word form area (VWFA) in the brain, which is formed in the part of the brain that is responsible for recognizing visual signals such as facial features and objects.

With only a few months of education, this portion of the cortex is able to recognize the script that has been learned. When someone speaks multiple languages, patches of the VWFA are dedicated to recognising each language.

Memory and nutrition

The tasks to be learnt by a child are complex: They have to learn a vocabulary, and what each of those words mean. They have to read effortlessly to be able to understand sentences, and then whole paragraphs. Having a good working memory and flexible reasoning skills, commonly known as executive functions, allows children to become better readers. These traits help them excel in all areas of their lives: academically and emotionally. A study of preschoolers by Sumithra Selvam and her team at the St. John's Research Institute in Bengaluru has shown that executive function improves with better nutrition (Child Neuropsychology, 2018). Healthy bodies are needed for bright minds. It should be kept in mind that the time it takes for a child to understand visual text, to correlate text with speech, and to recognise vocal sounds varies from one youngster to the next.



Reading disorders

Dyslexia is a disorder marked by difficulty in reading. This neurological problem is associated with reduced language-processing activity in the brain. Aphasia, another language disorder, is caused by brain damage, such as after a stroke. It reduces the ability to express and understand language. The damage can also cause alexia — an inability to comprehend written language, or agraphia — the inability to write coherently. Eventual recovery from aphasia is quite common. Individuals who speak multiple languages and are suffering from aphasia usually struggle in all their languages, but at different levels of severity. To explain this phenomenon, it has been hypothesised that the first-learned or most-used language is the least affected. Early training of the brain thus appears to set a strong foundation for reading skill and enjoyment.

PAUL LYNCH'S BOOKER WIN: A WRITER IN SEARCH OF RADICAL EMPATHY

Paul Lynch's novel "Prophet Song" has won the 2023 Booker Prize for Literature, providing a powerful and unsettling depiction of a Dublin microbiologist named Eilish Stack whose life unravels as her country faces increasing totalitarianism and civil war. The story revolves around the secret police's demand to interrogate her trade unionist husband Larry, leading to a struggle to keep her family together. The novel was praised for its urgency in addressing political chaos worldwide, particularly the immigrant crisis, and its theme of "radical empathy." The Booker Prize seems to be leaning towards more political themes, as seen in recent winners like Shehan Karunatilaka's "The Seven Moons of Maali Almeida," which explored the impact of a three-decade-long civil war. "Prophet Song" reflects on the precarity of democratic ideals and the potential consequences of their desecration.

ANTARCTICA'S OZONE HOLE EXPANDS MID-SPRING SINCE 2001

The core (middle stratospheric layer) of the Antarctic ozone in mid-spring (October) has experienced a 26% reduction since 2004, contrary to previously reported recovery trends in total ozone, according to a study published recently in the journal NatureCommunications. However, recovery trends remain in early spring (September). The findings highlight the importance of continuous monitoring and evaluation of the state of the ozone layer with the changing dynamical state of Earth's climate.

Ozone reduction

The Montreal Protocol designated a list of controlled ozone depleting substances that were banned from future production in 1987 and is widely considered to have been successful for ozone recovery.

However, the past three years (2020-2022) have witnessed the re-emergence of large and long-lived ozone holes over Antarctica in mid spring, while early spring still shows a slight ozone increase (or a slight recovery of the ozone hole). Understanding ozone variability remains of high importance, due to the major role Antarctic stratospheric ozone plays in climate variability across the Southern Hemisphere.

To assess recent changes in the Antarctic ozone hole, including during the 2022 season, Annika Seppälä from the University of Otago, Dunedin, New Zealand and others analysed monthly and daily ozone changes between 2001-2022. Data from 2002 and 2019 were excluded as sudden stratospheric warming broke up the ozone hole anomalously early in these years. They looked at



different stratospheric layers throughout the key austral springtime months of September to November.

