



25th to 31st August 2024

# CURRENT AFFAIRS FOR UPSC

DreamIAS





## INTERNATIONAL

### KAMALA HARRIS AND CLIMATE CHANGE: SETTING GREEN TERMS

As the themes in the US presidential elections get delineated in the coming weeks, one closely watched issue will be how Donald Trump and Kamala Harris frame their differences on climate change. At the Democratic National Convention (DNC) last week, Harris mentioned global warming only once. That may appear to contrast with her radical positions as a Democratic challenger in 2019-2020 or Joe Biden's emphatic criticism of Trump's climate denialism in his last presidential campaign. However, Harris's brief mention of global warming mitigation at the DNC attracted attention because she located climate change as one of the "fundamental freedoms" at stake during the November election. Along with "reproductive choice, the elections will be about the freedom to breathe clean air and drink clean water, and live free from the pollution that fuels the climate crisis," she said last Thursday. Tim Walz used the same language a day earlier when he said that "the elections are about freedom" — he contrasted this freedom with that advocated by Republicans "for corporations to pollute air and water".

Trump was quick to call out the Democrats for making climate change an "issue of patriotism" without saying much about China. In a similar vein to his 2016 bid for the White House, Trump has couched fossil fuel advocacy in a language of economic nationalism. In July, he told a conference of the National Association of Black Journalists, that along with closing the US-Mexico border, his administration would go all out — "drill, baby drill" — to increase domestic oil production. Domestic drilling, the former president has maintained, will decrease the cost of oil and help lift the sentiment of consumers currently "worried about inflation and high energy costs". In 2019-2020, the Biden-Harris team made the reduction of drilling one of its major campaign planks. However, environmentalists have called out the Biden administration for not only failing to act on poll promises but also approving the \$7 billion Willow Oil Drilling Project in Alaska.

During her campaign in 2019, Harris said that she would ban the heavily polluting practice of fracking but has since toned down her position. The uncertainties of the post-Covid world, aggravated by the Ukraine crisis, could be one reason for the Democrats' cautious approach. However, it has long been clear that global warming mitigation will require a major overhaul in the energy sector of the highest GHG emitter in history. The Harris-Walz campaign will be watched for how it deals with the issue.

### UNENDING WAR

Israel's "pre-emptive" strike on Lebanon on August 25 and Hezbollah's rocket and drone attacks on Israel underline the complexities and escalatory risks of the raging multi-party war in West Asia since October 2023. While the main theatre is Gaza, which Israel has been mercilessly pounding since the October 7 Hamas attack, the conflict has effectively spread to Israel's northern border and southern Lebanon. Over the past 10 months, Hezbollah, the Iran-backed Lebanese Shia militia, has launched hundreds of rocket attacks towards Israel, "in solidarity with the Palestinians". Israel has responded with air strikes on Lebanon, killing Hezbollah operatives and civilians. The trigger for the latest flare-up was the Israeli killing of Fuad Shukr, a senior commander of Hezbollah, in a strike in Beirut on July 31 — the day Israel killed Hamas leader Ismail Haniyeh in Tehran. On August 25, after striking hundreds of Hezbollah targets, Israel said the Shia group was planning to carry out a large-scale attack and that its assault was defensive.



But the massive strike did not deter Hezbollah from launching over 300 katyusha rockets and drones towards Israel, killing at least one soldier and wounding several.

After Sunday's pre-dawn bombardments, both sides have signalled a de-escalation. Hezbollah chief Hassan Nasrallah says his group achieved its targets, while Israeli Defence Minister Yoav Gallant said his country does not want a regional war. Yet, neither side is ready to back off from escalatory cycles. It is clear that Israel is not in a hurry to wrap up its devastating offensive in Gaza, which has killed over 40,000 Palestinians. The U.S. supports and mediates a ceasefire, but backs Israel's war efforts through defence supplies and diplomatic protection. Hezbollah says it will not stop attacking Israel as long as the Gaza war continues. By bombing Hezbollah and taking down its commanders, Israel is trying to change the reality on the ground, but Hezbollah's continued attacks, which have turned northern Israel into a depopulated furling zone, suggest this approach is not very successful. When Israel began attacking Hamas, it vowed to dismantle the group. Today, even the Israeli Defense Forces doubt whether it can be destroyed. While the war on Hamas still continues, the conflict with Hezbollah is escalating. By destroying Hamas, Israel wanted to strengthen its security in the south, but the widening war has heightened its insecurity in the north. And Israel does not have any easy military solution for Hezbollah. As long as the war in Gaza continues, the path towards a wider regional war will remain open.

#### WHY A NEW HOMEGROWN MISSILE CAN BE A GAME-CHANGER FOR UKRAINE'S FIGHT AGAINST RUSSIA

President Volodymyr Zelenskyy, on Saturday, confirmed the existence of a new homegrown long-range weapon — a missile-drone hybrid — which can strike deep into Russia. The Palianytsia was used for the first time on Saturday to target a Russian military installation, officials said without providing further details.

##### **What is the Palianytsia?**

The Palianytsia was born out of necessity, with its development starting some 18 months ago. Currently, the United States and other Western allies provide long-range weapons to Ukraine but restrict their usage deep into Russian territory out of fears of further escalation.

The Institute for the Study of War said that Russia was “leveraging sanctuary space in deep rear areas” for military infrastructure. It estimated at least 250 militarily significant targets in Russia were within range of the ATACMS missiles, but current restrictions allow Ukraine to strike only 20 of them.

##### **Possibly, a game-changer**

The Palianytsia with a 700-km range, comparable to the ATACMS, will allow Ukraine to bypass western restrictions.

Ukraine's technology minister, Mykhailo Fedorov, told The Associated Press that “this will be a game changer” because Ukraine will be able to “strike where Russia doesn't expect it today”. He added: “It's impossible to produce enough air defense systems to protect such a large territory [Russia]... [the Palianytsia] opens up the possibility of operating deep behind enemy lines.

The missile has a solid-fuel booster that accelerates it, followed by a jet engine, a specialist told The AP. Each missile costs less than \$1 million, and the military is turning to the private sector to bring down production costs further.



## COORDINATED ATTACKS

Ever since the Taliban, hosted by Pakistan's security forces, recaptured Kabul in August 2021, Pakistan, especially in its Balochistan and Khyber Pakhtunkhwa provinces neighbouring Afghanistan, has seen a surge in terrorist attacks. In 2023 alone, there were over 650 recorded attacks, with 23% occurring in Balochistan, which is Pakistan's largest province by landmass and a hotbed of separatist insurgency. But even in this new normal, Monday was one of the bloodiest days for Balochistan and Pakistan. On the eighteenth death anniversary of Nawab Akbar Bugti, a Baloch nationalist leader killed by the Pakistani military in 2006, separatists carried out coordinated attacks across the province. The Baloch Liberation Army has claimed responsibility for the many deaths. According to security officials, the separatists damaged infrastructure and executed migrant labourers from Punjab. That the attacks occurred in different parts of Balochistan show the growing reach and capability of the insurgency. Bugti's death anniversaries have seen violent incidents in the past, but Pakistan's military and intelligence services were caught off guard on August 26.

Historically, Pakistan has taken a ruthless, militarist approach towards the Baloch problem. Balochistan, despite its wealth of natural resources, is the country's most impoverished region. Pakistan has historically neglected the province. Punjab, on the other hand, grew to be influential in national politics and economically prosperous, leading to strong anti-Punjab tendencies within sections of the Baloch community. This, along with the poor living conditions, was exploited by the separatists to drum up support for their cause. They often attack the federal government "for extracting" resources without offering any help to the local economy. Baloch separatists have cited the China-Pakistan Economic Corridor, which goes through the province, as an example of this exploitation, and targeted Chinese interests. The Pakistani establishment has also failed to engage with the civil rights movements in Balochistan, such as the Baloch Yakjehti Committee, which organised several sit-ins in Islamabad and Baloch cities this year to draw the attention of the federal authorities to widespread human rights abuses in the province. Such activists were often painted as "enemies of Pakistan", which left the military with the only option of using force against the separatists. But state violence has only strengthened the separatists — as the latest attacks underscore. If Pakistan is serious about stability and security in its largest province, it should take measures to address the developmental concerns of the locals, stop the rights violations and engage with the peaceful civil rights voices to reset ties with the Balochis.

## WHO ARE THE JAMAAT-E-ISLAMI BANGLADESH, THE COUNTRY'S LARGEST ISLAMIST PARTY?

Bangladesh's interim government on Wednesday (August 28) lifted the ban on the Bangladesh Jamaat-e-Islami, paving the way for its return to active politics.

The Sheikh Hasina government had cracked down on the Jamaat for being a "militant and terrorist" organisation, and hanged or imprisoned many of its top leaders for "war crimes" committed during the 1971 Liberation War. The Jamaat was barred from contesting elections in 2013 on the ground that its charter violated Bangladesh's constitution by "opposing secularism".

On Wednesday, interim Law Affairs Adviser Asif Nazrul said the ban on the Jamaat was "politically motivated" and "not based on ideology", The Associated Press reported.



On its website, the Jamaat says it wants to “safeguard the independence, territorial sovereignty and Islamic values of Bangladesh”, and “implement the Islamic code of life... with a view to turning Bangladesh into an Islamic welfare state...”.

Bangladesh’s “largest Islamic party” traces its roots to the Jamaat-e-Islami established in Lahore in 1941 by Islamic theologian Abul Ala Maududi. Its foundational goal was to promote Islamic values in India, and eventually establish an unified Islamic state in the subcontinent.

The Partition — which the Jamaat actively opposed — dashed its original plans. After 1947, the organisation split on country lines. In India, the Jamaat was largely relegated to political irrelevance, but its influence grew in both wings of Pakistan.

### **Role in Liberation War**

While India was partitioned on religious lines, Pakistan struggled to hold together its geographically separated and culturally dissimilar East and West. Soon, the Bengali-speaking people in the East rebelled against the dominance of the Urdu-speaking West Pakistani elite, and started to demand first greater autonomy, and eventually a separate country.

Jamaat, with its goal of keeping Muslims together, opposed the partition of Pakistan, and stood firmly with the (West) Pakistani establishment. It provided leadership and manpower to paramilitary organisations and committees established by the Pakistan Army to crush the freedom struggle.

These included the Al Shams and Al Badr armed groups, which were recruited from the Jamaat’s student wing, and the East Pakistan Central Peace Committee, also known as the Shanti Committee. Ghulam Azam, then leader of the Jamaat in East Pakistan, was one of the founding members of the Shanti Committee.

These “razakars” (collaborators), along with the Pakistan Army (largely made up of West Pakistani recruits) carried out innumerable atrocities and human rights violations during the Liberation War, including the targeted killing of Bengali intellectuals, torture, abductions, rapes, and attacks on the minority Hindus.

Some 3 million people are estimated to have been killed during the nine-month Liberation War, more than 200,000 women were raped, and about 10 million were forced to flee East Pakistan.

### **Activities in Bangladesh**

Sheikh Mujibur Rahman banned all religious organisations from participating in politics. Many Jamaat leaders, including Ghulam Azam, fled the country to escape prosecution for their role during the war. The Jamaat was effectively wiped out from Bangladesh.

Bangladesh passed the International Crimes Tribunal Act in 1973 “to provide for the detention, prosecution and punishment of persons for genocide, crimes against humanity, war crimes and other crimes under the international law”.

But it would be decades before anyone would be actually prosecuted. Mujib was assassinated by a group of army officers in 1975, and Bangladesh then witnessed a series of coups, counter-coups, and military rule under various individuals. The Awami League remained out of power until 1996, and the Jamaat made a comeback during this time.





Ziaur Rahman, one of the individuals behind Mujib's assassination and the 1975 coup, would eventually lift the prohibition on religious parties from entering politics, and his Bangladesh Nationalist Party (BNP) would ally with the revived Jamaat. His wife Khaleda Zia, who later became prime minister herself (1991-96, 2001-06), continued the alliance.

#### **Crackdown by Hasina**

The Jamaat had been rehabilitated during the Khaleda years, but its role during the Liberation War was not forgotten. After coming to power in late 2008, Hasina announced that she would use the 1973 Act to prosecute war criminals. This Act would be amended in 2009, and its ambit expanded.

On March 25, 2010, Hasina's government announced the formation of a three-member tribunal, a seven-member investigation agency, and a twelve-member prosecution team to prosecute war criminals.

On February 5, 2013, Abdul Quader Mollah, who was a member of the Al Badr militia in 1971, was convicted of killing 344 civilians among other war crimes, and sentenced to life in prison. Following massive protests against the "lenient" punishment, the Bangladesh Supreme Court handed Mollah the death sentence. He was executed on December 12, 2013 — the first Jamaat leader to be hanged for war crimes.

Others followed suit: Mohommad Kamaruzzaman in April 2015, Ali Ahsan Mohammad Mojaheed in November 2015, and Motiur Rahman Nizami in March 2016. Numerous others were imprisoned. Ghulam Azam, who had been repatriated during Khaleda's first term, was given 90 years in prison, where he died in 2014.

The arrests and executions drew widespread international condemnation. The likes of Amnesty International and Human Rights Watch criticised the flimsy process of the tribunal. Hasina's critics alleged that the war crimes crackdown was a pretext to physically remove the opposition.

The Jamaat too, maintains this position, and denies any role in the atrocities of 1971.

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## NATION

### EXPLAINED: THE TWO NEW US-INDIA AGREEMENTS, SIGNED AS PART OF GROWING DEFENCE TIES

India and the US have signed a Security of Supply Arrangement (SOSA) and Memorandum of Agreement regarding the Assignment of Liaison Officers, the latest in a series of bilateral military agreements that have enhanced defence and security cooperation between the two countries over the past decade.

During Defence Minister Rajnath Singh's four-day official visit that concluded on Sunday (August 25), the partner nations agreed to advance priority co-production projects including jet engines, unmanned platforms, munitions, and ground mobility systems under the 2023 US-India Roadmap for Defence Industrial Cooperation.

#### Two new agreements

SOSA: Under SOSA, the US and India will provide reciprocal priority support to each other for goods and services that promote national defence. It will "enable both countries to acquire the industrial resources they need from one another to resolve unanticipated supply chain disruptions to meet national security needs", the US Department of Defense (DoD) said in a statement.

India is the 18th SOSA partner of the US. While SOSA, according to the DoD, are an important mechanism to strengthen interoperability with US defence trade partners, it is legally non-binding. The DoD has been working to conclude another agreement with India, the Reciprocal Defence Procurement (RDP) Agreement, which will be binding.

RDP Agreements are intended to promote rationalisation, standardisation, interchangeability, and interoperability of conventional defence equipment with US allies and other friendly governments. The US has signed RDP Agreements with 28 countries so far.

MOU ON LIAISON OFFICERS: The Memorandum of Agreement regarding the Assignment of Liaison Officers is a progression on a decision taken earlier to increase information-sharing between India and the US, and to post Indian armed forces officers in key strategic US Commands. India will deploy the first Liaison Officer to the US Special Operations Command headquarters in Florida.

#### India-US cooperation milestones on defence

The vision for bilateral defence cooperation was encapsulated in the September 2013 Joint US-India Declaration on Defence Cooperation and the 2015 Framework for the US-India Defence Relationship, in which the two countries committed themselves to increasing cooperation in the sector.

2023 ROADMAP: The roadmap for defence industrial cooperation released last year envisioned the conclusion of SOSA and the RDP Agreement. The US endorsed the integration of the Indian defence industry into global supply chains, and extended support to India to develop naval and maritime infrastructure to create an Indo-Pacific regional hub for ship and aircraft repair and maintenance.



Priority areas of cooperation identified in the roadmap included Intelligence, Surveillance, and Reconnaissance (ISR), Undersea Domain Awareness, Air Combat and Support, including Aero engines, munitions systems, and mobility.

iCET: In January 2023, the US-India initiative on Critical and Emerging Technology (iCET) was discussed to expand the strategic technology partnership and defence industrial cooperation. National Security Advisors Ajit Doval and Jake Sullivan discussed opportunities for greater cooperation in critical and emerging technologies, including co-development and co-production, and ways to deepen connectivity across our innovation ecosystems.

INDUS-X: In June 2023, during Prime Minister Narendra Modi's official state visit to the US, the DoD and Ministry of Defence launched the India-US Defence Acceleration Ecosystem (INDUS-X), which took forward the commitment to build a defence innovation bridge under iCET.

FOUNDATIONAL AGREEMENTS: In 2002, India and the US had signed the General Security of Military Information Agreement (GSOMIA) to facilitate sharing of military information. Between 2016 and 2020, the two sides signed four more agreements.

The Logistics Exchange Memorandum of Agreement (LEMOA) of 2016 established the basic terms, conditions, and procedures for reciprocal provision of logistic support, supplies, and services between the two militaries.

In 2018, the Communications Compatibility and Security Agreement (COMCASA), an India-specific version of the Communications and Information Security Memorandum of Agreement (CISMOA), was signed to secure military communication between the countries, facilitate access to advanced defence systems, and enable India to optimally utilise its existing US-origin platforms.

The Basic Exchange and Cooperation Agreement (BECA) of 2020 aimed to facilitate the sharing of military information including maps, nautical charts, and other unclassified imagery and data.

Additionally, in 2019, the Industrial Security Annex (ISA) to the GSOMIA was signed to facilitate the exchange of classified information between the defence industries of the two countries.

#### **Other deals and sales**

In 2016, the US designated India as a Major Defence Partner. Commensurate with this designation, in 2018, India was elevated to Strategic Trade Authorisation tier 1 status, which gave it licence-free access to a range of military and dual-use technologies regulated by the US Department of Commerce.

Earlier in 2012, the Defence Trade and Technology Initiative (DTTI) agreement was signed to promote industrial cooperation and defence trade between the two countries.

There is also a Memorandum of Intent between the US Defence Innovation Unit (DIU) and the Indian Defence Innovation Organization-Innovation for Defence Excellence (DIO-iDEX).

Big-ticket Indian military procurements from the US include MH-60R Seahawk multirole helicopters, Sig Sauer Rifles, and M777 ultra light howitzers.

Negotiations are underway to manufacture GE F-414 jet engines in India for the LCA MK 2 fighters, and to procure 31 MQ-9B High-Altitude Long-Endurance (HALE) UAVs. Deliveries of the GE-F404 engines for the LCA Tejas Mark-1A are underway.





## WAR AND PEACE

Just days after his visit to Kyiv, Prime Minister Narendra Modi's telephonic conversations with U.S. President Joseph Biden and Russian President Vladimir Putin have raised hopes that New Delhi is ready to take the plunge and attempt peacemaking in the Russia-Ukraine conflict. Mr. Modi's travel to the UN in September, where he will meet U.S. and European leaders and possibly Ukrainian President Volodymyr Zelenskyy again, and another visit to Russia in October for the BRICS summit, have fuelled those hopes. However, those who are boosting speculation of an Indian role may benefit from a careful consideration of the circumstances, and India's position thus far. Since the 2022 Russian invasion of Ukraine, India has remained distant from the outcomes of what External Affairs Minister S. Jaishankar had once called "Europe's war" and any peace process that does not involve bringing Russia and Ukraine to the table for talks. It had even disassociated itself from the Swiss peace summit. While Mr. Modi has consistently said that India is "on the side of peace" alone, New Delhi has been seen to be partial to Moscow, given its historical ties and military and energy dependencies. It will need to recast itself in a more unbiased image. Meanwhile, the war continues without pause, indicating the belief in both parties of there still being military gains to be made. That Russia launched deadly attacks on Ukraine just before the Modi Moscow visit in July, and Ukraine carried out operations into Russia's Kursk Oblast just before his visit to Kyiv last week, demonstrate the dangerous power play and messaging Mr. Zelenskyy and Mr. Putin can indulge in, regardless of their guest's sensitivities.

With such entrenched positions, New Delhi must proceed with care if it indeed seeks to join the ranks of others wanting involvement in conflict resolution. Successful efforts have been few, and have required focused agendas — the Black Sea Grain Initiative; the IAEA effort, on nuclear safety at the Zaporizhzhia power plant; and the latest exchange of Russian and Ukrainian prisoners. India must also articulate its own principles for a ceasefire compromise and lasting peace. The Modi government may well benefit from studying India's own history: In the 1950s, Prime Minister Jawaharlal Nehru, at the instance of Vienna, mediated with Soviet leader Nikita Khrushchev on troops withdrawal from the north-east zone of Austria post-war, in return for promises of Austrian neutrality. An Indian peace initiative will be further complicated by the proposals Ukraine and Russia have themselves put forth: Mr. Zelenskyy insists on a full military withdrawal from Ukraine by Russia first, and Mr. Putin has called for Ukrainian forces to withdraw from regions now occupied by Russia, and for Kyiv to formally give up any efforts to join NATO.

## WITH HUNDREDS STRANDED IN SAO PAULO, INDIA TO BROACH TOPIC WITH BRAZIL MINISTER

With Brazilian Foreign Minister Mauro Vieira landing here on Sunday, India may raise with him the plight of hundreds of men and women, many of them Indians, stranded at an airport in Sao Paulo, Brazil as they are suspected to be un documented immigrants.

Mr. Vieira is here to hold the ninth India-Brazil Joint Commission meeting with External Affairs Minister S. Jaishankar. They will also discuss the agenda for the G-20 Summit in Rio de Janeiro on November 18 and 19, the External Affairs Ministry said in a statement announcing the visit.

While Brazil's new regulations to crackdown on illegal immigration routes and the issue of more than 660 people, including more than 100 Indians, being held in Sao Paulo's Guarulhos Airport for several weeks, are not on the formal agenda, officials expect that they will be raised.



On August 22, Brazil's Justice Ministry also announced it would impose new restrictions on travellers from "certain Asian countries" who transit through its airports beginning August 26, and will not allow them to stay in Brazil.

The measure is expected to target Indian, Chinese, Nepalese and Vietnamese citizens in particular, who are believed to be part of a growing trend of illegal immigrants landing and requesting asylum, and then taking the land route from Brazil to the Mexican border with the United States in order to cross over to the U.S. and Canada.