When satellite data from 2022 is considered, they found that previously reported recovery trends in Antarctic spring total column ozone (the total ozone above a given point on Earth across all atmospheric layers) from 2001 onward disappear. The middle stratosphere has been dominated by continued, significant ozone reduction since 2004, amounting to 26% loss in the core of the ozone hole. This reduction is potentially driven by dynamical changes in the mesosphere (the atmospheric layer above the stratosphere and the ozone layer). The findings suggest that changes in the Southern Hemisphere atmosphere are contributing to a persistent Antarctic ozone hole.

COP, CARBON MARKET, LOSS AND DAMAGE: A GLOSSARY OF CLIMATE TERMS

With the COP28 summit just around the corner, terms like the Paris Agreement, Kyoto Protocol, loss and damage, and NDCs will soon make headlines.

Here is a guide to key terms in the climate change conversation.

COP

COP is an international climate meeting organised annually by the United Nations (UN). COP is short for Conference of the Parties. 'Parties' is a reference to (now) 198 countries that have joined the international treaty called the UN Framework Convention on Climate Change (UNFCCC). 'Parties' to the treaty have pledged to take voluntary actions to prevent "dangerous anthropogenic [human-caused] interference with the climate system."

Kyoto Protocol

The Kyoto Protocol was an international treaty that placed obligations on the set of rich and industrialised countries to cut their greenhouse gas emissions by assigned amounts. It was adopted in Kyoto, Japan, in 1997, and came into effect in 2005. The treaty formally expired in 2020 and was replaced by the Paris Agreement as the main international treaty for coordinating global action against climate change.

Paris Agreement

Adopted in 2015 at COP21 in Paris, the agreement is aimed to limit rising global average temperature. It's considered a landmark deal as it legally binds (now) 195 nations, for the first time ever, to combat climate change and adapt to its effects.

If you want to read more about the Paris Agreement, [click here](#).

1.5 degree limit

Under the Paris Agreement, the world governments have agreed to keep average global temperature "well below" 2 degree Celsius this century compared to pre-industrial levels. They have also pledged to pursue efforts to limit the rise to 1.5 degree Celsius — an important threshold, crossing which would unleash far more severe climate change impacts, including more frequent and severe droughts, heatwaves and rainfall.

Glasgow Pact



Reached at the COP26 summit in Scotland's Glasgow, the pact called for phase down of coal and phase out of fossil fuel. This was the first time that a UN climate agreement explicitly mentioned coal. The pact also marked the resolution of the deadlock over carbon markets.

Carbon markets

Such markets are essentially trading systems in which carbon credits are sold and bought. They allow countries, or industries, to earn carbon credits for the greenhouse gas emission reductions they make in excess of their targets. These carbon credits can be traded to the highest bidder in exchange for money. The buyers of carbon credits can show the emission reductions as their own and use them to meet their reduction targets.

One tradable carbon credit is equal to one tonne of carbon dioxide or the equivalent amount of a different greenhouse gas reduced, sequestered or avoided. Once a credit is used to reduce, sequester, or avoid emissions, it becomes an offset and can no longer be tradable.

Greenhouse gases

The gases that trap heat in the atmosphere are known as greenhouse gases (GHGs). They allow sunlight to pass through the atmosphere, but obstruct the heat the sunlight brings from leaving. The main source of GHGs is the burning of fossil fuels like coal, diesel, gasoline or petrol, kerosene and natural gas. Carbon dioxide, methane, and nitrous oxide are among the most prominent GHGs.

Net-zero

Also referred to as carbon-neutrality, net-zero doesn't mean that a country would reduce its emissions to zero. Rather, it is a state in which a country's emissions entering the environment are equal to the greenhouse gases being removed from the atmosphere. The removal can be done by creating more carbon sinks such as forests or by implementing futuristic technologies such as carbon dioxide removal (CDR).

In 2018, the Intergovernmental Panel on Climate Change (IPCC) marked 2050 as the deadline by which the world must reach net zero if it wants to limit global warming to 1.5 degree Celsius.

Carbon capture and storage (CCS)

CCS is basically a process that captures carbon dioxide and traps it beneath the earth. It's usually used at fossil fuel plants and factories, where it prevents the gas from escaping into the atmosphere. Notably, CCS is different from carbon dioxide removal (CDR), which involves sucking out carbon from the atmosphere.

Carbon capture, utilisation and storage (CCUS)

CCUS goes a step further than CCS and uses the captured carbon in the production of goods such as alcohols, biofuels, plastics or concrete.

Geo-engineering

It is the deliberate large-scale intervention in the Earth's natural systems to tackle climate change. There are numerous proposed geo-engineering techniques, including CDR. Their effectiveness and potential side effects, however, remain widely debated.

IPCC



The IPCC is the United Nations body for assessing the science related to climate change. It was set up in 1988 by the World Meteorological Organisation (WMO) and the UN Environment Programme (UNEP). IPCC's main activity is to prepare Assessment Reports, special reports, and methodology reports assessing the state of knowledge of climate change.

Nationally Determined Contributions (NDCs)

The Paris Agreement requires each country to prepare an outline for their efforts to reduce national emissions and adapt to the impacts of climate change. These commitments are known as NDCs. They are submitted every five years, and successive NDCs are supposed to be more ambitious than previous ones.

National Adaptation Plans (NAPs)

The NAP helps countries develop plans to respond to climate change's present and future impacts. They are aimed to reduce vulnerability to the severe effects of climate change and strengthen adaptive capacity and resilience. NAPs also play an essential role in updating and improving the adaptation elements of the NDCs.

Global stocktake

It refers to a five-year review in which countries assess where they are in the fight against climate change, and what needs to be done in the next five years to make this fight more effective and potent. COP28, which will take place from November 30 in Dubai, will witness the presentation of the findings of the first stocktake exercise.

Triple Renewable Energy

In 2021, the International Energy Agency (IEA) published its 'Roadmap to Net Zero by 2050' report, which said that if the world needs to meet the net zero goal, it has to commit to tripling global renewable capacity by 2030. If met, this single step could avoid carbon dioxide emissions by seven billion tonnes between now and 2030, the agency said. This would be equal to eliminating all the current carbon dioxide emissions from China's power sector.

Just transition

The term describes a shift to a low-carbon or net-zero economy without jeopardising the rights of workers and the needs of communities, which could be affected due major changes to industries like fossil fuels.

Common but differentiated responsibilities (CBDR)

It is a principle of international law which states that different countries have different capabilities and responsibilities to address cross-border environmental problems such as climate change. One example of the CBDR principle is the 1989 Montreal Protocol, an international treaty designed to protect the ozone layer. It gave a 10-year grace period for 'developing countries' to implement the control measures.

Loss and damage

There is no agreed definition of 'loss and damage' in the international climate negotiations, according to the United Nations Development Programme (UNDP). In broad terms, it refers to the unavoidable social and financial impacts caused by extreme weather events.



Last year, at COP27, developing countries managed to get a loss and damage fund established. It is meant to provide financial help to countries struck by climate disasters. It is, however, empty right now.

\$475 MILLION PLEDGED TO CLIMATE DISASTER FUND AS COP28 MAKES A PROMISING START

The COP28 climate conference in Dubai began Thursday on a promising note, approving one of the most keenly-awaited decisions – the operationalisation of a loss and damage fund for developing countries – on the first day.

About \$475 million was immediately committed to the fund, with the European Union pledging nearly \$275 million, and hosts UAE promising another \$100 million.

India welcomed the decision, with Environment Minister Bhupender Yadav saying at the meeting: “India strongly supports the operationalisation of the loss and damage fund today. It is a landmark decision.”