According to the U.S. Justice Department, the number of such "asylum applications" has increased 61 times between 2013 and 2023, growing from 69 to 4,239.

"With Brazil holding the G-20 Presidency this year, the Ministers will also discuss how the two countries as [part of the] Troika can take forth key G-20 outcomes from the Indian Presidency last year," the Ministry said, adding that the two sides would discuss ways to further strengthen the India-Brazil strategic partnership signed in 2006.

Mr. Vieira is meeting with business leaders on ways to grow bilateral trade, which has ranged between \$10 and \$15 billion in the past few years.

The Joint Commission will meet on Tuesday, with cooperation in defence, agriculture and energy on the agenda. Brazil exports crude oil and cooperates with India on biofuels.

Meanwhile, the U.S. Border Control Services recorded that the number of Indians crossing over from the U.S.'s southern borders had grown to around 1,00,000, five times more than 2019-20 figures, as Indians have now become the third-largest community of illegal immigrants in the U.S.

#### COLOMBO PORT WELCOMES INDIAN, CHINESE WARSHIPS

Sri Lanka's main port in capital Colombo on Monday welcomed India's frontline war ship INS Mumbai, as well as three warships of the Chinese People's Liberation Army, piquing interest in the island nation that is familiar with the two powers' strategic contest.

The indigenously built destroyer INS Mumbai, on its first port call in Sri Lanka, will stay for three days. The 163-metre-long destroyer is manned by a 410-member crew, and its commander Captain Sandeep Kumar called on the Commander Western Naval Area Rear Admiral Chinthaka Kumarasinghe, a statement from the Sri Lankan Navy said. The ship's visit marks the eighth visit of Indian Navy ships to Sri Lanka this year, according to the Indian High Commission in Colombo.

Meanwhile, Chinese PLA war ships Hefei, Wuzhishan and Qilianshan, too, arrived in Colombo Monday morning. "To strengthen the camaraderie between the two navies, crew members of these ships are set to participate in a series of programmes organised by the Sri Lanka Navy," an official statement said, adding that the vessels' commanders would meet Sri Lanka's Western naval commander. Both crews are scheduled to visit tourist attractions, the Sri Lankan Navy said.

#### Indian concerns

The concurrent visit of Indian and Chinese naval warships has drawn attention in Sri Lanka, as India's reservations on port calls by Chinese research vessels are well known. In the last few years, India has voiced concern with the Sri Lankan government on multiple occasions.



Following frequent messages from New Delhi and Washington objecting to the visit of Chinese research vessels, Sri Lanka banned the visit of foreign research vessels beginning January 2024.

However, speaking to Japanese media in July 2024, Sri Lanka's Foreign Minister Ali Sabry hinted at possibly lifting the ban on foreign vessels next year. "We cannot have different rules for different countries and only block China. We will not do that. We will not take sides," Mr. Sabry said in an interview.

Last month, the Chinese Embassy in Colombo hosted a reception to mark the 97th anniversary of the founding of the People's Liberation Army (PLA). Earlier in August, the Sri Lankan Navy welcomed three US naval warships that were on a replenishment visit.

#### EXPRESS VIEW: ON DELHI AND BEIJING, A HINT OF HOPE

The latest round of talks with China on easing the military stand-off in eastern Ladakh raises hopes for the long-awaited breakthrough that could end the current political stalemate in bilateral relations. The Foreign Office has described the talks as "constructive and forward looking" and said that the two sides are looking to "narrow down differences and find early resolution of the outstanding issues". The optimistic tone follows two meetings in quick succession between External Affairs Minister S Jaishankar and China's top diplomat, Wang Yi. That these talks have been going on since the surprise Chinese aggression across the Line of Actual Control during the Spring of 2020 without restoration of status quo ante on the border suggests that India must temper its optimism. The well-known but divergent approaches of Delhi and Beijing to the negotiations reinforce the case for considerable caution in assessing the immediate prospects of a breakthrough.

India, which had cut off all political engagement and severely limited commercial ties with China since 2020, insists that the "state of the border" will reflect the "state of the bilateral relations." China has argued against India's condition that settling the border stand-off must precede renewal of bilateral relations. China has called, instead, for putting the border question in its "proper place" and going ahead with the "normalisation" of the relationship. The hint of hope arises out of the assessment that Beijing and Delhi may be inching towards a finessing of the situation that could take them to a common ground. Over the last many rounds, the two militaries have "disengaged" from several friction points that emerged from Chinese aggression and the Indian riposte in 2020. The current focus appears to be on resolving two legacy issues that arose from earlier military crises in Depsang and Demchok in eastern Ladakh. Military experts have long pointed to solutions that both sides could live with.

On the political front, Beijing is recognising the costs of its military aggression — in the form of deteriorating relations with a major Asian neighbour and lost business opportunities in one of the world's fast-growing markets. Delhi, too, sees that the lack of normal engagement with Beijing, at a time when most major powers, including India's Quad partners, are talking to China, is problematic. A potential deal involves China agreeing to ease the military stand-off in eastern Ladakh and India restoring political dialogue and ending the constraints on commerce with China. The NDA government's annual Economic Survey as well as several industry groups have been pressing the government to take a fresh look at the economic measures imposed against Beijing in the summer of 2020. As Delhi looks for a long-awaited closure to the current phase of tensions with Beijing, it must reach out to the Opposition parties, the foreign policy community and the public at large to explain the contours of the potential deal and make the case for it in terms of India's national interest. Talks with China have always been shrouded in mystery that even



experts find hard to decode. The political polarisation within the country and the hyper-nationalism that has run unchecked over the last decade could derail even a sensible arrangement with China.

## FOCUS ON TRIAL

The Supreme Court order granting bail to Bharat Rashtra Samithi leader K. Kavitha does more than grant relief to a jailed politician; it brings under focus the ill-motivated tactic of using the judicial process and the power of arrest as a tool to hound political opponents. The charge that the Delhi government's liquor policy was formulated in exchange for crores of rupees to grant a favourable deal to a certain lobby is quite serious, warranting a thorough investigation and fair prosecution. However, the focus of the Centre and its agencies seems to be entirely on keeping some political figures imprisoned in the run-up to the trial. In oral observations, a Bench of Justices B.R. Gavai and K.V. Viswanathan has questioned the fairness of the investigation, especially because the agency has cited some of those apparently involved as witnesses, while seeking pardon to some arrested suspects so that they could testify as approvers. After a spell during which the courts were reticent to disregard the vehement objections by the prosecution to the grant of bail, the judiciary has now begun to see through the attempt to use the bail-denying features of the Prevention of Money-Laundering Act (PMLA) to keep adversaries in prison for long. The Court had earlier granted bail to Delhi Chief Minister Arvind Kejriwal (still in jail in a CBI case on the same allegations) and Deputy Chief Minister Manish Sisodia.

Ms. Kavitha has been accused of arranging the alleged deal between the Delhi government and a 'south lobby'. It is notable that the political leaders have all been implicated by witnesses who themselves appear to be involved in the case and accused who have turned approvers. The Bench has questioned the Delhi High Court's failure to give her the benefit of a proviso to Section 45 of the PMLA, which allows grant of bail to women, merely on the ground that she was educated and not a "vulnerable" woman. The mere fact that the investigation by the CBI and the Enforcement Directorate is over was enough to grant bail. Instead of vehemently objecting to bail, and spending their time filing lengthy replies to a spate of bail petitions in various courts, prosecutors should concentrate on building a water-tight case. They should now focus on opening the trial and concluding it within a reasonable time-frame. The agencies concerned should remember that headlines that cite fabulous sums of money allegedly paid as bribes and thousand page charge sheets can impress only a few. Trial courts would surely prefer concrete evidence and reliable testimony backed by relevant documents.

## SC UNDERLINES: BAIL IS THE RULE, JAIL EXCEPTION EVEN IN PMLA CASES, ARTICLE 21 HIGHER RIGHT

The Supreme Court reiterated Wednesday that the legal principle "bail is the rule and jail is the exception" will apply even in cases registered under the Prevention of Money Laundering Act (PMLA) 2002.

— Granting bail to Prem Prakash, named as an accused by the Enforcement Directorate in a PMLA case in Jharkhand, the bench of Justices B R Gavai and K V Viswanathan referred to the Supreme Court's ruling in the July 27, 2022 ruling in Vijay Madanlal Choudhary and Ors. Vs Union of India and Ors, upholding the constitutional validity of PMLA, and the powers of the ED under it.

— Writing for the bench, Justice Viswanathan said in the Madanlal Choudhary judgment, the Court had "categorically held that while Section 45 of PMLA restricts the right of the accused to grant of

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





bail, it could not be said that the conditions provided under Section 45 impose absolute restraint on the grant of bail”.

— He said “these observations are significant and if read in the context of the recent pronouncement of this Court dated 09.08.2024” granting bail to former Delhi Deputy Chief Minister Manish Sisodia in the CBI and ED cases against him, “it will be amply clear that even under PMLA, the governing principle is that ‘Bail is the Rule and Jail is the Exception’.”

— The bench, in its ruling Wednesday, said, “all that Section 45 of PMLA mentions is that certain conditions are to be satisfied. The principle that, ‘bail is the rule and jail is the exception’ is only a paraphrasing of Article 21 of the Constitution of India, which states that no person shall be deprived of his life or personal liberty except according to the procedure established by law. Liberty of the individual is always a Rule and deprivation is the exception. Deprivation can only be by the procedure established by law, which has to be a valid and reasonable procedure”

— It said while applying Section 45 of PMLA, “Article 21 being a higher constitutional right, statutory provisions should align themselves to the said higher constitutional edict”.

— Yashovardhan Azad Writes— “A clutch of recent Supreme Court judgments has established that the principle “bail is the rule, and jail is the exception” shall apply to special laws like the Unlawful Activities (Prevention) Act, 1967 (UAPA) or the Prevention of Money Laundering Act, 2002 (PMLA). In the case of B R S leader K Kavitha too, the court observed on Tuesday, “Undertrial custody should not turn into a punishment”.

— “The ED, the PMLA has been framed in consonance with the directives of the Financial Action Task Force (FATF), an intergovernmental organisation formed to combat money laundering and terror financing. Most countries have laws similar to India.”

— “PMLA was framed under FATF directives, but it cannot go against the spirit of the Constitution. The ED needs to ensure that for legitimate relief enshrined in the PMLA, the accused does not have to approach the courts. The SC is due to review the harsh provisions of the Act later this year.”

**BAIL SHOULD NOT SUFFER DUE TO ONE’S INABILITY TO FIND PEOPLE TO STAND SURETY:  
SC**

Gandhi got bail in 13 separate cases of criminal breach of trust, cheating and criminal intimidation, but could only get two pairs of people to stand surety for his bail. He faced the prospect of staying behind bars for his inability to find 22 others to sign as surety for the remaining 11 First Information Reports (FIRs).

Understanding the man’s quandary, a Bench of Justices B.R. Gavai and K.V. Viswanathan, in a recent judgment, said the same two pairs of people were enough to stand sureties for all the 13 cases in which he got bail.

Justice Viswanathan, who authored the judgment, said Gandhi must not continue to stay behind bars for his inability to find enough people to stand surety for him. He had a physically handicapped wife, a young son and an aged mother to care for.

The Supreme Court said judges could not shut their eyes to the “hard realities of life”. One of them being that only a very few people would take the risk of standing surety for another person. The choice would be still narrower in a criminal proceeding.





In cases like that of Gandhi, the Supreme Court said, judges should pass a “reasonable and proportionate” order which would both protect the person’s fundamental right under Article 21 (right to life) of the Constitution and at the same time guarantee his presence. As to what such an order should be, will again depend on the facts and circumstances of each case.

“To grant bail and thereafter to impose excessive and onerous conditions is to take away with the left hand what is given with the right... Sureties are essential to ensure the presence of the accused, released on bail. At the same time, where the court is faced with the situation where the accused enlarged on bail is unable to find sureties in multiple cases, there is also a need to balance the requirement of furnishing the sureties with his or her fundamental rights under Article 21,” Justice Viswanathan explained.

#### BY ANOTHER NAME

On August 27, a Bench of the Supreme Court of India found itself reaching, once again, for idioms over a matter involving misleading advertisements of ayurveda, siddha, and unani products. Earlier this year, another Bench had concluded proceedings against Patanjali Ayurved over its defiance of an order to not publicise unproven or unprovable medicinal claims attached to its products. Towards the end of that matter, various State-level regulatory agencies were finally roused to act against Patanjali Ayurved over these claims while the Court ordered it to publish media advertisements apologising for its actions. While the responses of the State bodies to the company are still evolving, the Court’s own verdict seemed to embody a belief that nothing more could be done — and this belief casts the Court’s current ire against the Ministry of AYUSH in a particular light. India’s drug manufacturers and regulators are caught between ensuring high quality, which leads to higher manufacturing costs, while keeping consumer prices down so that patients can access the drugs they need. Unfortunately, neither regulators nor manufacturers have navigated this tension in the patients’ favour. The AYUSH Ministry’s actions have further complicated this scenario by allowing businesses to register all sorts of products as “Ayurvedic” (as illustrated in the case of its licence, and later cancelled, to a Bengaluru-based company to sell milk as “Ayurvedic proprietary medicine”) and by attempting to evade existing quality rules, presumably to grease the wheels of businesses.

With the Ministry’s cynical attempt now to sidestep Rule 170 of the Drugs and Cosmetics Rules 1945, which penalises misleading advertisements of ayurveda, siddha, and unani products, the Court confronts an old tendency in a new disguise. Public apologies and post facto action by regulatory bodies may have been the end of the line against one company. The Court may also seem sated by a demand, as it spelled out in its May 7 order, that all advertisers self-declare that they will not publish misleading advertisements. But similar concessionary measures will falter against a Ministry. Medicine quality and manufacturer inspections are disuniform, more so in the alternative medicines space, and regulating advertisements has emerged as a last-ditch backstop against bad products entering the market. In the face of progressively weakening protections against what is ultimately fake medicine, the most preferred outcome in the present matter would be for the Court to look at past declarations — self-made or otherwise — and into rectifying the quality-control regime, particularly to empower it, protect it from political capture, and bring alternative medicines under its purview.



## 'THERE CAN'T BE A VACUUM': DELHI HC DIRECTS CENTRE TO CONSIDER INCLUSION OF SEC 377 EQUIVALENT IN BNS

Disposing of a public interest litigation (PIL) by lawyer Gantavya Gulati highlighting the absence of an equivalent to Indian Penal Code (IPC) Section 377 (unnatural offences) in the newly enacted Bharatiya Nyaya Sanhita (BNS), the Delhi High Court on Wednesday directed the Union government to treat the plea as a representation and decide on the same "as expeditiously as possible, preferably in six months".

— A bench of Acting Chief Justice Manmohan and Justice Tushar Rao Gedela observed that "prima facie, to this court, while the perpetrator has been made gender neutral thereby permitting any gender be recognised as the wrongdoer, the gender of the victim remain specified as a woman".

— While a 2023 Home Affairs' Parliamentary Standing Committee report on the BNS had recommended retaining Section 377 in the BNS, the same was not explicitly included in the new legislation that replaced IPC from July 1.

### **For Your Information:**

— The Supreme Court in *Navtej Singh Johar v. Union of India* decriminalised homosexuality by ruling that Section 377 (unnatural offences) of the IPC does not punish people in same-sex relationships. This provision punished anyone who "voluntarily has carnal intercourse against the order of nature with any man, woman or animal". Though the SC reinterpreted the provision, Section 377 remained in the text of the IPC until the BNS came into force — where it was deleted entirely.

— The Indian Penal Code (IPC) of 1862 has been replaced by a new set of criminal laws known collectively as the BNS, ending 160 years of the code being in existence.

## BADLAPUR HEARING: HC ASKS GOVT. TO CONSTITUTE PANEL FOR 'CHANGING MINDSET OF BOYS'

The Bombay High Court on Tuesday raised grave concerns over lapses in the implementation of the Protection of Children from Sexual Offences (POCSO) Act and asked for a committee to be constituted for gender sensitisation of boys in schools.

Hearing a suo motu public interest litigation (PIL) in the sexual assault case of two four-year-old girls in Badlapur town of Maharashtra's Thane district, a Division Bench of Justice Revati Mohite Dere and Justice Prithviraj K. Chavan asked Advocate General Birendra Saraf for State to submit names for the panel.

"We talk about victims but don't convey to the boys what is wrong and what is right. The committee needs to work on changing the mindset of boys at a young age. The Education Department needs to help with gender sensitisation," the Bench orally observed.

Mr. Saraf informed the Bench of a Government Resolution passed on August 23 regarding the same, but was told to see if the panel could include a retired judge and a representative from Parent Teacher Associations, among others.



### Police pulled up

The court, after going through the investigation report, pulled up Maharashtra Police for not adhering to the POCSO Act by calling the victim and her family to record their statements at the police station, and omitting the name of the victim's class teacher. It directed that a female prosecutor be appointed to the case.

The court also slammed the media for being insensitive and revealing the name of the school and victims.

## A PROPER PROBE ALONE CAN ENSURE TIMELY JUSTICE

Amid national outrage over the rape and murder of a trainee doctor in Kolkata and the sexual abuse of two kindergarten girls in Badlapur, Maharashtra, Prime Minister Narendra Modi has spoken twice in 10 days on crimes against women. In his 78th Independence Day address, Mr. Modi said that crimes against women should be investigated without any delay, and that it was important to instill fear among culprits of committing such crimes. "There should be a wide discussion about the criminals who get punished so that even those who commit such sins fear the consequences including hanging to death. I feel that it is very important to create this fear," he said. Then, while addressing the Lakhpati Didi Sammelan in Jalgaon, Maharashtra, on Sunday, Mr. Modi said that committing a crime against women was "an unpardonable sin", adding that the guilty should not be spared.

### Incidents and changes to law

Protests erupted after a postgraduate trainee doctor was found dead after 36 hours of duty at Kolkata's R.G. Kar Hospital on August 9. Forensic reports stated that she had been raped. Furious at persistently high level of sexual violence despite reforms in the criminal justice system, women gathered on streets across India. The Calcutta High Court ordered the transfer of probe of the case to the Central Bureau of Investigation (CBI). Later, the Supreme Court took suo motto cognisance of the case.

Following the gang rape and murder of a 23-year-old woman in New Delhi in December 2012, the government brought about several changes in the criminal justice system. The definition of rape was widened to include non-penetrative acts, fast-track courts were set up, and the age threshold was reduced so that even 16-year-olds could be tried as adults in sexual offences.

However, little seems to have changed. According to a government report, on average, one woman reported a rape every 15 minutes across the country in 2018. There were more than 31,000 reported rapes in 2022, the latest year for which data are available. Around the time of the 2012 Delhi case, data from the National Crime Records Bureau (NCRB) showed that there were 25,000 recorded rapes a year across India.

### A collective failure

The fact that the annual number of rapes is largely above 30,000 is not just a cause for concern, but also a reflection on the four components of the criminal justice system: the police, the prosecution, the courts, and the prisons. It is a collective failure of these four components that there is no fear of punishment in the minds of people who commit these heinous crimes. The police, which are the investigative agency, have to ensure that there are no infirmities in the investigation procedure. For this, the first step is to preserve the scene of crime so that experts



can gather evidence in the best possible manner. A botched job in the early stages of investigation has serious ramifications and often leads to acquittal. A botched job also gives some rapists the confidence that they can get away with their crime. Early-stage botching begins with delay in the registration of the crime. There was a delay of 14 hours in registering an FIR in the Kolkata case. In the Badlapur case too, the police sprung to action only after public outrage. The Bombay High Court slammed them for the delay in filing the FIR and recording statements.

After the registration of the FIR, proper investigation needs to be done. This includes collection of vital evidence from the scene of crime. The role of the investigators, therefore, is of paramount importance. Police being a state subject, the State governments have a bigger role to play in ensuring delivery of timely and fair justice. Why should all highly publicised cases be transferred to the CBI after an outcry by the media and the public? Lack of confidence in state investigative agencies is a major cause for concern.

If the investigation is improper, the prosecution finds it difficult to pursue the case in a court of law. This creates problems in trials, appeals, and every step of legal proceedings, often ending in rapists getting away. As per the NCRB data, conviction rates for rapes were 27%-28% from 2018 to 2022. This means that almost 70% of rape cases in India end in acquittal. But even in cases where the prosecution manages to get conviction, inordinate delays in execution of the sentence makes delivery of justice a long process. In the 2012 Delhi case, even though the fast-track court which tried the case held the accused guilty of gang rape and murder in less than a year, the guilty were hanged after seven years.

#### **Revamped justice system**

In the revamped criminal justice system of India, forensic examination has been made mandatory in cases with offences that are punishable with imprisonment of seven years or more, which are categorised under heinous offences. The maximum punishment for rape in India is life imprisonment and death penalty in the case of the victim being below 12 years of age. The forensic examination is aimed at enhancing the criminal investigation by ensuring that a team of experts conduct an on-site examination and gather evidence. The Bharatiya Nagarik Suraksha Sanhita, 2024, which has replaced the Code of Criminal Procedure, 1973, also makes it mandatory to videotape the forensic examination. The revamped criminal justice system of the country has also fixed timelines for enforcement agencies to take cognisance of complaints and mercy petitions, for filing of charge sheets and e-FIR for women, along with timelines for hearings to address contemporary challenges.

But these legal reforms will yield the desired results only when the investigating agency does its job thoroughly. Often, failure in preliminary investigation and incomplete or delayed collection of forensic evidence leads to botched-up investigations that ultimately make it more difficult for the victim to get justice. It is important that the investigating agency preserves the scene of crime and collects forensic evidence to build a watertight case so that the accused persons get convicted. It is equally important to ensure that the appellate courts, such as the High Court and the Supreme Court, dispose of the appeals quickly and in a time-bound manner for sentences to be executed.

These steps may not prevent atrocities against women, but they will at least instill the fear of consequences in the minds of the perpetrators, and ensure that the victims and their families don't have to wait endlessly for delivery of justice.





## BENGAL HAS NOT SET UP NEW COURTS FOR RAPE CASES: CENTRE

Asserting that implementation of various initiatives of the Centre to tackle crimes against women falls within the ambit of the States, the Union Women and Child Development Ministry on Monday faulted the West Bengal government for failing to establish courts to hear cases of rape and those charged under the Protection of Children from Sexual Offences (POCSO) Act under a Centrally sponsored scheme.

In a letter to West Bengal Chief Minister Mamata Banerjee, Union Women and Child Development Minister Annpurna Devi listed various provisions of the recently implemented Bharatiya Nyaya Sanhita, which provide strict punishment for crimes against women.

Ms. Devi was responding to Ms. Banerjee's August 22 letter to Prime Minister Narendra Modi, seeking a stringent Central law to combat crimes against women in the wake of the rape and murder of a doctor at the R.G. Kar Medical College and Hospital in Kolkata, which had led to widespread protests.

The August 25 letter by the Union Minister said it was imperative that the State machinery was fully sensitised and geared up to take full advantage of the legal and schematic provisions made by the Union government for ensuring safety and security of women and girls in West Bengal.

### **Pendency of cases**

She pointed out the West Bengal government's alleged failure to implement crucial safety measures for women and girls, including setting up of fast-track special courts (FTSC) allocated to it under a Centrally sponsored scheme, in spite of a pendency of 48,600 rape and POCSO cases.

The FTSC scheme, launched in October 2019, was designed to expedite the trial and disposal of pending cases related to rape and the POCSO Act.

Under this scheme, the Union government allocated 123 FTSCs to West Bengal, including 20 exclusive POCSO courts and 103 combined courts for both rape and POCSO cases. However, as of mid-June 2023, none of these courts had been made operational, she said.

Ms. Devi also criticised the State government for failing to implement key emergency helplines such as the women and child helplines and the emergency response support system.

## WHAT DID THE 2013 PANEL SAY ON DEATH PENALTY FOR RAPE?

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

After the brutal rape and murder of a doctor on duty at Kolkata's R.G. Kar Medical College and Hospital on August 9, there has been a clamour of voices seeking the death penalty for the accused. The Justice J.S. Verma Committee recommendations, which led to the amendment of criminal laws in 2013, had specifically said it was not inclined to recommend the death penalty for rape even for the rarest of rare cases. "...seeking of [the] death penalty would be a regressive step in the field of sentencing and reformation," the committee pointed out.

### **What did the Union Cabinet decide?**

The Union Cabinet did not take the recommendation on the death penalty when it cleared an ordinance on sexual assault in 2013, and signed the criminal amendments into law. The committee

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





to amend criminal laws was set up after the gang rape of a paramedic student in Delhi on December 16, 2012. Led by Justice J.S. Verma (retired), the committee submitted its recommendations on January 23, 2013. One of its key suggestions, that the death penalty does not necessarily act as a deterrent against such crimes, was overlooked.

Key amendments were brought in to provide the death penalty for rape that led to death of the victim or reduced her to a persistent vegetative state (Section 376A of the Indian Penal Code) and anyone found guilty of rape more than once (Section 376E). In 2018, further changes introduced death as the maximum punishment for every participant in a gang rape when the victim is less than 12 years old (Section 376DB), and life-long imprisonment if the victim is less than 16 (Section 376DA). Under the new Bharatiya Nyaya Sanhita, punishment for rape is laid down in several Sections including 64, 65 and 70(2), which notes the punishment for gang rape of a woman under the age of 18 is the death penalty.

#### **What did the committee recommend?**

The Justice Verma Committee provided for enhanced sentences for rape, increasing it from 7 years to 10 years, 20 years, and life, but “short of death”. “Whoever causes the person to be in a persistent vegetative state, shall be punished with rigorous imprisonment for a term which shall not be less than twenty years, but may be for life, which shall mean the rest of that person’s natural life,” it noted. The committee pointed out that “there is considerable evidence that the deterrent effect of death penalty on serious crimes is actually a myth. According to the Working Group on Human Rights, the murder rate has declined consistently in India over the last 20 years despite the slowdown in the execution of death sentences since 1980.”

#### **What was its stance on marital rape?**

The Verma Committee recommended that the exception to marital rape be removed, pointing out that “a marital or other relationship between the perpetrator or victim is not a valid defence against the crimes of rape or sexual violation.” Concurring with the judgment of the European Commission of Human Rights in C.R. vs U.K., the Verma Committee endorsed the conclusion that a rapist remains a rapist regardless of his relationship with the victim. The Union government did not go by this recommendation and refused to criminalise marital rape. Under the BNS, exception 2 of Section 63 states that “sexual intercourse or acts by a man with his wife, the wife not being under 18 years of age, is not rape.”

#### **What about gender rights?**

The Verma Committee pointed out that “the ethos of empowerment of women does not limit itself to political equality, but also extends, in equal terms, to social, educational, and economic equality. If true empowerment of women were to mean anything, it is necessary that law, as well as public policy, must be capable of engaging substantially with women’s rights, opportunities, acquisition of skills, the ability to generate self-confidence and insist on total equality in relationships, both with society and the state.” The correction of social mindsets of its gender bias depends more on social norms, it observed, noting that “the deficiency has to be overcome by leaders in society aided by the necessary systemic changes in education and societal behaviour.”



## ON WEST BENGAL'S CIVIC POLICE VOLUNTEERS

### The story so far:

As protests rage across West Bengal and in different parts of the country over the rape and murder of a doctor at Kolkata's R.G. Kar Medical College and Hospital, questions are being raised as to how she was assaulted inside a State-run health facility. The accused, arrested hours after the crime, is a civic police volunteer, who not only had access to the hospital but also the emergency building where the victim was found dead on August 9.

### Was he a civic police volunteer?

The accused, Sanjay Roy, had been working as a civic police volunteer with the Kolkata Police since 2019. Despite being engaged as a civic police volunteer, the accused enjoyed certain facilities accorded to police personnel; he drove a motorbike belonging to the police, and stayed in the barracks of the Kolkata Armed Police's fourth battalion. There are reports that the 35-year-old was also associated with the Kolkata Police Welfare Committee and helped in admission of relatives of police personnel to hospitals.

### What are the terms of employment?

Civic volunteers, or village police volunteers as they are known in rural areas, are contractual workers engaged by the police for assistance, particularly in traffic management and other minor duties that do not require police personnel. The process of recruitment for civic police volunteers started in 2011 soon after the Mamata Banerjee government came to power. In a government order on September 26, 2011, the eligibility criteria for the recruitment of civic police volunteers were specified. It said the applicant should be a resident of the area under the police station where he will be deployed; should be above 20 years of age; should have passed the Class X examination and should not have any criminal record. The educational qualification of the civic police was later changed to Class VIII pass.

Soon after the first set of recruitment in 2011, the police submitted a proposal to the government for engaging 1.3 lakh civic police volunteers. The honorarium of civic police volunteers is now ₹310.00 per day (about ₹9,300 per month). The ad-hoc bonus of such civic volunteers has been increased from ₹5,300 to ₹6,000 for the year 2023-2024. At present there are 7,200 civic volunteers with the Kolkata Police, while the strength of the force stands at 37,400. In the State, the strength of the police is 79,024, but there are over 1.24 lakh civic police volunteers.

### What has Calcutta High Court said?

Through several orders, the Calcutta High Court has raised questions about the recruitment and legal veracity of civic police volunteers. In an order dated May 20, 2016, Justice Sanjib Banerjee of the Calcutta High Court said the recruitment scheme of civic police volunteers was devised to prey on the unemployed with little respect for taxpayer's money.

In Chandra Kanta Ganguli vs The State of West Bengal and Others, Justice Banerjee noted that it was not humanly or physically possible for the five men on the interview board to reasonably vet 1,351 candidates in the course of a single day for the Sarenga police station or even 875 candidates for the Barikul police station. In another case in 2020, where civic police volunteers had approached the Calcutta High Court after their services were discontinued, a division Bench had pointed out that the conditions "which we have narrated (in the order) clearly demonstrate that



the deployment of appellants/petitioners as civic police volunteers was temporary in nature and it cannot be considered as an engagement on probation.” There have been several occasions where the High Court and the police administration had clearly stated that civic police volunteers will not be deployed in any law and order duty. Despite such orders, there are regular instances of civic volunteers being engaged in law and order duties.

#### What is the main criticism?

While engagement of local civic police volunteers has come in handy for the West Bengal government in managing conflict, there have been several cases of excesses conducted by civic police volunteers. The most talked about case was the unnatural death of student leader Anish Khan in February 2022, where a civic police volunteer and a home guard were arrested. More recently, after the R.G. Kar incident, a civic police volunteer was arrested from Bhatar State General Hospital after he threatened a lady doctor.

Both Opposition leaders and political observers say the civic police is an extension of the party. Biswanath Chakraborty, professor of political science at Rabindra Bharati University, says that the civic volunteers have provided a political footing to the Trinamool Congress. “There is no proper process for appointment of such personnel. This makes the local Trinamool Congress leadership appoint personnel who will be loyal to them,” Prof. Chakraborty said. The crisis of unemployment in the State has led the Mamata Banerjee government to devise an ingenious way of contractual recruitment where thousands of youth are provided just about minimum wage and can work for the party without any accountability, he pointed out.

Often the criteria of appointment has been overlooked in engaging civic police volunteers. The mother-in-law of the accused in the R.G. Kar rape and murder said her family had approached the police after Sanjay Roy assaulted their daughter. Despite a police complaint, he continued to function as a civic police volunteer and had unrestrained access to the hospital.

### DECODE POLITICS: HIMACHAL RAISES MINIMUM AGE OF MARRIAGE FOR WOMEN TO 21, AND WHY OWN PARTY ‘SURPRISED’

The Himachal Pradesh Assembly passed a Bill to raise the minimum age of marriage for women from 18 to 21 years. The Prohibition of Child Marriage (Himachal Pradesh Amendment) Bill, 2024, was passed by voice vote. The Bill amended the Prohibition of Child Marriage (PCM) Act, which was passed by Parliament in 2006.

— While presenting the Bill in the Assembly on Tuesday, Health, Social Justice, and Empowerment Minister Dhani Ram Shandil said raising the minimum age of marriage for women would provide them with opportunities.

— The minister also highlighted that early marriage and motherhood often severely impact the health of women. According to the ‘Statement of Objects and Reasons’ provided with the Bill, “The early marriages...act as a hindrance not only in the progress of their (women’s) career but also in their physical development.”

— Section 2(a) of the PCM Act defines a “child” as someone “who, if male, has not completed twenty-one years of age, and if a female, has not completed eighteen years of age”. The Himachal Bill eliminates this distinction on the basis of age between “males” and “females”. It defines a “child” as “a male or female who has not completed twenty-one years of age”.



— The Bill also amends Section 2(b) of the PCM Act, which defines “child marriage” as “a marriage to which either of the contracting parties is a child”. The Bill has added a clause giving it an overriding effect over “anything contrary or inconsistent therewith contained in any other law...including any custom or usage or practice governing the parties”.

— The Bill introduces Section 18A to the PCM Act, which gives the same overriding effect to the entire central law and its provisions.

— The Bill increases the time-period for filing a petition to annul a marriage. Under Section 3 of the PCM Act, the “contracting party who was a child at the time of the marriage” can file a petition to annul the marriage within two years of attaining majority (before they turn 20 for women, and 23 for men). The Bill increases this period to five years, allowing both women and men to file petitions to annul the marriage before they turn 23 years old (the minimum age for marriage at 21 years is higher than the age of majority at 18 years).

**For Your Information:**

**How will the Bill’s amendments to the PCM Act come into force?**

— The Concurrent List — or List III under the Seventh Schedule of the Constitution of India — contains a list of subjects that both the central and state governments can pass laws on.

— Entry 5 of the Concurrent List comprises a number of subjects including “ marriage and divorce; infants and minors;...all matters in respect of which parties in judicial proceedings were immediately before the commencement of this Constitution subject to their personal law”. This allows both the Centre and states to enact laws to address child marriage.

— Under Article 200 of the Constitution, a Bill passed by a state Assembly will be handed over to the Governor of that state for her assent. The Governor can then declare that she assents to the Bill (making it a law), return the Bill for reconsideration, or “reserve” it for consideration by the President. The President can then declare that she assents or withholds assent to the Bill, or direct the Governor to send it back for reconsideration.

— However, the Bill passed by Himachal Pradesh changes the PCM Act by adopting a different marriage age for women, rendering it incompatible with the Act passed by Parliament. According to Article 254(1) of the Constitution, if a state legislature enacts a law dealing with a matter on the Concurrent List that is “repugnant” — inconsistent or contradictory — with a central law, the repugnant element of the state law is “void”.

— The exception is allowed in Article 254(2). If the Bill in question conflicts with an earlier or existing law passed by Parliament, it must be reserved for the President’s consideration and acquire her assent under Article 201. Only then would the repugnant provision of state law be legitimate. So, for the Himachal Pradesh Bill to take effect, Governor Shiv Pratap Shukla must reserve it for President Droupadi Murmu’s consideration, after which she must determine whether to give her approval to the Bill.

**LGBTQIA+ COUPLES CAN OPEN JOINT BANK ACCOUNTS: CENTRE**

Persons from the LGBTQIA+ community cannot be prevented from opening joint bank accounts with their partners, the Union government said in an advisory this week, making it clear that they can also nominate each other as beneficiaries.





This comes nearly a year after the Supreme Court asked the Union government to consider providing equal entitlements to LGBTQIA+ couples, in a judgement that refused to recognise same-sex marriage. The top court, in the October 2023 judgment, directed the government to consider enabling LGBTQIA+ couples to be able to open joint bank accounts and nominate each other in case of death.

The August 28 advisory was issued by the Department of Financial Services as a “clarification” in connection with judgment. “There are no restrictions for persons of the Queer community to open a joint bank account and also to nominate a person in queer relationship as a nominee to receive the balance in the account, in the event of death of the account holder,” it said, adding that the Reserve Bank of India had also issued a clarification on this matter to all scheduled commercial banks on August 21.

Some private banks had already been enabling LGBTQIA+ couples to open joint bank accounts, even before the judgment. In a statement, Axis Bank welcomed the advisory, saying it “seamlessly aligned” with its inclusive banking initiative, which has let LGBTQIA+ persons in same-sex relationships nominate each other as beneficiaries and open joint bank accounts since September 2021.

In April, the government set up a six-member committee to define and elucidate “the scope of the entitlements of queer couples who are in unions”, in accordance with its submission to the top court. The panel held its first meeting on May 21, the Social Justice Ministry told Parliament. A sub-committee meeting was held on May 31, and the first round of stakeholder consultations was held on July 25.

## CATALYST FOR CHANGE

At different points of time, come events that have the potential to shape the future. Whether these catalysts fulfil that potential to the fullest extent or not is in the hands of the people in their vortex. The Justice K. Hema Committee report that studied the issues faced by women in cinema, could well be one such catalyst. The three-member committee was constituted in 2017, based on a petition submitted by the Kerala-based Women in Cinema Collective, and submitted its report two years later. It was released last week, several paragraphs redacted, and contains unsurprising and yet disturbing revelations about the state of affairs in the film industry — discrimination, exploitation and sexual harassment of women. The term ‘casting couch’, hatched in Hollywood, has become repugnantly accepted as a euphemism for sexual favours in exchange for a role in films. Justice Hema points out that making the exchange of sexual favours the passkey for entry into the field itself, and normalising it and conflating it with consensual sexual activity, makes the industry inherently exploitative. The report deals also with other inequities that disadvantage women in the industry, including the lack of essential facilities such as toilets, changing rooms, safe transportation, and accommodation at the shooting spot which are violative of the right to privacy; and discrimination in remuneration, and a lack of binding contractual agreements. These affect the range of women across the industry — actors, technicians, make-up artists, dancers, support staff, and particularly so, women lower in the pecking order.

The way ahead is not as murky as the hole that the film industry, here Malayalam, seems to find itself in. The government has decided to constitute a special investigation team to go into the accusations of harassment. While the government would do well to ignore the committee’s recommendation on doing away with internal complaints committees for each film project, it must act on suggestions that call for provision of essential facilities and for structural reforms within





the film industry, including professionalising it. Nothing will change unless the state gets involved meaningfully in creating an equitable work space for men and women, in an industry dominated by people with great power and money, who have so far refuted the existence of such a power cartel or have remained silent. Each of the issues raised must be taken cognisance of, and acted upon. As with the #MeToo movement, Justice Hema's report has the potential of being a catalyst to enable scores of women to speak up. It behoves the state to ensure that their complaints are not ignored, or worse still, used against them.

## WHY IS SANCTION FOR PROSECUTION NEEDED?

### The story so far:

The issue of granting sanction to prosecute a public servant has once again come to the fore, following Karnataka Governor Thawar Chand Gehlot's approval to open an investigation against Chief Minister Siddaramaiah and to prosecute him in connection with alleged irregularities in the allotment of compensatory plots to his wife whose land had been lost to the acquisition process by the Mysore Urban Development Authority. The issue has raised legal and constitutional questions, resulting in the Karnataka High Court asking a trial court to postpone its consideration of private complaints against him.

### Why is sanction required to prosecute a public servant?

Sanction for prosecuting a public servant has been a mandatory feature of anti-corruption law. This is intended to protect public servants from vexatious and malicious prosecution for actions and decisions made in the course of discharging their official duties. Section 197 of the Code of Criminal Procedure Code (CrPC) said no court could take cognisance of a case against a public servant unless an authority competent to remove that person grants sanction. Section 197 spoke of anyone who 'is or was' a public servant.

Section 6 of the Prevention of Corruption Act, 1947, has a similar provision. However, the sanction requirement was limited to the period when the public servant was in office, and, no sanction was necessary if the person no more held that office. Under both the CrPC and the Prevention of Corruption Act (PCA), the State and Central governments had the authority to sanction prosecution of their respective employees. The provision was preserved in Section 19 of the PCA, 1988.

### What are the latest provisions on granting sanction?

Section 218 of the Bharatiya Nagarik Suraksha Sanhita (BNSS), the procedure code that has replaced the CrPC, retains the sanction provisions. When the PCA was amended in 2018, a new provision was introduced under which the government's approval is required, even to begin an investigation. While under Section 17A, the appropriate authority's approval is necessary to begin an investigation, the provision for sanction under Section 19 is a pre-requisite for any court to take cognisance of a charge sheet or complaint of corruption. Another feature of the 2018 amendment is that it applies to those who are and were public servants.

### What is the Governor's role in a case against a CM?

Provisions relating to sanction in the CrPC generally spoke of the State government and the Central government as the authority to grant sanctions for those employed by their respective governments. However, both the 1947 and 1988 versions of the PCA have a clause stating that in



the case of “any other person”, the sanction would be granted by the authority competent to remove the public servant in office. As the power the Governor is vested with the power to dismiss a CM, the Governor is seen as the authority to consider granting sanction for prosecuting a CM. Questions have often arisen as to whether the Governor exercises his discretion while considering sanction, or he is bound to act on the aid and advice of the Council of Ministers.

In the case of A. R. Antulay, the Supreme Court held that the Governor should act in his discretion: “... We have no doubt in our mind that when there is to be a prosecution of the Chief Minister, the Governor would, while determining whether sanction for such prosecution should be granted or not under s. 6 of the Prevention of Corruption Act, as a matter of propriety, necessarily act in his discretion and not on the advice of the Council of Ministers.”

#### **What have courts said on the issue?**

In a Madhya Pradesh case concerning corruption charges against two Ministers, the Council of Ministers held there was no material against them even though the Lok Ayukta’s report confirmed the charges. The Governor went against the Ministry’s decision and granted sanctions because there was sufficient material against them. In Madhya Pradesh Special Police Establishment vs. State of MP and others (2004), the Supreme Court found the Council’s decision “irrational” and upheld the Governor’s action. It said: “... on those rare occasions where on facts, the bias becomes apparent and/or the decision of Council of Ministers is shown to be irrational and based on non-consideration of relevant factors, the Governor would be right, ... to act in his own discretion and grant sanction”.

### **SHAH ANNOUNCES 5 NEW DISTRICTS FOR LADAKH; WILL GET MORE FOCUS: PM**

Union Home Minister Amit Shah on Monday announced the creation of five new districts in the Union Territory (UT) of Ladakh.

— “The new districts, namely Zaskar, Drass, Sham, Nubra, and Changthang, will take the benefits meant for the people to their doorsteps by bolstering governance in every nook and cranny,” he added.

— “Ladakh is a very large Union Territory in terms of area. At present, Ladakh has two districts; Leh and Kargil. It is one of the least populated areas of India. Being extremely difficult and inaccessible, at present the district administration was facing many difficulties in reaching the grassroots level....” an MHA spokesperson said in a statement.

— An MHA official said the Ladakh region was left behind in the race for development due to the difference in social fabric and the so-called discrimination of the state governments.

— Ladakh was made a UT after the erstwhile state of Jammu and Kashmir was bifurcated into two UTs on August 5, 2019. The other UT is Jammu and Kashmir.

— The move to create new districts was welcomed in Ladakh but with a reiteration of the demand for greater political representation. “The creation of new districts can be truly beneficial if it is accompanied by the establishment of an Assembly and subsequent democratic processes. Without this, Ladakh faces a risk of more bureaucratic layers rather than enhancing democratic governance,” social activist Sajjad Kargili said.



**For Your Information:**

— In a meeting with representatives from Ladakh (March 2024), which has been witnessing protests recently, Union Home Minister Amit Shah offered to extend Article 371-like protections to the region.

— Shah is learnt to have told the Leh Apex Body (ABL) and the Kargil Democratic Alliance (KDA) that their concerns related to jobs, land, and culture would be taken care of, but the government would not go as far as to include Ladakh in the Sixth Schedule of the Constitution.