The loss and damage fund was set up during COP27, the previous version of the UN’s annual climate change conference, at Sharm el-Shaikh in Egypt last year. The fund, a long-pending demand of developing countries, is meant to provide financial assistance to countries recovering from climate disasters, such as extreme weather events. It would also be used to finance measures to deal with other climate-related emergencies, like sea-level rise, migration, and displacement.

Last year, however, no country had promised any money to the fund. Many other details of the fund had also not been finalised. The Sharm el-Shaikh meeting had set up a Transitional Committee to work on these details and submit its recommendations by the next meeting. The committee had met several times during the year, and made several recommendations.

UAE, the hosts of COP28, decided to deal with this right at the start of this year’s conference, and convinced other countries to accept the recommendations, overlooking their objections to specific points for the time being. The acceptance of the recommendations, and the commitment of money for the fund, sealed an important decision that has the potential to create the right atmosphere for a few more meaningful decisions during the conference.

“This is the spirit we should like to take forward through the two weeks of meetings here,” said COP28 president Sultan Al Jaber, who is also the UAE’s minister of industry and advanced technology.

The operationalisation of the loss and damage fund was welcomed by all parties, and hailed as a very important step forward in helping small and developing countries in dealing with the impacts of climate change.

Apart from the EU and the UAE, Germany promised \$100 million, the UK committed about \$70 million. The United States said it would contribute \$17.5 million, and Japan promised \$10 million.

Under the international climate change architecture, developed countries are obligated to provide money to developing countries for different kinds of climate action.

Harjeet Singh, head of global political strategy at Climate Action Network International, who has campaigned for such a fund for years, said that while the flow of money was welcome, it was, as of now, inadequate in comparison to the requirements.



“While these funds are valuable in initiating activities, it is important to recognise that the costs of rebuilding from the devastating effects of climate disasters run into hundreds of billions of dollars annually. Rich countries, given their significantly higher historical responsibility, must do more on a scale commensurate with their impact on the planet-heating emissions,” he said.

COP-28 AIMS AT BOTTLING THE FOSSIL FUEL GENIE FOR GOOD

The COP-28 climate summit is scheduled to begin in Dubai on November 30. World leaders, including India’s Prime Minister Narendra Modi, will meet to discuss measures to control the climate emergency in a year that has already broken several heat and ice cover records. Here are six topics expected to dominate discussions.

1. The global stocktake is a periodic review by countries to contain greenhouse gas (GHG) emissions and transition their fossil-fuel-dependent energy systems to renewable energy sources. A synthesis report published in September this year said there is a “rapidly narrowing” window for countries to make amends if they want to limit global warming.
2. The COP-28 Presidency and the U.N. Food Systems Coordination Hub announced a new partnership to elevate the role of food systems in achieving targets set in the Paris Agreement. The partnership expects to secure the commitment of heads of state and governments at COP-28 to align national food systems and agricultural policies with their Nationally Determined Contributions by 2025.
3. The idea of a ‘loss and damage’ (L&D) fund is to help developing countries cope with financial losses due to the climate crisis and environmental degradation. At COP-27 in November 2022, representatives of countries party to the United Nations Framework Convention on Climate Change agreed to set up the L&D fund. COP-28 is expected to finalise its details, including the size of its corpus and how the money will be disbursed.
4. Larger provisions related to climate finance will be at the heart of COP-28, including technology transfer and capacity-building to reduce emissions and pivot towards cleaner energy, for which many countries require financial support. According to the U.N., developing countries need at least \$200 billion every year by 2030.
5. Strong language highlighting a commitment to phasing out fossil fuels is expected to be a major point of discussion. The European Union (EU) is expected to push for a phase-out that, if accepted, will be a first. Many countries favour continuing the use of oil, gas, and coal together with technologies to ‘capture’ their emissions, instead of avoiding the use of such fuels altogether. COP-28 is also the first such summit to have a president who’s a CEO in the fossil-fuel sector.
6. In June 2023, the EU and the COP-28 Presidency had pledged to seek support to increase renewable energy capacity worldwide and so help countries shift from the unabated use of fossil fuels, Reuters reported. At COP-28, countries are expected to consider setting goals to triple renewable energy capacity and to double energy savings by 2030.