— ABL and KDA, the two socio-political organisations spearheading the movement, are pursuing four main demands: statehood for Ladakh, safeguards under the Sixth Schedule of the Constitution, reservation of jobs for the youth of Ladakh, and the creation of separate Parliamentary constituencies for the two parts of the region — Leh and Kargil.

**NO MORE DELAYS**

In what can only be a case of muddying the waters, the Union government is reportedly mulling the expansion of data collection in the long-delayed Census to include caste enumeration. That caste may be one of the variables in the Census could be an outcome of the strident demand for a caste census by several political parties. But considering the incomplete and poorly constructed nature of the Socio-Economic and Caste Census of 2011, which resulted in data that were unwieldy, inaccurate, and hence unusable, the government must not hurry into utilising the office of the Registrar General and other agencies to tabulate caste. There must first be a definite time frame to conduct the Census on a war footing. If the delay is deliberate, in order to allow for delimitation to be conducted first in 2026, this will be harmful not just to public policy but also to relations with States. As of June 2024, out of 233 countries, India was one of 44 not to have conducted the Census this decade. The ostensible reason provided by the Union Home Ministry was delay due to the COVID-19 pandemic, but 143 other countries conducted the Census after March 2020, which marked the onset of the pandemic. India shares this dubious distinction of not having a Census with countries affected by conflict, economic crises or turmoil such as Yemen, Syria, Afghanistan, Myanmar, Ukraine, Sri Lanka and in sub-Saharan Africa.

There remains little excuse to continually delay the decennial Census, an exercise that has been conducted without fail from 1881 to 2011. Yet, the deadline to freeze administrative boundaries of districts, tehsils, towns and municipal bodies — a prerequisite before the conduct of the Census — lapsed on June 30 this year. This deadline has been extended 10 times since 2019. Several public schemes such as the National Food Security Act, the National Social Assistance Programme and the delimitation of constituencies are dependent upon the Census being conducted. Besides, statistical surveys that go into setting policy such as those related to household and social consumption, the National Family Health Survey, the Periodic Labour Force Survey, and the Sample Registration System, among others, use the Census to set their sampling frames. With the 2011 Census data getting increasingly out-dated and phenomena such as migration across and within States, the urbanisation of Indian societies, and the suburbanisation of cities becoming increasingly prominent in recent years, the lack of a Census is telling. The reliance on a bevy of sample surveys to fill in the gap is only resulting in debates over methodology and conclusions based on cherry-picking according to one's political choice. Clearly, the Union government must stop being derelict in its duties and should proceed with the Census quickly.



## ON THE CONTROVERSY OVER LATERAL ENTRY INTO THE CIVIL SERVICES

### The story so far:

The Union Public Service Commission (UPSC) had withdrawn its advertisement pertaining to lateral recruitment for 45 posts of Joint Secretaries (JS), Directors and Deputy Secretaries (DS) in the government. This follows objections raised by coalition partners and the Opposition as well as the intervention of the Prime Minister's Office (PMO) about the need for reservation in such lateral recruitment.

### What is merit versus spoils system?

Merit system entails appointments to government posts after a rigorous selection process by an independent authority. In India, this commenced in the year 1858 when the British introduced the Indian Civil Service (ICS) to select officers for administering the country. After independence, the UPSC conducts exams to select officers for IAS, IPS and other central services. The merit system is aimed at building career bureaucrats who are expected to function without any political leanings and provide independent advice to the incumbent political executive.

The spoils system on the other hand works on the adage 'to the victor belong the spoils.' It is a system where the incumbent political executive appoints its supporters to various posts in the government. It has its origins in the U.S., and continued until 1883 when it was replaced largely by a merit system. At present, out of more than 2.8 million federal government posts, only around 4,000 senior posts are directly appointed by the President.

### What is lateral entry?

IAS and other central service officers with more than 15 years of experience are generally posted as JS to head various departments. It is a cutting-edge post where the officers prepare cabinet notes, handle parliamentary questions, liaise with officers of other ministries and State governments.

Lateral entry is when executives from the private sector, public sector undertakings and academia are appointed to senior and middle management positions in the government. There have been instances of lateral entrants who were technocrats being appointed at secretary level posts since independence. Notable examples include former Prime Minister Manmohan Singh, economist Montek Singh Ahluwalia, agriculture scientist M.S. Swaminathan etc. The Second Administrative Reforms Commission (2005) and the NITI Aayog in 2017 had also recommended lateral entrants to bring specialised knowledge and skills into governance.

### What are the pros and cons?

Lateral entry brings with it certain tangible benefits. First, it brings much needed specialisation for niche areas of governance like emerging technologies, semiconductors, climate change, digital economy, cyber security etc. Second, it results in infusion of fresh ideas from experts to reinvigorate the system. Third, it also has the potential of making career bureaucrats more responsive thereby bringing in a positive change.

However, it has its own set of significant limitations. The domain expertise and specialisation of IAS officers is their field experience that is hard to match by outside entrants. There can be





coordination issues with career bureaucrats. It may also result in opaqueness and conflicts of interests while hiring recruits from private sector.

#### **What can be the way forward?**

Notable lateral entrants in the past have been appointees at the secretary level which is the highest position in government departments. At this level, the lateral entrant will be capable of influencing policy decisions. Their performance will also be subjected to greater scrutiny. Even if appointments are to be made at more operational levels of JS, Directors and DS posts, it should be in line with public policy.

In his book *The Tyranny of Merit*, political philosopher Michael Sandel discusses the flaws of placing too much emphasis on merit without pursuing equity. Hence, appointment at these levels should coalesce technical competence with reservation and social justice. Therefore, the intervention from the PMO in the recent episode is welcome.

However, excessive focus on lateral entrants is missing the larger picture. The issues plaguing the system cannot be set right with just a handful of lateral recruits. While there can be genuine grievances about the red-tapism, inefficiency and corruption in administration, it is equally true that career bureaucrats work in a challenging environment. Since governments deal with public money, the system is bound by a plethora of rules. Government performs various roles where the objectives are intangible, which the private sector would not do. Compounding these operational challenges is excessive political interference. A merit system being morphed into a spoils system is a serious threat to Indian bureaucracy and various institutions headed by career bureaucrats.

Autonomy of career bureaucrats is essential for their effective functioning. This includes reasonable independence with respect to postings, tenures and transfers. In this regard, as per Supreme Court judgment in the T.S.R. Subramanian case (2013), Civil Service Boards headed by top bureaucrats should be effectively constituted and strengthened at the Centre and States.

### **WHAT ARE BJP'S CORRUPTION ALLEGATIONS AGAINST MALLIKARJUN KHARGE'S FAMILY?**

Leader of Opposition in the Karnataka Legislative Council Chalawady Narayanaswamy on Wednesday (August 28) asked Governor Thawarchand Gehlot to dismiss state minister Priyank Kharge for allegedly "snatching away yet another opportunity from deserving SC (Scheduled Caste) entrepreneurs".

Kharge, the son of Congress president Mallikarjun Kharge, is Karnataka's minister for IT/BT and Rural Development and Panchayat Raj. The BJP has alleged a "scam" in the allotment of a five-acre parcel of land identified for civic amenities (CA) in an industrial park near Bengaluru airport to a trust run by the Kharge family.

Priyank is a trustee of the beneficiary Siddhartha Vihar Trust, and his brother Rahul Kharge is the chairman.

#### **What is this piece of land, and how was it allotted?**

In February this year, the Karnataka Industrial Area Development Board (KIADB) issued a notification for allotment of civic amenities (CA) plots in industrial areas set up by it. The applicants had to satisfy various criteria to be eligible for the allotment of these sites.





The CA sites were meant for centres of research and development, innovation, and excellence; skill development/technical institutes; educational institutions; offices of government or public sector units; etc. As per a government order issued in November 2023, the CA plots were to be given on a 10-year lease-cum-sale basis.

A total 24.1 per cent of the total sites area developed by the KIADB is reserved for ST/ST entrepreneurs from the state. This year, applications were sought for the allotment of 193 CA sites reserved for SCs/ STs, spread across industrial areas in 12 districts.

The CA site at the centre of the controversy is a 5-acre plot at the Hi Tech Defence and Aerospace Park Phase-1 (Hardware Sector) in Bengaluru Urban district. The land parcel is part of 45.94 acres set aside for civic amenities at the park, to be allocated under the SC quota.

#### **What is the Siddhartha Vihar Trust, and why did it ask for a CA site?**

Apart from Mallikarjun Kharge's sons Rahul and Priyank, the Congress president himself is a trustee, as is his son-in-law, Radhakrishna, who is the Congress Lok Sabha MP from Gulbarga. The Siddhartha Vihar Trust built the popular Buddha Vihar complex, a Buddhist spiritual centre spread over 24 acres off Sedam Road outside Kalaburagi (formerly Gulbarga) in northern Karnataka.

In its application to KIADB, the trust asked for the CA site to build a not-for-profit skill development centre and training institute at an estimated cost of Rs 25 crore. The promoters were supposed to put in Rs 10 crore, and another Rs 10 crore was to be raised in loans. The skill development centre, which was expected to be headed by Rahul Kharge, reportedly had plans to collaborate with the Indo-German Training Centre.

The Trust had sought either a 2.17-acre AM-3 plot or a 5-acre AM-4 plot at the industrial park. Under the lease-cum-sale agreement, the price of the plot in question was Rs 2.8 crore per acre.

#### **What has the BJP alleged?**

The BJP has pointed to several alleged irregularities in KIADB's allocation of CA sites. Applications were invited on February 8 with February 23 as the last date to apply — according to Narayanaswamy, this small 14-day window was to "make sure no one knew about it".

The State Level Single Window Clearance Committee reviewed the applications on March 4, and the list of allottees was cleared a day later at a meeting chaired by Industries Minister M B Patil. According to Narayanaswamy's complaint to the Governor, allocation to the Kharges when Priyank is a minister amounted to a conflict of interest, "a criminal breach of trust", and a "breach of (the minister's) oath".

#### **What is the Kharges' defence?**

At a press conference on Wednesday, Priyank Kharge challenged the BJP to identify any illegality in the allocation of the CA to the trust for a skill development centre. "We have not sought any subsidy, nor deferred payment for the sites. Is there any law preventing us from applying for the sites?" he said.

According to Priyank, applications were received for 43 of the 193 sites. "Were there other applicants for the site, and were we unduly favoured? We have been running the trust for the past two decades. Where is the quid pro quo?" he said.



He alleged that the BJP was targeting the Kharge family for opposing the RSS, and the controversy had been “pre-scripted” to destabilise the government.

It has been pointed out that in the last days of Basavaraj Bommai’s BJP government last year, Nirani Sugars Ltd, which is owned by then Industries Minister Murugesh Nirani, received approval for a Rs 86.91 crore project to expand the capacity of its sugar plant in Bagalkot district.

The in-principle approval came on March 29, 2023, the day the Model Code of Conduct came into effect.

## POLITICS HAS RETURNED TO JAMMU AND KASHMIR — AND THAT IS WELCOME

After the Election Commission of India announced the dates for elections to the Jammu & Kashmir Assembly on August 16, politics with all its drama has returned to the region. Except for one seat in Kashmir and four in Jammu – where there will be a “friendly contest” between the allies – the National Conference (NC) and Congress have reached a seat-sharing arrangement. The NC will contest 51, Congress 32 and the CPM and J&K Panthers Party one each. On the face of it, Congress seems to have got the better end of the deal. Its political presence in the region has greatly diminished since 2014, exacerbated by the exit of stalwart and former CM, Ghulam Nabi Azad. While most of the seats allotted to it are in Jammu, Congress will work to gain a foothold over a broader swathe of the erstwhile state. For the NC, it is a chance to regain relevance and become the major player in electoral politics in the Valley and beyond. Former CM and NC leader Omar Abdullah told this newspaper earlier this month that “No, I am not contesting... I am not going to sit outside the waiting room of the LG and, ask him, ‘Sir, please sign the file’”. That he is now rethinking this position underlines the exigencies of electoral politics post the abrogation of Article 370.

Still, the NC-Congress alliance, like many others, is marked by contradictions. The NC has suggested that, if elected, it may bring a resolution in the Assembly against the abrogation of Article 370 even as it knows that it cannot move the clock back. The Congress – for the sake of its national politics, if nothing else – does not share this position. Managing such differences will be challenging. Congress’s K C Venugopal has said that a Common Minimum Programme will guide the alliance if it comes to power. And while much water has flown in the Jhelum since 2018, it might be useful to remember that the BJP-PDP government too had an Agenda for the Alliance that promised not to revoke special status.

Both major constituents of the last elected government of the erstwhile state of J&K appear, for the moment, to be on the back foot. The BJP withdrew its first list of candidates hours after its release, reportedly due to protests and objections from within the party over ticket distribution. The PDP, part of the INDIA bloc at the national level, has been isolated in J&K. From a vote share of 22.67 per cent in the 2014 assembly elections, it was down to 8.48 per cent in the 2024 general elections and won no seats. The PDP’s rise owed much to its founder, Mufti Mohammad Sayeed reimagining state politics and its relationship with the broader national picture. In the changed scenario after August 5, 2019, it remains to be seen if his daughter, his political successor, can do the same. All this may add to the uncertainty in the run-up to elections but what is clear is that politics is coming back — and that’s an unambiguous positive.



## WITH THE LATEST ELECTIONS, NDA CROSSES THE MAJORITY MARK IN THE RAJYA SABHA

The BJP, which has been the single largest party in the Upper House for some time, has increased its strength to 96 and along with allies, six nominated members and two Independents, the NDA now has the support of 119 members.

The strength of the Rajya Sabha is 237 now. The majority mark is thus 119. These numbers will hold till April 2026, when the largest lot of 31 seats from 10 States are up for grabs.

In the past 10 years of the Narendra Modi government, no Bill had been stalled for want of a clear majority in the Upper House.

The YSR Congress Party and Biju Janata Dal, which have always stood apart from the ruling and Opposition blocs, had more often than not come out in support of the government Bills.

The two parties, since the 2024 general election, though have been inching closer to the Opposition.

### **Congress's strength**

The Congress, on the other hand, had been perilously close to losing the Leader of the Opposition status with its depleted strength. It has 26 members at present.

In a full-strength House, a party needs to have at least 25 MPs to get the Leader of the Opposition's position.

For the rest of the year, not much change is expected in the Rajya Sabha arithmetic.

The next big round of elections will happen in November when 11 members from Uttar Pradesh and Uttarakhand retire. Among them, 10 will be from the BJP and one from Samajwadi Party.

## HATEFUL, BALEFUL

Hate speech, especially by elected authorities and targeting a specific community, has been repeatedly flagged as a possible trigger for ethnic conflagrations and atrocities that could have catastrophic consequences. Politicians in India are well aware of this but this does not deter the most cynical among them from using hate speech to further a polarising agenda. A case in point is the Chief Minister of Assam, Himanta Biswa Sarma. The BJP leader continues to revel in making communally sensitive remarks, targeting the State's minority communities. On Tuesday, he explicitly said that he would take sides against "Miya Muslims" — a discriminatory euphemism for the minority Bengali Muslim community — and would not let them "go to Upper Assam". These remarks were in the context of a debate on the law and order situation after a gangrape of a minor in Dhing. During the 2024 general election, Mr. Sarma, in speech after speech, had used rabidly communal language to target Muslims, with nary a response from the Election Commission of India. He even said, "Islamophobia is real for many of us [Hindus]".

By making these statements repeatedly, Mr. Sarma is going against the oath he took as the Chief Minister — that he will bear true faith and allegiance to India's secular Constitution. He should be condemned for explicitly saying that he will side against a particular community. Second, by amplifying demands by groups that have threatened an entire community to leave "Upper Assam" and suggesting that the minority community does not have the right to free movement, he is



furthering hate in a State which has been affected by ethnic violence. From violent anti-immigrant agitations to militancy and a flawed process of identifying “foreigners” that has brought misery to the poor, Assam has been through crises; some of those issues continue to fester. Instead of finding ways of reconciliation, all-round harmony and peace, he uses the cynical ploy of fostering division in order to reap the benefits out of the politics of hate. As actions in nearby Myanmar and the plight of the Rohingya show, repeated use of hate speech to characterise a minority community and the amplification of communalism have disastrous consequences. The Union government and the BJP leadership have shown no inclination to rein in the errant Chief Minister. Unlike party leaders who have been reprimanded for utterances targeting sections such as farmers, Mr. Sarma uses hate speech against Muslims. But if the government is serious about improving the lot of the Assamese people — the State has among the poorest HDI indicators in the country — it has to put an end to hate speech as a communally charged environment militates against all-round development.

#### WHAT ASSAM’S NEW MUSLIM MARRIAGE LAW SAYS, WHY IT WAS INTRODUCED

The Assam Legislative Assembly on Thursday passed the Assam Compulsory Registration of Muslim Marriages and Divorces Bill, 2024, a proposed law with the stated objectives of preventing “child marriages” and “marriages without the consent of the parties”, and to “check polygamy”.

— The registration of marriages and divorces between Muslims in Assam had been taking place under the colonial-era Assam Muslim Marriage and Divorce Registration Act, 1935.

— This Act was in line with Muslim personal law and authorised the state to grant a licence to “any person, being a Muslim” to register such marriages and divorces. There were 95 such Muslim registrars or kazis across the state, and they were deemed to be public servants.

— The Cabinet decided to scrap the law in February this year. In March, the government notified an Ordinance repealing the 1935 Act with immediate effect... On Thursday, the Assembly passed the Assam Repealing Bill, 2024 to replace the Ordinance.

— The government’s main argument for doing away with the 1935 Act was that it allowed the registration of marriages of and between minors.

#### **For Your Information:**

Child marriages are illegal but not void. It is voidable at the option of the minor party. This means, the marriage can be declared void by a court only if the minor party petitions the court.

— Personal laws that govern marriage and other practices for communities prescribe certain criteria for marriage, including age...For Muslims, the criterion is attaining puberty, which is assumed when the bride or groom turns 15.

— At the same time, particular laws exist for the prohibition of child marriage: The Prohibition of Child Marriage Act, 2006 and the Protection of Children from Sexual Offences Act, 2012.

— Under the Child Marriage Prevention Act, any marriage below the prescribed age is illegal and the perpetrators of forced child marriage can be punished.

— But the Prohibition of Child Marriage Act does not have any provision that says the law would override any other laws on the issue. So, there is a discrepancy between the Prohibition of Child





Marriage Act and the Muslim personal law on the minimum age of marriage, and there is no clarity on what law supersedes the other.

### 'TIME', 'PEOPLE OF OTHER RELIGIONS...': WHY ASSAM ASSEMBLY DID AWAY WITH 3-HOUR BREAK THAT ALLOWED FOR FRIDAY PRAYERS

The Assam Legislative Assembly Friday did away with a provision in its Rules of Procedure, under which the House used to be adjourned for three hours between 11 am to 2 pm on Fridays.

Though the Rules of Procedure did not explicitly mention that this was to enable Muslim MLAs to offer Friday prayers, the Assam government, while announcing the decision, said that this was the purpose of the rule.

Rule 11 of the Rules of Procedure of the Assam Legislative Assembly stated: "The House shall ordinarily commence from 9:30 am to 2 pm on all weekdays except Fridays and Saturday. On Friday, the House shall sit from 9:30 am to 11:30 am and 3 pm to 5 pm."

With the amendment approved by the Assembly on Friday, from next session onwards, the House will sit for the same hours on Friday as the rest of the week.

"In the Assam legislative assembly, it had become like a tradition from the time of the British during Saadullah saab's Chief Ministership. At that time, Bangladesh was with Assam and the capital was in Shillong. Maybe then there were many members who were followers of the Islamic religion and they brought this proposal... Since I've become Speaker, I've noticed that on Friday, when there's some important matters to discuss, it becomes very difficult for time. The other thing is that in today's day and age, everybody is very conscious about their rights. People of other religions have also sometimes started saying that we should also get some time for prayers... I took information from all the legislative assemblies and found that no assembly adjourns the house for any religion or prayer. Even in the Parliament, there is no such rule," he said.

He said that the proposal to amend this rule was presented before the Rules Committee, which is headed by him, and the committee unanimously agreed. The motion for the amendment had been introduced in the Assembly on August 28 and was passed on Friday.

Assam Chief Minister Himanta Biswa Sarma posted on social media: "By doing away with the two-hour Jumma break, the Assam Assembly has prioritised productivity and shed another vestige of colonial baggage."

While the amendment was not protested in the house, Dhing MLA from AIUDF Aminul Islam, who is also a part of the Rules Committee, claimed that the Speaker had told members that he was facing pressure from BJP members.

"Apart from Jammu and Kashmir, the highest number of Muslim MLAs is in Assam. So if there's no break and if they all go to do jumma namaz during that time, a lot of work of the assembly where their participation is involved, they will be absent. That's why it was given. Friday is for private members' business, so different MLAs' names keep coming up for participation. We had wanted all this to be discussed," he told reporters.

CPI(M) leader from West Bengal, Hannan Mollah, called it a "heinous decision". He was quoted by ANI as saying, "This is dangerous to the country and the mindset is anti-national. This mindset is against the unity of the country."





## SGPC SENDS LEGAL NOTICE TO PRODUCERS OF EMERGENCY

The Shiromani Gurdwara Parbandhak Committee (SGPC), the body responsible for the management of historical gurdwaras, has sent a legal notice to the producers of actor-turned-politician Kangana Ranaut's upcoming movie, Emergency, alleging misrepresentation of the history of Sikhs, and has demanded the removal of objectionable scenes that it asserted have hurt Sikh sentiments.

A public interest litigation petition was filed seeking a revocation of the certificate of the movie for its public release. In the notice, the producers of the movie have been asked to seek an apology from the Sikh community.

## U.P. PLAN TO REWARD DIGITAL INFLUENCERS DRAWS FLAK

The Uttar Pradesh government has come up with a new social media policy to give cash prizes to influencers who promote its initiatives, schemes, and achievements. The initiative of encouraging pro-government posts and schemes on social media faces sharp criticism from the various quarters with the Opposition parties alleging that no influencer or social media warrior can save a government which is bound to face defeat in the coming election.

"The government has decided to list agencies/firms to give advertisements to promote them for making and displaying content through digital medium like tweets/videos/posts/reels about schemes and achievements of the U.P. government. It will also help in employment opportunities to citizens of the State,".

### Four categories

The policy also mentions categorising influencers into four categories with payment limits for influencers based on subscribers and followers on their platforms. "For X, Facebook, and Instagram, the maximum monthly payment limits are set at ₹5 lakh, ₹4 lakh, ₹3 lakh and ₹2 lakh, respectively, while on YouTube, the payment limits for videos, shorts, and podcasts are ₹8 lakh, ₹7 lakh, ₹4 lakh, and ₹4 lakh, respectively," the statement added.

Under the policy, the government has been authorised to take legal action if such paid content has any anti-national, anti-social, or derogatory reference. "We are against any kind of censorship on social media. What has been done is bidding the independent voices and threat them, if they do not fall in line, but no influencer can save this government which is bound to go. The aim is to provide employment to BJP-linked people," SP spokesperson Ameeqe Jamei said. The Congress, while criticising U.P. government's move, said it shows nervousness amid truth coming out through social media platforms in the era of digital literacy.

Digital influencers on social media platforms argue that it signals the government's attempt to get produced favourable content and influence the public through the medium.



## INDIA'S SECOND NUCLEAR SUB

India's second nuclear submarine, the Arighaat, was commissioned into the Indian Navy on Thursday at Visakhapatnam. The submarine has undergone extensive trials over the last few months.

— The 6,000-tonne INS Arighaat will join its predecessor, the nuclear submarine INS Arihant, as a key component of the India's nuclear triad, which refers to a country's ability to launch nuclear missiles from platforms in the air, land, and at sea.

— India is part of a select group of countries with nuclear triad capabilities, which includes the United States, Russia, China, and France. The induction of INS Arihant into the Navy in 2016 provided India with maritime strike capability for the first time.

— The commissioning of INS Arighaat will enhance the Navy's nuclear strike capability. The nuclear-capable Agni 2, Agni 4, and Agni 5 missiles can be launched from land, and fighter aircraft of the Indian Air Force such as the Rafales, Su-30MKIs, and Mirage 2000s can deliver nuclear warheads.

— The nuclear-propelled Arighaat will be armed with indigenously built K-15 missiles, with a range of more than 700 km. Like Arihant, Arighaat is powered by 83 MW pressurised light-water nuclear reactors, which allow it to remain submerged and undetected for much longer than conventional diesel-electric submarines.

— Under its "No first-use" policy, India is committed to using nuclear weapons only for deterrence and retaliation. With its ability to survive a nuclear attack and then launch a retaliatory strike, a nuclear sub acts as a very strong deterrent.

— The Indian Navy also has 16 conventional submarines in service — seven Kilo (Sindhughosh) class, four Shishumar class, and five French Scorpène (Kalvari) class attack submarines.

— To carry out its full spectrum of operations, the Navy is authorised to have 18 submarines, a milestone that has been achieved with the commissioning of INS Arighaat. However, at any time, around 30 per cent of the fleet is under refit (repair and renovation), which brings down the strength of operational submarines.

### For Your Information:

— **About Arihant:** India's nuclear-powered submarine project was initiated more than three decades ago, involving both private firms and the Defence Research & Development Organisation (DRDO), with help from Russia. Arihant was launched in 2009, and commissioned into the Navy in 2016 as its first nuclear-powered submarine.

— Arighaat, like Arihant, is an SSBN. Nuclear-powered submarines are of three kinds. The one that carries conventional weapons is called an SSN in NATO terminology. The second, is capable of carrying guided missiles with conventional warheads—an SSGN. The third, and typically the largest and most complex, is the one that can carry ballistic missiles that may be nuclear armed SSBN.



## HOW ISRO DESIGNED HUMANOID SKULL WHICH WILL BE USED IN GAGANYAAN

The Indian Space Research Organisation's (ISRO's) uncrewed Gaganyaan mission in 2025 will carry the female half humanoid Vyomitra (literally "space friend"). The design for Vyomitra's skull, fashioned by ISRO's Inertial Systems Unit in the Vikram Sarabhai Space Center in Thiruvananthapuram, Kerala, was finalised recently.

— Humanoids (or half-humanoids) are robotic systems designed to resemble humans — Vyomitra comes with movable arms, a torso, a face, and a neck — and function autonomously in space.

— In general, robotic devices let astronauts conduct monotonous and/or dangerous activities in space, like cleaning solar panels or repairing defective equipment outside the spacecraft. This safeguards astronauts while allowing them to focus on the scientific mission at hand.

— The mission for next year is largely intended to demonstrate the Vyomitra's technological capabilities. The half-humanoid will utilise its robotic arms to operate the crew console, visually monitor various systems within the crew module, and interact with the mission control team on Earth.

— ISRO will assess the robot's technology to determine the potential effects of space flight on humans before India's first crewed mission, which is scheduled for later in 2025.

### **For Your Information:**

#### **How did ISRO design the humanoid skull for Vyomitra?**

— The recently designed Vyomitra skull will store the robot's vital components. It is made of an aluminium alloy (AlSi10Mg) noted for its excellent flexibility, low weight, heat resistance, and mechanical qualities. This alloy is extensively used to manufacture automotive engines and aeronautical components.

— The skull has been intended to be extremely strong, capable of withstanding the tremendous vibrational pressures that occur during a rocket launch. The aluminium alloy's strong strength allows for a yield strength of more than 220 MegaPascals. Yield strength is the greatest stress that a material can withstand before it irreversibly deforms.

— The humanoid skull model is 200mm x 200mm and weighs only 800 grams.

— AlSi10Mg is also suitable for additive manufacturing (AM). This is how the humanoid skull was formed. AM facilitates the induction of lattice structures, as seen in the humanoid skull design. Importantly, it contributes to a significant reduction in the overall weight of the finished product. Unlike traditional manufacturing techniques, AM uses a layered process to generate a desired part or product, which is a frequent mechanism in 3D printing.

## 'HIGH AMOUNT OF MICROPLASTICS IN INDIAN PERSONAL CARE PRODUCTS'

Personal care products (PCP) like face wash and shower gels in India contain a significant amount of harmful microplastics, new research has revealed.



According to a study published in the Emerging Contaminants journal and led by Riya K. Alex, a third-year PhD Scholar at the Cochin University of Science and Technology, polyethylene (PE) is the dominant polymer in microplastic emissions from PCPs.

Microplastics are plastic particles are under 5 mm in size; microbeads have a diameter under 5 mm in diameter.

The researchers analysed 45 samples of PCP in face washes, face scrubs, shower gels, and body scrubs available in India and manufactured in 2022. The study focused on products marketed as “eco-friendly”, “natural” or “organic” to scrutinise the legitimacy of these claims.

Around 23.33% of products contained cellulose microbeads and their biodegradability was unclear. Most microbeads were coloured white while green were the rarest. According to the researchers, white microbeads are more easily concealed in PCP. These orb-like particles are used as exfoliating agents and to enhance the delivery of active ingredients in the PCP. They are made of PE, polypropylene or and polyester. PE was present in the highest concentration in more than half the microbeads.

The research also found polycaprolactone, a type of bioplastic, in two of the tested samples. Polycaprolactone is become more popular in pharmaceuticals as a carrier of drugs and for its anti-ageing and antibacterial constituents, but scientists it also know malforms aquatic biota.

The researchers’ paper also noted that labels like “organic”, “natural”, and” eco-friendly” thus constitute a form of greenwashing and said brands rely on consumers to not scan the ingredient lists in detail. They also said the blend of natural ingredients and plastics in the same product challenges tests to identify the presence of plastic.

The U.S., the U.K., Canada, France, and New Zealand have banned the production and sale of products with microbeads but it remains an ambiguous issue in India.

A recent study by Toxics Link, an environmental research and advocacy NGO, found 6.71 to 89.15 pieces of microplastics per kilogramme of dry weight of salt and sugar, sized 0.1-5 mm.

Microplastics have also been found in the human brain, blood, lungs, colon, placenta, testicles, and stool.

The study paper advocated for better policies to control microplastic pollution in India and suggested coffee, apricots, walnut, kiwi seeds, and soluble cellulose beads could replace microbeads in PCPs.

#### THE UNION HEALTH MINISTRY APPROVES RT-PCR TESTING KITS FOR DETECTION OF MPOX

The Central Drugs Standard Control Organisation has granted approval to Siemens Healthineers for the manufacture of RT-PCR testing kits for detection of Mpox, a senior Health Ministry official said on Tuesday.

The kits will be manufactured by the company’s molecular diagnostics manufacturing unit in Vadodara, with a production capacity of one million a year.

With the RT-PCR kits, the test results will be available in 40 minutes, which is significantly faster than traditional methods. This will help reduce the turnaround time for reporting, leading to quicker responses, the company said.



“The IMDX Monkeypox Detection RT-PCR Assay is a molecular diagnostic test that targets two distinct regions in the viral genome, spanning both clade I and clade II variants of the virus. This ensures thorough detection across various viral strains, providing comprehensive results. This assay is platform-agnostic and seamlessly fits into existing lab workflows with standard PCR setups, eliminating the need for new instruments. The ability to use existing COVID testing infrastructure would enhance the efficiency,” Hariharan Subramanian, managing director, Siemens Healthcare, said.

“By providing India with advanced assay kits tailored to combat Mpox, we are taking a proactive stance in battling this disease and prioritising prompt and precise detection that can truly make a difference in saving lives,” he added.

Clinically validated by the Indian Council of Medical Research-National Institute of Virology, Pune, the assay boasts 100% sensitivity and specificity.

The Union Health Ministry said the approval for the kit was given last week.

## BIOTECH ENIGMA

Earlier this week the Cabinet cleared a proposal, though without specifying a budget, called BioE3 or Biotechnology for Economy, Environment and Employment. Its thrust is to boost manufacturing in the biotechnology sector. Since 1986, India has had a dedicated department for biotechnology, and which deserves substantial credit. For instance, the progress in vaccine development, diagnostics and biologicals, that has bolstered India’s reputation as a ‘vaccine factory’, is due to the initiatives of this department. However, biotechnology did not quite spawn the equivalent of the IT revolution. There is much more to an industrialised biotechnology sector beyond vaccines. There are billion-dollar conglomerates today that rest on high-value microbes, gene-modification technologies, bio-plastics, bio-materials, and high-precision medical devices. However, despite the know-how and human resource capital, only a few Indian biotechs have global resonance, as there are few local manufacturers who can supply Indian laboratories/startups with the ingredients and devices to make products. The reliance on imports means that India loses its international competitiveness. The BioE3 policy aims to correct this.

In the last four decades, India has funded biotech research institutions but now sees that it needs to be going beyond and setting up companies, in public private partnership mode, to bolster biotechnology manufacturing. There are six verticals that this initiative envisages: bio-based chemicals and enzymes; functional foods and smart proteins; precision biotherapeutics; climate-resilient agriculture; carbon capture, and futuristic marine and space research. Futurists have been saying that the era of fossil-fuel industrialisation is over and humanity will have to rely on the natural world — for food and for making consumer products. This is to solve the global problem of non-biodegradable waste and carbon emissions. Future industries must be grounded in environmentally benign products, and this is impossible without sophisticated biotechnology. By setting up bio-foundries and bio-artificial intelligence hubs, the policy hopes there will be avenues for a variety of biotechnologists to congregate. Well intentioned this may be, but India’s woes with manufacturing have chronic causes. Without establishing enabling grounds for long-term capital investment — and these have little to do with biotechnology per se — top-down initiatives will have limited impact. The BioE3 policy must be a deeply collaborative effort between Centre and States. Rather than expect quick returns, the government must provide financial and infrastructural support over the long term.





## VINESH PHOGAT VERSUS THE COMPLEX BIOCHEMISTRY OF LOSING WEIGHT

On August 7, Vinesh Phogat was set to become the first Indian woman to compete in a wrestling final at the Olympics. At the 2024 games in Paris, she had defeated defending Olympic champion Yui Sasaki (Japan) and European and Pan-American champions Oksana Livach (Ukraine) and Yusneylis Guzman (Cuba) in that order, guaranteeing herself at least a silver medal.

That morning, however, Vinesh's weight was found to be about a hundred grams more than 50 kg — the maximum permitted in the category she was competing in. The game's rules demanded that she be disqualified. The silver medal, initially seen as a consolation in case she lost the final, was now out of her reach.

The next day Vinesh retired from wrestling, although media reports have said she may reconsider.

Physically a hundred grams isn't much, but biologically it's a lot. The things Vinesh tried to bring her weight under 50 kg left her unwell and requiring medical care, speaking to the difficulties of gaining and losing weight. But why are they so difficult?

### The physiology of weight

Losing or gaining weight is on the face of it a function of "one's energy intake and expenditure," Sanjay Kalra, an endocrinologist in Karnal, Haryana, said. If an individual intends to lose weight, it should ideally suffice for them to reduce the amount of energy they take in as food and increase the amount of energy they lose through exercise.

There is more to the story, however.

It plays out on at least three levels, according to Dr. Kalra:

(i) The brain: The hypothalamus, a small part of the brain, produces two kinds of hormones: orexigenic hormones increase appetite and anorexigenic hormones lower appetite and increase satiety.

Hormones are molecules produced in one part of the body that exert their effects on a different and often distant part. The orexigenic and anorexigenic hormones are produced in the hypothalamus and show their effects on other parts of the brain and in the gut.

(ii) The bowels: The gut produces hormones that can directly communicate with the brain to regulate appetite; it also regulates the rate at which food flows through the gut, which affects body weight.

A 1976 paper in the journal *Gut* reported that when food moved faster from the stomach to the small intestine, the intestine had more time to absorb calories from the food, leading to higher body weight. Conversely, lower body weight was associated with slower food movement from the stomach to the small intestine.

(iii) The brawn: "The brawn refers to the physical build of the body," Dr. Kalra said. It has two kinds of hormones that he called "burners" and "builders". Burners, including hormones produced by the thyroid, increase metabolism and lead to weight loss. Builders, like insulin, help incorporate glucose from the bloodstream into liver and fat cells and skeletal muscles, leading to weight gain.



Complicating the story further is a person's "metabolic set-point". A term proposed in 1982 by American nutrition researchers William Bennett and Joel Gurin in their book 'The Dieter's Dilemma', the set-point refers to an individual's innate weight range that the body attempts to preserve.

When the individual tries to lose weight by, say, regulating their diet, the body kicks in mechanisms that lead to weight gain.

"This makes weight loss incredibly challenging," Dr. Kalra said.

### **Losing weight rapidly**

Christiane Ratna Kiruba, a general medicine physician in Guwahati, said every human's weight has three main contributions: from skeletal muscles, fat, and water. The exact contribution of each varies from one individual to the next, but in all bodies the biggest contributor is water.

Thus rapid weight gain or loss targets the fluid content of a body. According to Dr. Kiruba, "The methods Vinesh Phogat was using to reduce her weight appeared to target water weight."

According to media reports, Vinesh tried a combination of sauna visits, static cycling, running, and exercising in the gym the night before her weighing.

Gaining or losing water leads to an overall increase or reduction in body weight because of carbohydrates. Dr. Kalra said the body stores carbohydrates mainly as glycogen (a polymer of glucose molecules), most of which goes to the skeletal muscles and the liver.

But whenever glycogen is shuttled into muscles, it is stored in a hydrated form, so water gets in as well. According to one estimate, every gram of glycogen brings about 3 grams of water along.

This is why rapid weight loss protocols target carbohydrates by reducing their intake as well as storage. As the amount of carbohydrates drops in the body, so does the amount of water, leading to weight loss.

"This is why people see rapid weight loss in the initial few days of dieting and exercise," Dr. Kiruba said.

In addition to carbohydrates, other factors including salt intake also affect body weight by involving water. In 2021, a group of scientists in the U.S. compared the beverage hydration index of electrolyte-, protein- or carbohydrate-rich fluids against plain water.

This index is used to measure the amount of water a body retains after consuming a fluid. They found electrolyte-rich fluids led to the highest amount of water retention.

Consuming excess salt increases the concentration of sodium ions — a type of electrolyte — in the body. In response, the body reduces the amount of water excreted through urine to ensure the sodium-to-water ratio is constant. This in turn leads to water retention and a higher body weight.

### **Sex matters**

After Vinesh's disqualification, the Indian Olympic Association (IOA) appealed to the Lausanne-based Court for Arbitration of Sports (CAS), an international body that adjudicates in sports-related disputes. One of the IOA's arguments was: "The biological difference in the bodies of male



and female wrestlers, particularly in light of the menstruation of women, needs to be taken into account whilst determining the eligibility of female wrestlers on the second day of the weigh-in.”

The IOA also provided medical certificates highlighting Vinesh was close to her menstrual period. CAS replied that such differences are “speculative and unsupported by evidence”. Both Dr. Kalra and Dr. Kiruba said some women might gain body weight during the latter part of their menstrual cycle, closer to their periods. In this time, women are in the luteal phase of the cycle: the time when the levels of the hormone progesterone are high in the body. According to Dr. Kalra, about 25% of women experience bloating and water retention in this time and may gain weight. That said, evidence of progesterone’s impact on body weight is controversial.

In 1967, researchers reported that progesterone could increase the body weight of female rats, but subsequent evidence suggested the hormone in human females may either not lead to a change in body weight or lead to its reduction. Even in human males, where the adrenal glands produce low levels of progesterone, researchers have associated the hormone with lower body weight.

The contradictory observations can be explained by the metabolic effects of progesterone. It can increase the amount of insulin, which leads to more glycogen being stored in the liver along with water. On the other hand, according to a 1982 study, progesterone “antagonises the effects of insulin” in fat tissue and skeletal muscle, leads to larger fat deposits, and a faster rate of protein breakdown.

#### **Weight v. athletic advantage**

Dr. Kalra said that, in Vinesh’s case, he believes little could have been done to lower her weight further. One option he said could have been to medically regulate her menstrual cycle to ensure she was in the low-progesterone phase, together with a stricter weight monitoring regime. As controversial as menstrual regulation sounds, Dr. Kalra said it is a “regular reality for many women athletes”. “Even though there are medicines that can induce weight loss, most of them would amount to doping in sports contexts,” he added.

Vinesh’s inability to make the required weight may have stemmed from being compelled to compete in the ‘wrong’ category. Most wrestlers compete in categories where the maximum weight limit is slightly less than their regular weight. Vinesh’s regular weight was around 55 kg, so the more appropriate category might have been 53 kg. But another wrestler had already been selected to represent India in that category, so Vinesh was slotted into the 50-kg group. Dr. Kiruba said Vinesh’s case shines light on the potential need for Olympic rules to consider whether small increases in weight correspond to athletic advantage. According to her, athletic advantages stem mostly from skeletal muscle mass and not from water weight, which she suspected was the cause of Vinesh’s higher weight on August 7 morning. By fixating more on the weight instead of whether the athlete acquired any actual advantages, the sports might be misjudging the eligibility of an individual to compete, she added.

#### **WHAT ARE COMBINATION DRUGS; WHY HAVE 156 OF THEM BEEN BANNED?**

The government has banned 156 fixed-dose combination (FDC) drugs, including popular medicines such as Cheston Cold and Foracet, used for cold and fever and pain respectively.



— The ban is the most sweeping crackdown on FDCs — which are combinations of two or more known drugs in single-dosage form — since 2018, when 328 such drugs were banned. A total 499 FDCs have been banned since 2014, officials said.

— FDCs are medicines that have more than one active ingredient — chemical compounds in medicines that have an effect on the body — in a single pill, capsule, or shot. FDCs are meant for patients with conditions such as tuberculosis and diabetes for which they need to take multiple medicines regularly.

— FDCs reduce the number of pills the patient needs to take each day, and help improve adherence to the treatment.

— Sometimes, however, an FDC could mean that a patient ends up taking a drug that they may not need.

— These “irrational” combinations have been banned because they contain ingredients that either do not work well together or have ingredients that are not needed by patients to be taken together.

— Mefenamic acid + Paracetamol injection, Cetirizine HCl + Paracetamol + Phenylephrine HCl, Levocetirizine + Phenylephrine HCl + Paracetamol, Paracetamol + Chlorphenamine Maleate + Phenyl Propanolamine and Camylofin Dihydrochloride 25 mg + Paracetamol 300 mg are some of the FDCs on the list.

— Speaking about the ban, Anil Bansal, member of the Delhi Medical Association, said that irrational combination drugs can pose significant health risks in a community that is known to buy over-the-counter drugs. “The lack of knowledge and awareness can work against the patient’s welfare,” he said.

—Dr. Bansal added that since these medicines are being introduced into the market without proper research and randomised controlled trials, their safety does come under scrutiny.

— A major reason is to take combinations of antibiotics out of circulation, because the unnecessary consumption of antibiotics can lead to increase in antibiotic resistance — which means increasingly higher doses or stronger antibiotics are needed for the treatment of even simple infections.

— Another reason for the ban is the pricing control on essential medicines. The government decides ceiling prices for these medicines based on average market prices. Companies are known to create FDCs to escape the pricing control mechanism.

— The action is in line with the government’s effort to weed out irrational medicine combinations that have entered the market over the years.

— These banned drugs were initially approved by various state licensing authorities without any trials for combinations because the ingredients were individually approved, the senior ministry official said.

—“The new drugs and clinical trial rules of 2019 make it clear that fixed dose combinations are to be considered as new drugs, and as such have to be approved by the central drug regulator. This has helped in bringing down the number of these irrational combinations available in the market,” the official said.





**For Your Information:**

— Every year, almost five million people die globally because of anti-microbial resistant (AMR) bacteria, according to a latest Lancet study. In fact, they make up a major part of the estimated 7.7 million deaths globally due to bacterial infections, which are becoming the second largest cause of mortality.