TIME FOR ACTION

The next fortnight will see world leaders, industrialists, activists, and indigenous peoples converge at the 28th edition of the Conference of the Parties (COP). This annual affair is an attempt to inch ahead on getting at least 190 countries, all members of the United Nations climate framework, to act on weaning their economies off fossil fuels. The current goal is to make good on

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



a collective commitment made by countries in Paris, in 2015, to strive to hold global temperatures to no higher than 1.5°C above pre-industrial levels by the end of the century and definitely below 2°C. Despite countries unanimously agreeing that humanity will collectively bear a huge price if these limits are breached, and nearly all major economies framing grand national plans to show how they are doing 'their bit', the science says that instead of being cut 8% annually, emissions have grown 1.2% from 2021-22. At this rate, the world will warm 2.5-3°C by the end of the century. There have already been 86 instances just this year of global temperatures breaching the dreaded 1.5°C threshold.

In the nearly three decades of COP meetings, the major economies have agreed on three broad principles. Countries that rapidly industrialised in the 20th century have disproportionately emitted more carbon than their 'fair share' given the population sustained. Economic growth premised on fossil fuel consumption, while cheaper per unit than renewable energy, spells disaster. And developing countries and those with minimal industrial infrastructure today must be compensated for adopting costlier, but cleaner, non-fossil fuel sources for growing their economies. There is also a consensus that the countries already weathering climate disasters must be compensated and also paid to bolster their infrastructure. However, getting all countries to actually act on these principles is onerous given the mutual suspicion, the spirit of de-globalisation, and the fear of political reprisal that heads of governments face within their constituencies. These themes are expected to play out this year too. Two major issues are expected to take the stage: the conclusion of the Global Stocktake and the operationalisation of the Loss and Damage Fund. However, there is no clarity on the size of the fund and the individual contributions by countries. While COPs, by nature, are self-congratulatory when all they deliver are agreements with elaborate caveats, COP28 must strive to live up to its declared goal of being a conclave that compels its signatories to take definitive action.

AIR POLLUTION CAUSES OVER 2 MILLION DEATHS ANNUALLY IN INDIA: STUDY

Outdoor air pollution from all sources accounts for 2.18 million deaths per year in India, second only to China, according to a modelling study published in The BMJ. The research found that air pollution from using fossil fuels in industry, power generation, and transportation accounts for 5.1 million extra deaths a year worldwide. This equates to 61 per cent of a total estimated 8.3 million deaths worldwide due to ambient (outdoor) air pollution from all sources in 2019, which could be avoided by replacing fossil fuels with clean, renewable energy. These new estimates of fossil fuel-related deaths are larger than most previously reported values suggesting that phasing out fossil fuels might have a greater impact on attributable mortality than previously thought.

The team, including researchers from Max Planck Institute for Chemistry, Germany, used a new model to estimate all cause and cause-specific deaths due to fossil fuel-related air pollution and to assess potential health benefits from policies that replace fossil fuels with clean sources.

They assessed excess deaths -- the number of deaths above that expected during a given time period -- using data from the Global Burden of Disease 2019 study, NASA satellite-based fine particulate matter and population data, and atmospheric chemistry, aerosol, and relative risk modelling for 2019, in four scenarios.

The first scenario assumes that all fossil fuel-related emission sources are phased out. The second and third scenarios assume that 25 per cent and 50 per cent of exposure reductions towards the fossil phase-out are realised. The fourth scenario removes all human-induced (anthropogenic) sources of air pollution, leaving only natural sources such as desert dust and natural wildfires. The



results show that in 2019, 8.3 million deaths worldwide were attributable to fine particles (PM2.5) and ozone (O₃) in ambient air, of which 61 per cent (5.1 million) were linked to fossil fuels.

This corresponds to 82 per cent of the maximum number of air pollution deaths that could be averted by controlling all anthropogenic emissions, according to the researchers. Attributable deaths to all sources of ambient air pollution were highest across South and East Asia, particularly in China with 2.44 million per year, followed by India with 2.18 million per year, they said.

The researchers found that most (52 per cent) of deaths were related to common conditions such as ischemic heart disease (30 per cent), stroke (16 per cent), chronic obstructive lung disease (16 per cent) and diabetes (6 per cent). About 20 per cent were undefined but are likely to be partly linked to high blood pressure and neurodegenerative disorders such as Alzheimer's and Parkinson's disease, they said. Phasing out fossil fuels would result in the largest absolute reductions in attributable deaths in South, South East and East Asia, amounting to about 3.85 million annually, the researchers said. This is equivalent to 80-85 per cent of potentially preventable deaths from all anthropogenic sources of ambient air pollution in these regions, they said.

VIVID PATTERNS

How do animals get their stripes and spots?

The University of Colorado Boulder engineers have shown that the same physical process that helps remove dirt from laundry could play a role in how tropical fish get their colourful stripes and spots. The movement of molecules during diffusiophoresis (the migration of a colloidal particle in a solution in response to the macroscopic concentration gradient of a molecular solute) always follows a clear trajectory and gives rise to patterns with sharp outlines. The researchers ran a simulation of the purple and black hexagonal pattern seen on the ornate boxfish skin using only the Turing equations. The computer produced a picture of blurry purple dots with a faint black outline. Then the team modified the equations. The result turned out to be much more similar to the bright and sharp bi-colour hexagonal pattern seen on the fish. The team's theory suggests that when chemical agents diffuse through tissue as Turing described, they also drag pigment-producing cells with them through diffusiophoresis.

THE SPREAD OF AIDS CAN BE STOPPED WITH SCIENCE-BACKED PROTOCOLS

Since the first diagnosed case of HIV in 1981, it is estimated that globally 39 million persons are now living with HIV. In India the figure is 2.4 million. What is being done to stop the spread of this virus? There were 1.3 million new HIV infections in 2022 globally and 63,000 in India. Most transmissions occur in the key population include female sex workers, men having sex with men, transgender community and injecting drug users. Prevention interventions using behavioural change never stopped HIV spread significantly. There are no vaccines for HIV despite extensive research. Involving the communities and making them the focus will prevent infections.

Persons who acquire HIV end up with compromised immune systems which lead to opportunistic infections like tuberculosis, fungal meningitis, pneumonia, diarrheal diseases, variety of skin lesions and certain cancers. These co-morbid conditions result in advanced HIV disease and progression to death. In 2022, 650,000 persons died due to these conditions globally. In India AIDS caused 42,000 deaths. Many of these opportunistic infections are preventable and treatable.



The World Health Organization has developed guidelines for Advanced HIV to prevent and diagnose these opportunistic infections. These guidelines are still not widely implemented across the world. Health care programs should implement these in-expensive guidelines and tools to prevent advanced HIV. Tuberculosis was a leading killer among those with HIV in 2022. Newer short course TB preventive treatments with Isoniazid and Rifapentine have proven effective in clinical trials. Still TB programs in many countries are struggling to implement these treatments.

Today we have effective antiretroviral medications available to prevent multiplication of HIV. People with HIV who are on these antiretroviral medications can lead a normal, healthy lifestyle without developing opportunistic infections. Results from clinical trials recommend starting Antiretroviral Therapy (ART) soon after diagnosis. The Voluntary Health Services Infectious Diseases Medical Centre in Chennai participated in the landmark global START clinical trial and based on the results, WHO Guidelines recommend rapid ART initiation for maximum benefit. Several lower and middle income countries haven't implemented this guidance effectively. Analysis shows initiating early Antiretroviral therapy soon after diagnosis is cost effective and cost saving. Health care program managers need appropriate training on such scientific evidence to facilitate the implementation at an appropriate time without delay.