— “AMR is the failure of antibiotics to work because the bacteria have evolved to be resistant to drugs that have been widely used or misused,” says Prof Laxminarayan. As a result, infections become difficult or impossible to treat, increasing the risk of disease spread, severe illness, disability and death.

— The misuse and overuse of antimicrobials in humans, animals and plants are the main drivers in the development of drug-resistant pathogens. AMR puts many of the gains of modern medicine at risk.

**EDUCATION MINISTRY DEFINES ‘LITERACY’, ‘FULL LITERACY’ IN PUSH FOR ADULT LITERACY**

In a letter to all States, the Education Ministry has defined ‘literacy’, and what it means to achieve ‘full literacy,’ in light of a renewed push for adult literacy under the New India Literacy Programme (NILP), a five-year programme (2022-27) that aims to onboard one crore learners aged above 15 every year across all States and Union Territories.

Union School Education Secretary Sanjay Kumar, in the letter, has stated that literacy may be understood as the ability to read, write, and compute with comprehension, that is to identify, understand, interpret and create along with critical life skills such as digital and financial literacy. Full literacy (to be considered equivalent to 100% literacy) will be achieving 95% literacy in a State or Union Territory.

Mr. Kumar further writes that a non-literate person may be considered as literate under the NILP, as per the aforementioned definition when he/she has been declared literate after taking the Foundational Literacy and Numeracy Assessment Test (FLNAT).

According to data accessed by The Hindu, in 2023, 39,94,563 adult learners appeared for FLNAT in March and September, out of which 36,17,303 were certified ‘literate’.

In 2024, FLNAT was conducted on March 17, in which 34,62,289 learners appeared.

However, only 29,52,385 (85.27%) were certified as literate. While the pass percentage in FLNAT hovered between 89.64% and 91.27% in 2023, in 2024 it has dropped lower to 85.27%.

In 2024-25, the Ministry has allocated a budget of ₹160 crore for NILP. According to the latest Union Budget document, only ₹76.41 crore was actually utilised towards the scheme in 2022-23.

In 2023-24, the allocation was hiked to ₹157 crore, but later brought down to ₹100 crore in the revised estimates of the Union Budget.



### Significant challenge

According to the 2011 Census, India faces a significant literacy challenge with 25.76 crore non-literate individuals in the age group of 15 years and above, comprising 9.08 crore males and 16.68 crore females.

Despite the progress made under the Saakshar Bharat programme, which certified 7.64 crore individuals as literate between 2009-10 and 2017-18, an estimated 18.12 crore adults in India remain non-literate. The letter says non-literate individuals face disadvantages in various aspects of life such as financial transactions, job applications, understanding of rights and participation in higher productivity sectors.

### TAMIL NADU GOVT TO NATIONALISE KARUNANIDHI'S WORKS: WHAT DOES THIS MEAN

The Tamil Nadu government, last week, announced that the collected works of former Chief Minister M Karunanidhi would be “nationalised” – making them freely available for the public to publish, translate, and adapt.

— Copyright laws: Under the Copyright Act, 1957, an author has a bundle of legal rights including the right to reproduce, issue copies, perform, adapt, or translate the work in question. Upon the death of the author, the ownership of the copyright falls to her legal heirs.

— Section 18 of the Act allows a copyright owner to “assign” the copyright “wholly or partially” to anyone she pleases, in return for compensation.

— A copyright for any literary, dramatic, musical or artistic work remains in place until 60 years after the original author’s death. After this, the work enters the “public domain”, meaning can be used freely without permission from the former copyright owners.

— Nationalisation of copyright: In 2001, the Tamil Nadu government established the Tamil Virtual Academy (TVA) to provide online education in Tamil language. The TVA has a scheme in which it collaborates with legal heirs of original copyrights to make them assign the rights to specific works to the state government.

— The Tamil Nadu government has, till date, nationalised the works of 179 Tamil scholars, and has paid Rs 14.42 crore in royalties to their heirs, the government said.

— Case of Ambedkar’s works: Prakash Ambedkar, the grandson of Dr BR Ambedkar, granted the copyright for Dr Ambedkar’s works to the Maharashtra government in the 1960s. In 1976, the state government established the Dr Babasaheb Ambedkar Source Material Publication Committee which published the first volume of Dr. Ambedkar’s works in 1979...

— In 2016, Prakash refused to give permission for republishing these works to the Centre. He claimed that the copyright had not lapsed as the first volume of Dr Ambedkar’s works was only published in 1979.

— The Centre countered saying since 60 years had passed since Dr Ambedkar’s death, the copyright had indeed lapsed. The Centre published Dr Ambedkar’s works in 2018, ignoring his grandson’s claims.



## MORE FEMALE STUDENTS ENTER TRADITIONAL ENGINEERING COURSES

The number of students enrolled in undergraduate engineering courses in India steadily declined from 2016, despite the increase in the overall number of students pursuing college education, according to the All India Survey on Higher Education (AISHE). In recent years, the number of students enrolled in India was highest in the arts, science, and commerce streams, followed by engineering. Engineering was also the only discipline in which the number of students enrolled consistently declined between 2016 and 2022. There was a slight uptick in 2022 in enrolment in undergraduate engineering courses, which may have been due to the introduction of several new courses in the survey, which were previously not tracked by AISHE. This bump did not alter the trend, however.

The decline in enrolment in engineering courses was more pronounced among male students than female.

In 2013, large numbers of female students took up electronics engineering, computer engineering, and information technology (IT). In computer engineering and information technology, female students comprised more than 45% of all students in 2013. As the decade progressed, the presence of female students in these disciplines dropped by some 10% points each.

However, with a possible sway in societal attitudes and the introduction of new courses, female students started enrolling in disciplines where they were previously had little presence. For instance, in mining engineering, the share of female students was 1.2% in 2013 and increased to 8% in 2022. Similarly, in marine engineering, the share of female students jumped from 1.5% to 6.4%. The share of female students also increased significantly in mechanical engineering and civil engineering, from 4.2% to 7.6% and 18.2% to 23%, respectively, in the same period.

Male students continued to dominate the field of mechanical engineering, with their share declining only slightly from 95.8% in 2013 to 92.4% in 2022. The absolute number of students enrolling in the field dropped significantly though, almost halving from over 10 lakh in 2016 to 5.4 lakh in 2022. On the other hand, there was a drastic increase in the number of male students enrolling in computer engineering courses, from about 3.5 lakh in 2013 to 8.25 lakh in 2023.

The share of OBC students who enrolled in these courses steadily rose from 33% in 2013 to 38% in 2022. The share of ST students increased slightly from 2.1% to 3.3% in the same period (Chart 3). Among SC students, the increase was inconsistent. It slightly declined during some years, settling at 11% in 2022 compared with 8.7% in 2013. The share of students from the general category dropped over time.

Mechanical and civil engineering courses seem to have lost their appeal over the years among men, pointing towards a decline in employability, while courses such as computer engineering have continued to draw students.

## WHAT ARE JIU-JITSU & AIKIDO, PRACTISED BY RAHUL GANDHI DURING BHARAT JODO NYAY YATRA

Rahul Gandhi, the Leader of Opposition in Lok Sabha, said on Thursday (August 29) that during his Bharat Jodo Nyay Yatra earlier this year he had “a daily routine of practising jiu-jitsu every evening” which brought together young martial arts students from towns where they stayed.



“Our goal was to introduce these young minds to the beauty of the ‘Gentle Art’ — a harmonious blend of meditation, jiu-jitsu, Aikido, and non-violent conflict resolution techniques. We aimed to instill in them the value of transforming violence into gentleness, giving them the tools to build a more compassionate and safer society,” he posted on X, adding that a “Bharat Dojo Yatra is coming soon”.

Dojo in the Japanese language refers to a place of learning martial arts, somewhat like an akhada for kushti (wrestling) in India.

Here is a brief introduction to the martial arts that Rahul referred to.

### **Jujutsu: the ‘gentle art’**

A family of martial arts originating in Japan, jujutsu translates to “gentle art” — “ju” means “soft/ supple/ gentle” and “jutsu” means “art/technique”. Jiu-jitsu is a somewhat inaccurate (in terms of pronunciation), albeit popular Romanisation of the Japanese word.

The most commonly accepted story of jujutsu’s origin dates to late 16th century Japan, during the age of the samurai — Japan’s warrior class which held significant political power between the 12th and 19th centuries.

It is believed that samurai warriors developed various grappling and self-defence techniques for situations in which they lost their weapons (the legendary katana swords) during battle.

Since striking with bare hands against heavily armoured opponents — as the samurai were during battle — was ineffective, practitioners came up with more efficient ways of neutralising the opponent in the form of pins, joint locks, and throws. At the heart of these techniques was the principle of manipulating the opponent’s energy against them, rather than directly opposing it.

### **Jujutsu’s many offshoots**

Over time, as jujutsu became popular in Japan and overseas, multiple offshoots were born, which influenced various other combat sports. These include:

Judo, which was developed in the late 19th century from several traditional styles of jujutsu, and became an Olympic sport in the 1964 Tokyo Games;

Sambo, a combat sport developed by the Soviet Red Army in the 1920s to improve soldiers’ hand-to-hand combat abilities;

Brazilian jiu-jitsu was developed in the 1920s, and is today one of the most popular self-defence styles, which revolves around the principle of a smaller, weaker person defeating a bigger, stronger opponent with the help of leverage and weight distribution; and

MMA or mixed martial arts, the most popular combat sport today, borrows heavily from jujutsu and other styles which it has influenced.

Interest in jujutsu, especially the modern Brazilian form, skyrocketed after Royce Gracie’s legendary performance in the first United Fighting Championship (UFC) in 1993. Gracie methodically defeated much larger and stronger opponents while barely throwing around any kicks and punches, and relying instead on submission holds.





### **Aikido: The art of not hurting one's foe**

Aikido is an offshoot of jujutsu. It was developed by martial artist Morihei Ueshiba in the early 20th century, which makes it among the youngest of Japan's many martial arts. Aikido literally means the "way of harmonising energy", and is different from most other martial arts.

It takes jujutsu's principle of manipulating an opponent's energy to its logical extreme. Aikido's goal is to end conflict non-violently — to deflect strikes rather than overpower one's adversary, and to "match the opponent's force". The idea is to not only defend oneself, but to also protect or not hurt the attacker.

According to a phrase often used by Ueshiba, "true victory, final victory over oneself, here and now" — meaning that an Aikido practitioner's primary goal is to overcome oneself rather than cultivating violence or aggression.

This is why there are no aikido competitions. Rather, practitioners carry out demonstrations, and engage in a number of practices for their holistic mental and physical growth.

Some have criticised aikido's worth as a real-world fighting technique, arguing that aikido practitioners cannot hold their own against other, more violent forms of fighting. However, others argue that the skills and discipline that aikido inculcates are extremely important not just for self-defence but also for life.

Rahul Gandhi is a black belt in aikido, which denotes the highest level of technical proficiency in the martial art.

### **IMD: AUGUST WAS INDIA'S WARMEST SINCE 1901**

The India Meteorological Department (IMD) Saturday said that India recorded its warmest August since 1901. The all-India average monthly minimum temperature rose to an all-time record of 24.29 degrees Celsius for August. The normal is 23.68 degrees Celsius.

— Multiple favourable weather factors at local, regional and global-scales had kept the southwest monsoon active for a majority of days during August. There were a total of six low pressure systems, one of which went on to intensify into to a 'rare' cyclone Asna in the Arabian Sea on August 30.

— As a result of frequent low pressure systems, the country remained affected by a total of 16.5 low pressure-affected days in August.

— Similarly, atleast two geographical regions — southern peninsular India and central India — experienced the warmest August in 123 years.

— At the end of three months of the southwest monsoon season, the country had recorded 749mm, which was a 7 per cent surplus. Last month, the country experienced a total of 753 rainfall incidents categorized as 'very' heavy (115.6 – 204.4mm in 24-hours), the second highest recorded since 2020 (1,008).

— A comparison of August rainfall over India for the past six years showed that the monthly rainfall performance was the highest in 2019 followed by 2024.



— The low pressure systems mainly were responsible for causing extremely heavy rainfall (more than 200mm in 24 hours) over Tripura, Rajasthan and Gujarat during the latter half of the month.

**For Your Information:**

— India’s weather department is set to get a massive upgrade of its forecasting capabilities that will enable it to make localised and extreme-weather predictions with far greater accuracy.

#### IMD’S COLOUR-CODED WEATHER ALERTS

IMD issued ‘red alert’ in Gujarat due to heavy rainfall and severe waterlogging. India Meteorological Department (IMD) issues colour-coded weather alerts from time to time during the monsoon. These keep citizens informed and help in greater preparedness in times of unpredictable weather conditions.

1. ‘Green’ stands for ‘No warning’: no action needs to be taken by the authorities, and the forecast is of light to moderate rain. According to the weather department, 15.6 mm to 64.4 mm rain is considered “moderate”.
2. ‘Yellow’ alert signifies “Watch”, and authorities are advised to “Be updated” on the situation. According to the weather department, 64.5 mm to 115.5 mm rain is considered “heavy”.
3. ‘Orange’ warning stands for “Alert”, and authorities are expected to “Be prepared”. The forecast during an Orange warning is of heavy to very heavy rainfall. According to IMD, 115.6 mm to 204.4 mm rain is considered “very heavy”.
4. ‘Red’ alert stands for “Warning”, and asks authorities to “Take action”. The forecast is for extremely heavy rainfall. The IMD, however, clarifies that “Red colour warning does not mean ‘Red Alert’,” and that it only means “take action”. According to IMD, more than 204.5 mm rain is considered “extremely heavy”.

India’s weather department is set to get a massive upgrade of its forecasting capabilities that will enable it to make localised and extreme-weather predictions with far greater accuracy.

A new mission to improve weather forecasting, with a budget of at least Rs 10,000 crore is expected to be launched soon, The Indian Express has learnt. It is likely to be several times bigger than Monsoon Mission, launched in 2012, that has resulted in a noticeable uplift in the capabilities of the India Meteorological Department (IMD).

Previous upgrades to the weather forecasting system, including the Monsoon Mission, have focused mainly at improving the infrastructure — more instruments and better computing power.

The new mission is expected to focus on developing more accurate computer simulation models that will be tailor-made for India and would account for climate change scenarios, The Indian Express has learnt.

The mission would also further strengthen installation of more sophisticated instruments like Doppler radars, focus on greater integration of artificial intelligence and machine learning (AI/ML) in weather forecasting.



India already has three satellites in space — INSAT-3D, INSAT-3DR and INSAT-3DS —that are used mainly for meteorological observations. Of these, INSAT-3D and INSAT-3DR have been in space for over 8 years, and nearly completed their mission lives. INSAT-3DS was launched earlier this year. The next generation of meteorological satellites, possibly in INSAT-4 series, are already under development. These satellites would be equipped with latest technologies and designed to produce very high-resolution data to feed into weather forecasts.

#### ASSAM CITES NATIONAL INTEREST, ALLOWS VEDANTA PROJECT IN GIBBON HABITAT

Citing national interest, the Assam wildlife department has recommended to the Centre that forest clearance be granted to a Cairn Oil and Gas proposal for oil and gas exploration in the eco-sensitive zone (ESZ) of the Hollongapar Gibbon wildlife sanctuary, home to the endangered Hoolock Gibbon and wild elephants, official records show.

— Cairn Oil and Gas, Vedanta’s subsidiary, has sought diversion of 4.49 hectares of forest land for oil and gas exploration drilling in Jorhat, Assam, and is currently pending before the Union Environment Ministry’s Forest Advisory Committee (FAC).

— FAC had last month sought the state Chief Wildlife Warden’s views on the project from a wildlife conservation point of view.

— “As the project is of national interest, it may be recommended for granting Forest Clearance subject to the following conditions,” the Chief Wildlife Warden said.

— Among the four conditions mentioned, the top wildlife officer said that the exploration work should happen with minimal tree felling without causing “adverse impact” to “wild animals and their habitat.”

#### **For Your Information:**

— The proposed infra upgrade in the Great Nicobar Project has been opposed on grounds of the threat it poses to the ecology of the islands. The opposition has focused on the potentially devastating impact on the Shompen, a particularly vulnerable tribal group (PVTG) of hunter-gatherers with an estimated population of a few hundred individuals who live in a tribal reserve on the island.

— It has been alleged that the project violates the rights of the tribal population, and will impact the island’s ecology with the felling of nearly a million trees. It is feared that the port project will destroy coral reefs with spinoff effects on the local marine ecosystem, and pose a threat to the terrestrial Nicobar Megapode bird and leatherback turtles who nest in the Galathea Bay area.

#### FINGERS CROSSED OVER KUNO CHEETAH ‘DROWNING’ AMID FEARS OF POISONING

Earlier this week, Pawan, the only cheetah, ranging outside the enclosures in Kuno National Park of Madhya Pradesh, was reported to have died by drowning. Officials and researchers at Cheetah Project, under which cheetahs, like Pawan, are being brought to India from Africa, say that the circumstances of the cheetah’s death raise questions.

— The Cheetah Project’s brightest silver lining, among multiple setbacks, has been its success in avoiding man-animal conflict. A death by poisoning could challenge that exceptional run as the



project approaches its second anniversary and pose a fresh challenge for the cheetahs waiting to be released in the wild.

**For Your Information:**

— Cheetahs are the fastest land animals and can, in short sprints on open ground, reach speeds in excess of 100 kph. Asiatic Cheetahs were once abundant in India but their numbers dwindled over the centuries due to loss of habitat and widespread hunting. The last cheetah in the country died in 1952.

**INDIA ADDS 3 NEW RAMSAR SITES: WHAT ARE WETLANDS, WHY DO THEY MATTER FOR THE ENVIRONMENT?**

Union Environment Minister Bhupender Yadav announced three new Ramsar sites in Tamil Nadu and Madhya Pradesh earlier this month, taking the total of such sites in India to 85.

— The new additions are the Nanjarayan Bird Sanctuary and the Kazhuveli Bird Sanctuary in Tamil Nadu, and the Tawa Reservoir in Madhya Pradesh.

— **Ramsar sites** are also known as wetlands of international importance. The Ramsar convention, which led to their establishment, has been a landmark in raising awareness around this key ecosystem.

— According to the convention, wetlands are defined as “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres”.

— Wetlands help regulate climate conditions through carbon sequestration, that is, carbon storage from the atmosphere. The plant communities and soil in wetlands capture carbon instead of releasing it to the atmosphere as carbon dioxide, one of the major drivers of global warming.

— According to Wildfowl & Wetlands Trust, the main threats plaguing wetlands are: Unsustainable development, Pollution, Invasive species, and Climate change.

**For Your Information:**

— The Ramsar Convention is an intergovernmental treaty signed in 1971 in Ramsar, Iran. It encourages the protection and conservation of wetlands worldwide by designating them as such.

— Organisations like the International Union for Conservation of Nature, the World Wide Fund for Nature, and other environmental agencies are associated with the treaty. It also has 172 signatory countries. They are obligated to create wetland reserves and promote the wise use of wetland habitats. India joined it in 1982, initially designating the Chilika Lake in Orissa and Keoladeo National Park in Rajasthan. Today, the country has among the highest number of Ramsar sites in Asia.

**SNOW DISAPPEARS FROM OM PARVAT FOR THE FIRST TIME: ‘CAN TRIGGER A CASCADE OF CHANGES’, SAYS EXPERT**

For the first time, Om Parvat, a revered mountain in Uttarakhand’s Vyas Valley known for its snow-clad appearance and distinctive ‘Om’ shape, was completely devoid of snow last week. This

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





unexpected phenomenon left visitors bewildered and concerned, as the hill, perched at an altitude of around 14,000 feet, has traditionally been blanketed in snow.

Director of GB Pant National Institute of Himalayan Environment, Sunil Nautiyal, explained the vanishing snow in the Himalayas. He pointed to rising temperatures in the region's fragile ecosystems, citing two main factors: the growing number of fuel-powered vehicles and the broader effects of global warming.

"To check this, we will have to determine the bearing capacity of all sensitive places of the high Himalayan region as well as rampant forest fires as carbon generated by forest fires is also damaging the sensitive spots in the Himalayan region," he told PTI.

While a fresh snowfall on Monday night brought some relief, the incident sheds light on the pressing environmental challenges facing the Himalayan region.

Dilip Kumar Rai, environmentalist, Sikkim, says, "The complete disappearance of snow from Om Parvat for the first time is a significant environmental marker, reflecting broader changes happening across the Himalayas."

#### **Specific factors have contributed to the complete disappearance of snow from Om Parvat**

In addition to rising temperatures, he states, changes in precipitation patterns have played a significant role. The Himalayan region has seen a shift from snowfall to rainfall, particularly during what were traditionally the colder months. This shift reduces the accumulation of snow on peaks like Om Parvat.

"Glacial retreat, reduced snowfall, and changes in monsoon patterns are all interconnected consequences of global warming and local environmental impacts. For Om Parvat, these broader changes mean that its snow cover is no longer stable, reflecting a larger crisis in the region's climate health," informs Rai.

#### **Impact of disappearance of snow on Om Parvat on the local ecosystem and biodiversity**

Snow cover plays a critical role in maintaining the ecological balance in high-altitude environments, and its absence can trigger a cascade of changes, admits Rai.

He notes, "Snow and glaciers act as natural reservoirs, slowly releasing water into rivers and streams as they melt. This meltwater is crucial for sustaining local flora and fauna, as well as for agriculture and drinking water. The absence of snow reduces this water availability, potentially leading to water stress during drier months and affecting both wildlife and human communities."

The unique alpine habitats that depend on cold conditions and consistent snow cover are at risk. Many plant and animal species are adapted to specific temperature ranges and moisture conditions, which are disrupted when snow disappears. This can, in turn, impact herbivores that feed on these plants and the predators that depend on those herbivores, creating a ripple effect through the food chain.