Almost 21 million lives have been saved with antiretroviral therapy globally. India's ability to produce generic HIV medicines and supply them worldwide led to major successes in the global AIDS fight. Over 90% of antiretrovirals consumed globally were from India. We have the time-tested and proven capacity to manufacture HIV diagnostics, medicines and robust supply chain mechanisms to deliver them worldwide sustainably. But are HIV programmes worldwide strong enough to ensure that HIV prevention, diagnostics, treatment, care and support services are reaching every person in need – without any further delay?

Persons with HIV who are on uninterrupted antiretroviral therapy lead a normal life and modelling studies have shown, their life expectancy is almost similar to persons who don't have HIV. Several new antiretrovirals are in advanced clinical research, but we don't have a cure yet. Long acting antiretrovirals have been recently approved for treatment and this is a boon for individuals who have issues with oral medication adherence. With all these newer antiretroviral therapies, HIV disease is yet another chronic manageable condition. New complications in people with HIV are non communicable diseases (NCDs) like diabetes, hypertension, stroke and kidney disease. NCD care will be key for persons with HIV for longevity.

Guidelines in the developed world recommend that everyone living with HIV aged 40 and over should take a statin to reduce their risk of heart disease, even if they do not have raised cholesterol or a high risk of heart disease. The new guidance is based on the results of the REPRIVE study conducted globally to test whether statin reduced cardiovascular risk in people with HIV. It was presented at the International AIDS Society Conference on HIV Science in July 2023. As study investigator, I was able to demonstrate results that showed taking pitavastatin daily reduced the risk of a major cardiovascular event such as heart attack, stroke or a clinical intervention to treat a serious heart disorder by 35% in people with HIV.

We have robust Antiretroviral Therapy (ART), that can result in undetectable viral load for those PLHIV on treatment within just a couple of months and by now it is amply clear that 'Undetectable is Untransmittable' or U=U based on other research led by my team. Thus, each new HIV case is a 'missed opportunity' where a range of combination prevention options could have helped prevent the person from getting infected. Likewise, every AIDS- related death is a grim reminder that it



could have been averted because we have proven science-backed tools to make 'AIDS death' history.

We have effective biomedical prevention tools in preexposure prophylaxis (PrEP) medications. These oral medications are very effective in preventing HIV acquisition if a person with high risk of HIV takes them correctly without fail. Adherence is very important which might be an issue, as these medication have to be taken every day. To deal with this, a long acting injectable PrEP medication called Cabotegravir has been developed. Cabotegravir injections can be taken every 2 months instead of the daily oral pill and studies have shown higher efficacy in HIV prevention with long acting injectable PrEP. Many African countries have initiated implementation of this innovative prevention tool.

The Indian National HIV program should hurry to implement such interventions to stop AIDS in India.

Two decades ago, the global AIDS pandemic seemed unstoppable. More than 2.5 million people were acquiring HIV each year, and AIDS was claiming two million lives a year. The estimated 1.3 million new HIV infections in 2022 were the fewest in decades, with the declines especially strong in regions with the highest HIV burdens .

These effects were due to the combination of effective antiretroviral therapy which resulted in community viral suppression and the introduction of PrEP to prevent HIV acquisition. Despite advocacy programs, the national program in India has not yet introduced PrEP in India. These delays in implementation will lead to an unstoppable spread of HIV.

By 2025, 95% of all people living with HIV (PLHIV) should have a diagnosis, 95% of those should be taking lifesaving antiretroviral treatment (ART) and 95% of PLHIV on treatment should achieve a suppressed viral load to improve health and reduce onward HIV transmission. In 2022, these percentages were 86%, 89% and 93% respectively.

Today we have science-backed robust tools to prevent HIV, diagnose HIV, treat, care and support PLHIV. Let us use these tools to end AIDS.

DreamIAS