Rai adds, "Snow also protects the soil from erosion and helps maintain soil moisture. Without snow, the exposed ground is more susceptible to erosion, which can degrade the land and lead to loss of fertile soil. This further impacts plant growth and can exacerbate the decline in local biodiversity."



### Measures that can be taken

#### Some measures, as mentioned by Rai, include:

– Reducing Greenhouse Gas Emissions: Addressing climate change at the source by reducing greenhouse gas emissions is critical. This involves both global agreements like the Paris Agreement and local initiatives to shift towards renewable energy.

– Sustainable Tourism Practices: Implementing sustainable tourism practices can help mitigate some of the local environmental impacts. This includes promoting eco-friendly travel options, limiting the number of visitors during sensitive periods, and encouraging tourists to follow responsible behaviours.

Conservation and Reforestation: Protecting existing forests and undertaking reforestation projects can help absorb carbon dioxide and provide a buffer against climate impacts. Reforestation also helps stabilise soil, supports biodiversity, and improves local microclimates.

– Monitoring and Research: Increased monitoring and research into the specific changes happening in the Himalayas can help inform policy and conservation efforts. Understanding the precise factors driving snow loss on peaks like Om Parvat allows for targeted actions that address the most critical threats.

### A FEARLESS AUTHOR AND LAWYER WHO SPOKE TRUTH TO POWER

Ailing for a long time, Noorani, or Ghafoor bhai, as his friends called him, was laid to rest at a cemetery in Mumbai after Isha prayers. He was 94. Not one to call it quits, he was in the process of putting together a fresh book on the Supreme Court's Babri Masjid verdict, when death snatched him away.

A trained lawyer, he began his writing career in the early 1960s. He wrote long and passionately. Fearless and fair, he spoke truth to power. He called Narendra Modi the "Tughlaq" of our times for his Central Vista project in 2020 just as he had equated Indira Gandhi's actions with those of Adolf Hitler when writing about the Emergency. Likewise, on the jacket of his book, *The RSS: A Menace to India*, he made bold to reproduce Jawaharlal Nehru's quote on the ideological fountainhead of the BJP, writing, "It would appear that the declared objectives [of the RSS] have little to do with the real ones...these real objectives appear completely opposed to the decisions of the Indian Parliament...and the Constitution of India."

An authority on the Kashmir affairs, his views were equally profound on the Ayodhya mosque-temple dispute about which he did three books besides scores of columns over the years. Equally, he could quote any Article of the Constitution with natural ease and often drew parallels with the Constitution of other countries in his writings. He was not a trained historian, but his facts were seldom disputed, and his interpretations widely debated.

### SENIOR BUREAUCRAT T.V. SOMANATHAN TAKES CHARGE AS CABINET SECRETARY

Mr. Somanathan, a 1987-batch Indian Administrative Service (IAS) officer from the Tamil Nadu cadre, holds a PhD in Economics from Calcutta University. He has also completed the Executive Development Program of Harvard Business School, and is a Chartered Accountant, Cost Accountant, and Company Secretary.



He has served as Joint Secretary and Additional Secretary in the Prime Minister's Office. Prior to his joining as the Cabinet Secretary, he was holding the charge of Finance Secretary, and Secretary, Department of Expenditure.

In Tamil Nadu, he served many key positions such as Managing Director of Chennai Metro Rail Corporation Ltd., and Secretary to the Chief Minister. He was also the Additional Chief Secretary and Commissioner of Commercial Taxes during the crucial phase of roll-out of the Goods and Services Tax.

Mr. Somanathan has also served at multiple levels in the World Bank, including as Director between 2011 and 2015. He has published over 80 papers and articles in journals and newspapers on economics, finance and public policy, and is the author of three books.

## SHORT NEWS

### YUNUS LED BANGLADESH'S INTERIM GOVT LIFTS BAN ON JAMAAT E ISLAMI PARTY

The interim government of Bangladesh on Wednesday lifted the ban on Jamaat-e-Islami, the country's largest Islamist party. The ban had been imposed by former Prime Minister Sheikh Hasina, who was ousted amid widespread protests.

### UPSC AUTHORISED TO AUTHENTICATE AADHAAR CARDS OF EXAMINEES: GOVT

The government on Wednesday authorised the Union Public Service Commission to perform Aadhaar authentication of candidates for the 14 examinations conducted by it, including the Civil Services Examination.

Last month, the UPSC had floated a tender for "Aadhaar-based authentication and facial recognition of candidates, QR code scanning of e-Admit cards and live AI-based CCTV surveillance".

### SC PANEL STRESSED ON ENVIRONMENTAL STUDY FOR GANGOTRI ROUTE, BRO SAYS NOT NEEDED

The Border Roads Organisation (BRO) has told the Uttarakhand forest department and an Environment Ministry panel that the **Chardham road project** on the Gangotri-Dharasu route does not require either environment impact assessment (EIA) study or environmental clearance (EC), according to official records. The Gangotri-Dharasu route falls in the Bhagirathi Eco-Sensitive Zone (BESZ).

### TYPHOON SHANSHAN

— As Typhoon Shanshan made landfall in southern Japan, nearly 4 million people were asked to evacuate, and at least six people were killed in its aftermath.

— The storm made landfall in Kyushu on Thursday and has affected areas far beyond its center, including northern Hokkaido.



#### RAJAJI TIGER RESERVE

- Uttarakhand CM has handed over the charge of Rajaji Tiger Reserve to the officer who was ousted from Corbett Tiger Reserve (TR) after illegal tree felling and construction allegedly under his watch.
- It was named after the famous freedom fighter C.Rajgopalachari popularly known as “Rajaji”. The tiger reserve has spread across three major cities of Uttarakhand- Rishikesh, Dehradun, and Haridwar.

#### PACIFIC ISLANDS FORUM (PIF)

- The annual meeting of the Pacific Islands Forum (PIF) began on August 26 in Nuku’alofa, the capital of Tonga.
- PIF, formed in 1971, is an intergovernmental organisation which consists of 18 member states located in the Pacific region.
- Member countries are Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

#### MISSION RHUMI 2024

- Tamil Nadu-based startup Space Zone India, backed by Martin Group of Companies, launched its first reusable hybrid rocket, Mission Rhumi 2024 from Thiruvudanthai in Chennai’s scenic East Coast Road.
- It is the World’s first Mobile Launch of a Hybrid Rocket. It is carrying 3 Cube Satellites and 50 PICO Satellites at a maximum altitude from the mean sea level. These satellites will be collecting data for research purposes on Global warming and Climate change.

#### BIRD FLU

- Bird Flu has been detected in the two blocks of Odisha’s Puri district resulting in the culling of nearly 20,000 chickens.
- There are different strains of bird flu virus, which have been circulating for a very long time among at least 100 bird species.
- H5N1 is a type of influenza virus that causes severe respiratory disease in birds but has occasionally been known to jump to humans as well.
- Human infections with H5N1 were first reported in 1997 during a poultry outbreak in Hong Kong.

#### THE RAMON MAGSAYSAY AWARD

- The awardees of the 66th Ramon Magsaysay Awards were announced on August 31.





— The winners are Karma Phuntsho (Bhutan), Nguyen Thi Ngoc Phuong (Vietnam), Farwiza Farhan (Indonesia), Miyazaki Hayao (Japan), and the Rural Doctors Movement (Thailand).

— Hayao Miyazaki is considered one of the most renowned filmmakers in the history of animation. He co-founded Studio Ghibli in 1985 and is also popular for his works like “Kiki’s Delivery Service,” “Laputa: Castle in the Sky,” and “Porco Rosso,” among others.

#### DOCTOR HELPING VICTIMS OF ‘AGENT ORANGE’ DURING VIETNAM WAR WINS MAGSAYSAY

A Vietnamese doctor who has helped seek justice for victims of the powerful defoliant dioxin “Agent Orange” used by U.S. forces during the Vietnam War is among this year’s winners of the Ramon Magsaysay Awards — regarded as Asia’s version of the Nobel Prizes.

First given in 1958, the annual awards are named after a Philippine president who died in a 1957 plane crash, and honour “greatness of spirit” in selfless service to people across Asia.

#### JAGDISH TYTLER

— A court in Delhi has ordered the framing of charges against Congress leader Jagdish Tytler, almost 40 years after the 1984 anti-Sikh violence.

— In mid-May, 1984 Indira Gandhi authorised military action at the Golden Temple to neutralise militant preacher Jarnail Singh Bhindranwale. This operation was called Operation Blue Star.

— The aftermath of Operation Blue Star led to the assassination of PM Indira Gandhi by her two Sikh bodyguards leading to violence all over the country.

— In 2000, the government of Prime Minister Atal Bihari Vajpayee appointed a commission under former Supreme Court judge Justice G T Nanavati to submit a comprehensive report on the 1984 anti-Sikh violence. The commission made its submissions in 2005.

#### NATIONAL SPORTS DAY

— The National Sports Day is celebrated on August 29 in the memory of Dhyan Chand, the first superstar of Indian hockey, and arguably India’s first sporting superstar.

— Dhyan Singh, a prominent member of the Indian hockey team, played a crucial role in India’s first successful Olympic gold medal tally at the 1928, 1932, and 1936 Summer Olympics.

#### RAJKOT FORT, SINDHUDURG

— The 35-ft Chhatrapati Shivaji Maharaj statue at the Rajkot Fort in Maharashtra’s Sindhudurg district has collapsed.

— The statue was unveiled on December 4, 2023, during the Navy Day celebrations in Sindhudurg, which honoured the legacy of the Maratha Navy and Chhatrapati Shivaji Maharaj’s contributions to maritime defence and security.

— The statue sculptor is Jaideep Apte.

**BUSINESS & ECONOMICS****COTTON EXPORTS TO BANGLADESH HIT AS DHAKA'S WESTERN GARMENT ORDERS DRY UP**

The decline in orders from Bangladesh has had a spillover effect on the Indian textile industry, which supplies raw materials and other input items to Bangladesh. While fresh inquiries for garments are coming to India, Indian cotton exports to Bangladesh have begun to decline, industry executives said.

— Ahmed stated that much of the production is taking place in Dhaka and Chittagong, which are relatively isolated from the protests. There were disruptions earlier in August, but normalcy is returning, he said, adding that Western orders will eventually resume due to the favourable duty climate owing to Bangladesh's status as a least developed country (LDC).

— The Bangladeshi textile and garment industry, which accounts for over 80 per cent of Bangladesh's total export earnings and contributes approximately 11 per cent to the nation's GDP.

— Bangladesh's \$45 billion clothing industry, which employs over four million workers, was already affected due to the weakening electricity generation infrastructure, hit by higher input costs following the start of the Russia-Ukraine war and adverse weather events, according to S&P Global.

**For Your Information:**

— In trade terms, Bangladesh is India's biggest partner in the subcontinent, and India is Bangladesh's second biggest partner in Asia after China. Their total bilateral trade amounted to \$13 billion in the financial year 2023-24, according to the Union Ministry of Commerce.

— Bangladesh is the biggest export destination for India's cotton, accounting for 34.9% of India's total cotton exports (some \$2.4 billion in FY24). Other major Indian exports to Bangladesh are petroleum products and cereals.

— India's top import from Bangladesh are readymade garments, amounting to \$391 million in FY24. In recent years, Bangladesh has emerged as a major global hub for textiles.

**MOODY'S, FITCH FLAG CONCERNS ABOUT JOBS, PRIVATE INVESTMENTS**

Moody's Ratings on Thursday raised its India GDP growth forecast for 2024 by 0.4 percentage point to 7.2% citing signs of a revival in rural demand, while Fitch Ratings retained the country's long-term foreign-currency issuer rating at 'BBB-' with a stable outlook, even as it noted that fiscal metrics remained a credit weakness along with governance and GDP per capita trends.

"We have raised our real GDP growth projections for the Indian economy [and] now expect 7.2% real GDP growth in 2024, and 6.6% growth in 2025 versus our earlier estimate of 6.4%," Moody's said in a global update. "These forecast changes assume strong broad-based growth and we recognize potentially higher forecasts if the cyclical momentum, especially for private consumption, gains more traction."



Pointing to signs of a revival in rural demand, Moody's said it expects household consumption to grow as headline inflation eases toward the central bank's 4% target even though it noted that retail inflation's easing to 3.5% in July, was driven by "favourable base effects".

Asserting that the Indian economy was "in a sweet spot, with the mix of solid growth and moderating inflation," Moody's flagged that growth prospects over the medium- and longer-term would, however, "depend on how well the country can productively tap its substantial pool of labour." The extent to which the country ultimately reaped its demographic dividend would depend on the success of government policies for employment generation and skilling, it underlined.

#### 'Credit weakness'

Separately, Fitch Ratings noted that although India's strong medium-term growth outlook and achievement of deficit targets had improved prospects of a modest downtrend in government debt, fiscal metrics still remained a credit weakness as "deficits, debt, and debt service burden" were all high compared to its peers.

"Lagging structural metrics, including governance indicators and GDP per capita, also weigh on the rating," Fitch said.

Retaining its GDP growth estimate for 2024-25 at 7.2%, followed by 6.5% next year, Fitch pegged India's medium-term potential GDP growth at 6.2%, "underpinned by the infrastructure push, strong services sector, and solid private investment outlook".

While healthier bank and corporate balance sheets should pave the way for a positive investment cycle, Fitch said that a key risk was that the 'private investment cycle may not materialise due to subdued consumption, which would weigh on job creation and dampen potential benefits from India's demographic dividend'.

## GROWTH MATRIX

The first official gauge of the economy's performance so far in 2024-25 pegs real GDP growth at 6.7% between April and June, a five-quarter low and below the central bank's projection. The Reserve Bank of India (RBI), which expects a 7.2% GDP growth through 2024-25 following last year's 8.2% surge, had revised its estimate for Q1 from 7.2% to 7.1%, earlier this month. The actual numbers are underwhelming and mark a clear cooling in the economic momentum, although some base effects are in play. Growth in the Gross Value Added (GVA) in the economy came in higher at 6.8%, after a year of widening divergences with the GDP print. At the onset of this fiscal year, major hopes hinged on a normal monsoon boosting farm sector output and easing inflation, which could lift the weak rural demand and private consumption witnessed last year. Higher demand would bolster private firms' propensity to invest in new capacities, and ease the pressure on public spending to prop up growth. That the government would still ramp up capital expenditure by 17% to ₹11.11 lakh crore this year, while it waited for this narrative to unfold, was the other pillar underpinning this year's growth aspirations.

As things stand, this script is yet to fully play out. The stretched general election has sharply scuppered public capex, and the government will need to redouble efforts to meet its spending goals. The good news is that private consumption spends bounced to a six-quarter peak of 7.4%, partly thanks to easing headline inflation. But food prices remain elevated. The monsoon has been better than last year but a tad erratic and uneven, temporally as well as spatially. Farm GVA



growth has moved up to a four-quarter high of 2% but the next few weeks will determine whether the sector rebounds in earnest (and food inflation cools). Projections of above normal downpours in September may well affect standing kharif crops. This is a key monitorable for the RBI, whose independent monetary policy panel members have flagged a 1% GDP growth loss this year and next, if interest rate cuts are delayed. India may still grow 6.5% to 7% this year, but most expect growth to slip to 6.5% in 2025-26, with the medium-term potential hovering around that number. This is too slow for comfort. As top IMF official Gita Gopinath pointed out recently, policymakers need to urgently pursue meaningful reforms across all aspects of the economy, and improve the efficiency of its institutions and the judiciary. This is critical to lift its growth potential and fulfil hopes of creating gainful employment for its young, fast enough for India's demographics to yield a dividend.

## ANALYSING THE GENDER BUDGET OF 2024-25

### The story so far:

Women-led development remains at the core of announcements made by the Finance Minister (FM) in this year's Budget. This commitment to women empowerment was reflected in Budget allocations to pro-women programmes, as reported by the Gender Budget Statement (GBS). The GB reached 1% of GDP estimates in 2024-25 for the first time, and overall allocations currently stand at more than ₹3 lakh crore for pro-women programmes.

### What is the reason for the increase?

The GBS, since it was first introduced in 2005-06, consistently reported an average share of 5% of the total budgetary allocations, with marginal ups and downs. This year is special as the share of allocations to pro-women schemes stands at approximately 6.8% of the total budget expenditure for 2024-25, which is way above the usual trends and marks a positive departure from status quo.

The increase in GB allocations are driven by two factors. A part of this increase has been on account of the newly included Part 'C,' a third part in the GBS that reports pro-women schemes with less than 30% provisioning for women. The PM Kisan scheme in the agriculture sector has been reported in part C with an outlay of ₹15,000 crore. This is 25% of the total outlay of the programme. The second factor driving the overall increase is the increment in part A of the GBS. Part A reports expenditures in schemes with 100% allocation for women.

Part A had previously constituted 15-17% of overall allocations reported in the GBS till BE 2022-23. Since BE 2023-24, there was a sudden increase in the allocations in part A that raised the share of pro-women schemes with 100% allocations for women to almost 40% (figure 1). This was mainly due to a change in the reporting where the Pradhan Mantri Awas Yojana (PMAY) — rural and urban — started getting reflected in part A instead of part B. Part B of the GBS reports programmes with allocations of 30-99% for women. Hence, only a part of PMAY was reported earlier. Beginning last year, the entire allocation of ₹80,670 crore in PMAY for 2024-25BE has been reported under part A thus driving the up allocations. Such reporting of PMAY may not be entirely accurate as not all beneficiaries are women.

### Have there been other instances of over-reporting/under-reporting?

Over-reporting may also be found in other instances such as the PM Employment Generation Programme (PMEGP), which aims to assist entrepreneurs in setting up micro businesses in the





non-farm sector. The GBS reported an allocation of ₹920 crore or 40% of the total allocation to PMEGP, without providing any explanation for such reporting.

On the other hand, missing allocations often deflate the amount spent by programmes on women's needs. For example, this year for the first time the entire allocation to the National Rural Livelihoods Mission (NRLM) is reflected in part A of the GBS, indicating that 100% of its outlay is dedicated to women and girls, which is technically correct and should have been done earlier. In 2023-24BE, only 50% of the scheme's total outlay used to be reflected in part B of the GBS. The GBS this year has also correctly reported increased allocations for the Ministry of Electronics & IT. But it missed out reporting pro-women allocations in the schemes for women entrepreneurs such as PM Vishwakarma, SVANidhi, and Stand-Up India.

In another instance, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), which has the third highest allocation among schemes for women in the GBS, is currently reported under part B with ₹28,888.67 crore which is 33.6% of its total outlay. It is important to note that women constituted 59.3% of all person days under MGNREGA as of December 2023, and should have received commensurate wages from the total MGNREGA budget, yet only 33.6% gets reflected in the GBS.

#### What next?

These anomalies can be minimised by incorporating explanations for the entries made in the GBS. Incorporating explanations for allocations in GBS would not only ensure accounting accuracy but will help in gender audits and provide pathways for improved gender outcomes in government programmes. Several years of advocating for improved reporting in the GBS by experts is reflected in the inclusion of a third part. The above anomalies in reporting are reflections of the GBS still not having a scientific and systematic approach.

Efforts to reduce misreporting and improve the quality of the GBS is evident, but there is still a long way to go. The need for including rationale is also to maintain that detailed reporting is not a mere exercise in increasing the quantum of allocations reported for women's development — it is to ensure actual spending for women in all government programmes, that are well planned and designed to include women's needs from its inception. Gender responsive budgeting is a powerful tool to close the gender gaps in an economy.

### INDIANS WHO MIGRATE ABROAD DOUBLE THEIR INCOMES

Indians who migrate abroad often experience more than a 100% increase in their income levels whereas Indians who continue to work in their homeland often have to wait for over 20 years to get such a hike. This explains why most Indians who go abroad do not return home even if they benefit from a wage premium on doing so. These conclusions are based on a recent World Bank report titled 'Migrants, Refugees and Societies'.

Indians who migrate abroad experience an average 118% increase in their income levels. International migrants from Bangladesh and Ghana experience a 210% and 153% increase in income, respectively. The report states that one key driver for economic migration is the wage gap between the origin and destination country. A truck driver in Canada earns five times more than a truck driver in Mexico, even after adjusting for the difference in cost of living. Nurses in Germany earn nearly seven times more than nurses in the Philippines.



While the absolute gains in incomes after migration are higher for high-skilled workers, low-skilled workers also experience a multi-fold increase in income. Chart 2 shows the income gains for low-skilled workers who migrate to the U.S. The incomes of low-skilled Indians who migrate to the U.S. increase by 493%. The incomes of low-skilled migrants from Nigeria and Yemen increase by about 1,500%, the highest rise.

The incomes of low-skilled Indians who migrate to the Gulf countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) surge by 118%. Indians who migrate to the UAE specifically experience a 298% increase. This calculation doesn't adjust incomes for purchasing power parity because most of the spending occurred in the origin country through remittances. About 85% of the Indian migrants' earnings in UAE are spent in India.

The potential gains in income are highest when people move from low to high-income countries. A non-migrant from India would need 24 years of economic growth to match the gains made by an Indian who migrated to a high-income country, while a non-migrant from Bangladesh or Ghana would need 43 years and one from the Philippines would need 78 years. Chart 4 shows the number of years it would take for non-migrants in origin countries to match the economic gains made by migrants who moved to high-income countries.

The report states that about 40% of all migrants eventually return to their country of origin. However, the number varies based on destination. All migrants leave Gulf Cooperation Council countries. About 20% to 50% of migrants leave OECD countries within five to 10 years of arrival or move to a third country. Less than 20% of migrants leave the U.S. Those who do are mostly from high-income regions such as Western Europe, Canada, Australia, and New Zealand — in these cases, the return rates are over 40%. The return rate of Asian migrants in the U.S. is about 20%. Chart 5 shows the share of migrants who leave the U.S., by gender and region of origin.

Temporary migrants who return voluntarily after staying abroad turn out to be better off than before they left. Migrants benefit from a wage premium on coming back, especially if they are high-skilled workers. However, those who are forced to return face poorer socio-economic outcomes. On average, less than 2% of migrants are forced to return from the U.S., Canada, European Union, Japan, and Korea every year.

## SCRAPPING UNEMPLOYMENT DOLE SPARKS PROTESTS, UNREST IN RAJASTHAN

A decision by the Bharatiya Janata Party (BJP) government in Rajasthan, shortly after it came to power in December 2023, to discontinue the previous Congress regime's Rajiv Gandhi Yuva Mitra Internship Scheme and halt the recruitment of Mahatma Gandhi Seva Preraks has left more than 5,000 youths unemployed. The move has worsened the unemployment situation in Rajasthan, which is among the top five States with joblessness.

Ending both schemes has directly impacted those who were getting honorariums for their work, raising concerns about the decision's potential social and economic repercussions. The Rajiv Gandhi Yuva Mitras were young graduates placed in various government departments to publicise their welfare schemes. They received a monthly stipend of ₹17,500.

### **New jobs scheme**

After prolonged protests by those who lost their jobs, supported by the Opposition Congress, the government recently agreed to replace the two schemes with a new one - the Chief Minister's Fellowship Programme. But this episode highlighted Rajasthan's grim unemployment situation.

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Data from the Periodic Labour Force Survey (PLFS), shows Rajasthan's unemployment rate among those 15 years and older to have reduced marginally from 4.7% in 2020-21 and 2021-22 to 4.4% in 2022-23. More than 18.40 lakh unemployed candidates are registered with the government's Department of Skill, Employment and Entrepreneurship.

While the department's FY24 annual report states that 6.38 lakh candidates were paid a monthly unemployment dole of ₹4,500 between February 1, 2019, when the scheme was introduced and December 31, 2023, recipients have disputed it, saying payments were irregular and were conditional on meeting several difficult criteria.

#### CABINET APPROVES SETTING UP OF 12 INDUSTRIAL SMART CITIES ACROSS 10 STATES

The Cabinet Committee on Economic Affairs chaired by Prime Minister Narendra Modi on Wednesday approved setting up of 12 industrial smart cities under the National Industrial Corridor Development Programme (NICDP) with an estimated investment of Rs. 28,602 crore.

— The project spans across 10 states and is strategically planned along six major corridors. These industrial areas will be located in Khurpia in Uttarakhand, Rajpura-Patiala in Punjab, Dighi in Maharashtra, Palakkad in Kerala, Agra and Prayagraj in Uttar Pradesh, Gaya in Bihar, Zaheerabad in Telangana, Orvakal and Kopparthi in Andhra Pradesh and Jodhpur-Pali in Rajasthan.

#### Highlights of NICDP

— Strategic investments- to foster a vibrant industrial ecosystem by facilitating investments from both large anchor industries and Micro, Small, and Medium Enterprises (MSMEs).

— Smart cities and modern infrastructure- greenfield smart cities of global standards to be built "ahead of demand" on the 'plug-n-play' and 'walk-to-work' concepts.

— Area approach on PM GatiShakti- the projects will feature multi-modal connectivity infrastructure, ensuring seamless movement of people, goods, and services.

— Vision for a 'Viksit Bharat'- positioning India as a strong player in the Global Value Chains (GVC) and aligns with the broader objective of creating an 'Atmanirbhar Bharat' or a self-reliant India

— Economic impact and employment generation- an estimated 1 million direct jobs and up to 3 million indirect jobs being created through planned industrialization

— Commitment to sustainable development- designed with a focus on sustainability, incorporating ICT-enabled utilities and green technologies to minimize environmental impact.

#### For Your Information

— The Union Cabinet expanded the scope of the credit scheme at subsidised interest rate under the ₹1 lakh crore Agriculture Infrastructure Fund (AIF). It will strengthen the farm related infrastructure facilities in the country.

#### MIDDLE PATH

The Centre has restored guaranteed pensions for its employees, meeting their demand halfway, and weakly trying to hold on to principles of fiscal prudence. Pension schemes around the world, whether contributory and market linked or underwritten by the exchequer, are facing a crisis, due



to multiple factors, including demographic reasons. According to the Reserve Bank of India, the total Budget estimates of various States and Union Territories for pension in 2023-24 was ₹5,22,105.4 crore, which is between 6%-21% of their total revenue receipts. Pensioners argue that it is their deferred wages. It can also be argued that pensions from the exchequer are at the cost of future generations. Governments are outsourcing jobs through contracts, and resorting to innovations such as Agnipath — a short service scheme for the military services — and the ballooning of pension bills is among the reasons that drive such measures. Governments are also leaving posts unfilled. All such measures are leading to two things. First, it negatively affects state capacity, and second, it reduces avenues for government and public sector jobs for India's expanding number of young job seekers. The New Pension Scheme (NPS), which was market-linked and managed by an autonomous entity, was introduced during the stock market boom. Two decades later, when people began retiring under the NPS — those who joined after January 1, 2004 — it turned out that they were receiving much less than what they would have got under the old scheme.

With the Congress making the restoration of the old scheme a central piece of its politics, the BJP was pushed to the corner. A committee led by former Finance Secretary and Cabinet Secretary-designate T.V. Somanathan devised a middle path that involves employee contributions and enhanced share from the Centre. The Unified Pension Scheme (UPS), approved by the Cabinet, promises a pension of 50% of the average basic pay of the last 12 months before retirement and a minimum pension of ₹10,000 for those who worked for at least 10 years. The Centre's share towards the scheme was increased from 14% under the NPS to 18.5%, which Prime Minister Narendra Modi has said will ensure government employees dignity and financial security. The BJP and the government should note that no reform can be sustainable without broad political consensus. Social security for older people must cover the widest segment of the population. Government employees are an organised pressure group, and having managed to restore their guaranteed pension, they should wholeheartedly welcome the UPS, rather than protest against employee contribution.

#### EXPRESS VIEW ON JAN DHAN YOJANA: FOR THE UNDERSERVED

Over the past decade, there has been a concerted attempt by the government to bring the unbanked sections of the population into the ambit of the formal financial system. The launch of the Pradhan Mantri Jan Dhan Yojana in August 2014 was a significant step towards that end. As per the latest data, a staggering 53.1 crore accounts have been opened under the scheme. The Jan Dhan Yojana has not only helped narrow the gap in access to the formal banking system that existed between rural and urban areas — of all the accounts opened under the scheme, around 67 per cent are in rural/semi-urban areas — but has also helped bridge the gender gap. Roughly 56 per cent of the new account holders are women. The benefits that have accrued from this scheme extend beyond the bank account.

The acceleration in the pace of financial inclusion, coupled with the Aadhaar platform, the dramatic expansion in the use of mobile phones, and the reduction in telecom tariffs that have allowed millions to avail data services more cheaply have had far-reaching socio-economic and welfare implications. The JAM trinity (Jan Dhan, Aadhaar and mobile) has enabled the government to shift to a more efficient system for transferring benefits directly to beneficiaries. It has helped ensure more accurate targeting, while at the same time helping reduce leakages from the system. DBT is now being used in hundreds of schemes across various government departments and ministries — as per government data, total cumulative transfers amount to Rs 38.5 lakh crore.





This architecture has also been used by the government to provide support to citizens during times of distress. For instance, during the initial days of the pandemic, the government had transferred Rs 500 to 20 crore women Jan Dhan account holders. The JAM framework also forms an integral part of the Unified Payments Interface which has transformed the payment systems in the country, leading to significant economic gains. In July, 14.4 billion transactions were processed through this platform as per data from NPCI. A significant share of these UPI transactions are of a lower ticket size — 85 per cent of peer to merchant and 56 per cent of peer to peer transactions are of less than Rs 500 — which indicates that the changes in the country’s payment systems have eased the ability of households, even low income ones, to engage in formal financial transactions in their daily lives.

The challenge for the banking system has been to manage the costs associated with the opening and servicing of these accounts. There is also a need to focus on financial products and services that are tailored to the needs of households at the lower end of the income distribution, keeping in mind their irregular and uncertain income streams and the lack of collateral. In this regard, the new architecture — Unified Lending Interface — could play a role in servicing the segments that are still left out.

## THE EASE OF FINANCING

“The Pradhan Mantri MUDRA Yojana (PMMY) was launched in 2015 by the Narendra Modi government. The initiative, which focused on igniting entrepreneurship, provided collateral-free micro-loans up to Rs 10 lakh and supported numerous small and microenterprises. The Union Budget 2024 has increased the loan amount to Rs 20 lakh.”

— “The Budget has targeted the scheme’s Tarun category for enhancement, doubling the upper loan limit to Rs 20 lakh. The move is set to benefit those who have already availed of and repaid previous MUDRA loans under this category. It is time to move towards a new version of the scheme – MUDRA 2.0.”

— “Its inclusive approach is a key feature of the scheme. About 69 per cent of the MUDRA loan accounts are held by women, and 51 per cent belong to SC/ST and OBC entrepreneurs.”

— “The initiative has also been crucial in creating jobs, especially in rural and semi-urban areas. It has encouraged self-employment and supported the development of small businesses.”

— “Despite its success, MUDRA 1.0 faced several challenges. One critical issue was ensuring that benefits reached the intended target groups, particularly the smallest and most marginalised entrepreneurs.”

— “Inadequate monitoring and implementation led to leakages and misuse of funds. The higher NPAs under the Shishu and Kishore categories are due to a lack of business knowledge and skills among early-stage entrepreneur...The limited financial literacy of beneficiaries was another significant challenge.”

— “In light of this experience, MUDRA 2.0 should widen its scope, improve its effectiveness, and establish a robust support system for micro-entrepreneurs. For this, a focused outreach and empowerment zone should be set up in rural and semi-urban areas.”

— “MUDRA 2.0 should introduce nationwide financial literacy programmes covering budgeting, savings, credit management, investment strategies, and digital literacy.”

**For Your Information:**

— Loans are classified as MUDRA loans under PMMY. Commercial Banks, RRBs, Small Finance Banks, MFIs and NBFCs can disburse these MUDRA loans. Three products namely ‘Shishu’, ‘Kishore’ and ‘Tarun’ were created under to signify the stage of development, funding needs of the beneficiary and also provide a reference point for the next phase of growth.

**EXPRESS VIEW: A TIMELY WARNING ON SME STOCKS**

The Indian stock markets continue to climb upwards. Since the beginning of this year, the BSE Sensex is up almost 14 per cent. Investor enthusiasm is, however, not confined to the larger companies, the smaller companies are also witnessing spectacular gains. The BSE Smallcap index has risen by 30 per cent year-to-date, while the mid cap index is up around 33 per cent. However, for some time now, there have been concerns that across segments, especially in the small and midcap space, certain stocks have been trading at valuations that are difficult to justify. In fact, earlier, some mutual funds had restricted flows into their small cap schemes. In March, Sebi Chairperson Madhabi Puri Buch had also spoken of the “froth” in certain market segments. But the euphoria continues. There are numerous examples of such investor exuberance. Recently Resourceful Automobiles, a Delhi-based company with only two showrooms and eight employees, came out with an initial public offering of Rs 11.99 crore. The issue was oversubscribed 418 times, with bids for around Rs 5,000 crore. In the case of Aesthetik Engineers, the company came out with an IPO of Rs 26.47 crore that was heavily oversubscribed with bids worth Rs 18,000 crore. Since April, 108 SME IPOs have hit the market — of these, 99 listed at a premium, and in some cases, there were huge gains.

Questions have been raised by market analysts over the participants in some of the heavily oversubscribed SME IPOs, about whether they are “causing frenzy” in the hope of eventually dumping their shares on “gullible retail investors”. The worry has been that considering the relatively smaller float available in the case of smaller companies, they may be easier to manipulate. Earlier this year, the SEBI Chairperson had spoken on the possibility of price manipulation in IPOs and trading of small and medium enterprises. On Wednesday, the stock market regulator also said that some SME companies and/or their promoters have post-listing painted an “unrealistic” assessment of their operations to create a positive narrative about the company. This is meant to induce investors to buy the stocks, allowing the promoters to offload their shares at higher prices. SEBI has asked investors to be “watchful”.

In July, the NSE imposed a cap of 90 per cent on the issue price of SME IPOs. However, continued vigilance is required. As millions of new investors enter the markets — as per a report, the total number of demat accounts has increased to 16.2 crore as of June — the guiding objective should be to safeguard investor interests and protect the integrity of markets.

**ANIL AMBANI, OTHERS MAY FACE FURTHER ACTION IN RHFL CASE**

For promoters and group chairpersons facing charges of using their influence over Key Managerial Personnel (KMP) to divert funds from their listed companies for personal gain, the latest SEBI order in the Reliance Home Finance Ltd. (RHFL) case will surely serve as a salutary warning.

Reliance ADA Group chairman Anil Ambani, who has been barred from the markets and fined by the markets regulator Securities & Exchange Board of India (SEBI) for his alleged role in diversion



of RHFL's funds, as well as the sanctioned KMP of RHFL now face the prospect of further regulatory action in the coming days, the order passed by SEBI's Whole Time Member Ananth Narayan G shows.

## DGTR RECOMMENDS ANTI-DUMPING DUTY ON ALUMINIUM FOILS IMPORTED FROM CHINA

The Directorate General of Trade Remedies (DGTR) under the Ministry of Commerce and Industry on Friday recommended the imposition of an anti-dumping duty on aluminium foils imported from China, after observing that Chinese imports had captured 30 per cent of the Indian market despite sufficient domestic capacity.

— Anti-dumping investigations are conducted by countries to determine whether domestic industries have been harmed due to a surge in cheap imports. The Ministry of Finance makes the final decision on whether to impose duties.

— The DGTR stated that imports of “aluminium foil up to 80 microns, excluding aluminium foil below 5.5 microns for non-capacitor applications,” are undercutting the prices of the domestic industry. This price undercutting has forced the domestic industry to reduce its selling price below the cost of production, the DGTR said.

— The industry warned that an anti-dumping duty would increase the cost of downstream finished goods, making the Indian downstream industry unviable. Moreover, imports of finished goods from other countries would increase, causing injury to the flexible packaging industry in India.

— Despite several efforts to curb imports from China, goods are increasingly making their way from the neighbouring country. Imports from China have already crossed \$60 billion during the first seven months of 2024, which is 10 per cent higher than the \$55 billion recorded during the same period last year.

### **For Your Information:**

— Dumping is an unfair trade practice that occurs when goods are exported from one country to another at a price lower than their normal value. DGTR investigates cases of anti-dumping brought forward by industry players and recommends an ADD and the margin of duty in case of a consequential serious injury to the domestic industry.

— CBIC has to accept or refuse DGTR's ADD recommendation within three months from the date of the final hearing. The imposition of anti-dumping duties is a legitimate trade remedial measure under the World Trade Organization (WTO) rules.

## 'BOROLINE' VS 'BOROBEAUTY': DELHI HC RULES IN FAVOUR OF POPULAR ANTISEPTIC CREAM IN TRADEMARK CASE

It was in the 1920s, at the height of the Swadeshi Movement in pre-Independence India, that a humble over-the-counter antiseptic ointment was created by Gour Mohan Gupta. Boroline — packaged in a slim dark green tube and a small black cap — soon became a household staple used for skin ailments and infections.



Over a century later, its parent company, G D Pharmaceuticals, found itself engaged in a trademark war with another cosmetic brand selling similarly designed products labelled 'Borobeauty'. The case went to the Delhi High Court.

In an order issued earlier this month, the HC issued a decree of permanent injunction in favour of GD Pharmaceuticals' 'Boroline' and held the Boroline trademark as a "well-known trademark".

The court of Justice Mini Pushkarna on August 7 directed Cento Products (India), "its partners, proprietors, servants, agents, and all others in active concert or participation with them," from manufacturing, selling, offering for sale, advertising, directly or indirectly dealing in products bearing the mark with the name 'BOROBEAUTY'. It also directed it to change its trade dress and trademark, "which shall be totally distinct and different from the plaintiff's well-known trademark and trade dress".

The court ruled that Cento Products (India) "shall not use the trade dress of dark green colour", which is used by GD Pharmaceuticals' Boroline, and that they shall adopt a new trade name "which would not include the prefix 'BORO' and would not be similar to the trademark of the plaintiff, 'BOROLINE'".

Additionally, Cento Products (India) was also directed to pay Rs 2 lakh to GD Pharmaceuticals for the long pendency of the copyright infringement and trademark suit that was moved by the latter in 2019.

The court also held that the trademark Boroline "qualifies as a well-known trademark".

To evidence Boroline's long-lasting market presence, the court was also provided with a newspaper clip from August 15, 1947 — the day India became independent — containing a Boroline ad, which the court reproduced in its order.

GD Pharmaceuticals had submitted that their products are "not only known for their superior quality, but are well recognised and immensely popular amongst doctors, chemists, patients and over three generations of loyal consumers, since 1929".

Additionally, it was also submitted that due to the cream's "extensive and continuous use," the Boroline trademark is recognised not only throughout the geographical extent of India but also recognised in other countries, with the trademark registered in countries like Oman, Turkey, Bangladesh, and UAE.

#### TO CONSOLIDATE CHIPMAKING GAINS, HOW INDIA PLANS TO SPEND \$15BN IN NEXT PHASE

The government plans to increase the funding outlay for the second phase of its chip manufacturing incentive policy to \$15 billion from the \$10 billion it had committed for the first phase.

— Tata is building India's first commercial fabrication plant along with its Taiwanese partner Powerchip Semiconductor Manufacturing Corporation (PSMC) for a cost of more than Rs 91,000 crore. The government has also approved three assembly and testing plants, which are called ATMP and OSAT in chip parlance.

— The four projects will together cost more than Rs 1.48 lakh crore, and the central government will spend almost Rs 59,000 crore in capex subsidies.

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





— India currently has virtually no footprint in manufacturing semiconductor chips. The bulk of the global chip production happens in countries like Taiwan and the United States.

— Domestic fabrication plants will boost India's economic and strategic imperatives, given that chips are used in practically all downstream industries from rockets to power steering in cars to kitchen toasters.

**For Your Information:**

— Most modern-day semiconductors are integrated circuits, also referred to as 'chips'... Fabs are the highly specialised semiconductor manufacturing facilities that print the miniaturised integrated circuits from the chip design into the silicon wafers.

— India has ambitions to become a major chip hub on the lines of the United States, Taiwan and South Korea, and has been courting foreign companies to set up operations in the country.

— India's chip incentive plans are focused on boosting all three aspects of the semiconductor ecosystem – packaging, assembly and testing facilities (called ATMP and OSAT units), and full-scale foundries that can manufacture chips.

**VISTARA WILL SOON BE AIR INDIA: HOW WILL MERGER AFFECT FLYERS?**

The decade-old Vistara, an airline reputed for its excellent product and service quality, will fly into the sunset in November after its operational merger with the Tata group's flagship airline Air India.

An announcement by both the airlines on Friday said that Vistara will continue to operate flights only till November 11. After this date, all Vistara flights will be operated by Air India.

**DreamIAS**



## LIFE & SCIENCE

### CHANDRAYAAN-3 ROVER FINDINGS SUGGEST LAYERED CRUST FORMATION ON THE MOON

Studies carried by one of the instruments on the Chandrayaan-3 mission have produced new evidence to support the most widely accepted hypothesis on the early evolution of the Moon which suggests that the lunar surface was covered with a sea of molten material, or magma, in its early periods.

— The Alpha Particle X-ray Spectrometer (APXS), one of two instruments on the Chandrayaan-3 rover, has delivered the first information on the composition of top soil in the Moon's southern latitudes.

— According to a study published in the journal Nature, the soil in this previously unexplored region of the Moon was primarily made up of two types of rocks: one from magma, as expected, and the other likely from deeper layers of the lunar surface, which could provide new insights into its evolution.

#### **For Your Information:**

— The Moon is believed to have formed as a result of a collision between a massive asteroid and Earth approximately 4.2 to 4.3 billion years ago.

— The Moon is believed to have been composed of magma during its early life. As it cooled over millions of years, heavier silicon and magnesium-rich minerals such as Olivine and Pyroxene sunk and created the Moon's interior layers. The outer layer was made up of lighter minerals containing calcium and sodium compounds.

#### **Objectives of the Mission**

According to ISRO, the mission's three objectives were:

- (i) to demonstrate a safe and soft landing on the lunar surface,
- (ii) to demonstrate a Rover roving on the Moon and
- (iii) to conduct in-situ scientific experiments.

Many portions of the moon's polar zone are entirely black, with temperatures dropping below 230 degrees Celsius. This complicates the operation of instruments. There are also other big craters scattered over the area.

As a result, the Moon's polar regions have remained untouched. The unusually frigid temperatures may indicate that anything stuck in the location will remain frozen in time, with little alteration. The rocks and soil at the Moon's north and south poles may thus hold clues about the early Solar System.



## THE SECRET TO A LONG LIFE? THOSE WHO LIVED ONE CAN'T TELL YOU

Age, the ageing often say, is just a number. It is, perhaps, a form of consolation, this self-affirmation, as the inevitable ravages of life and time make their mark, and muscles, bones and even the mind begin to show signs of wear and tear. Maria Branyas Morera, at the age of 117, was the oldest person in the world till she died peacefully in her sleep last week in Spain. She had lived through two major pandemics — the Spanish Flu and Covid-19 — and witnessed two World Wars. And to everyone curious about the secret to her long life, she had told the Guinness Book of World Records, “order, tranquility, good connection with family and friends, contact with nature, emotional stability, no worries, no regrets, lots of positivity and staying away from toxic people”.

Self-preservation and a fear of death, ageing and irrelevance are perhaps at the core of complex living organisms. And while there is much to cherish and learn from the wisdom of elders, especially supercentenarians like Morera, they do not hold the secret to long life. Simply put, living beyond 110 — especially while retaining a modicum of physical and mental acuity — is so rare that there are no broadly applicable lessons to be drawn from people who cross that milestone. Some smoke, others swear that a glass or two of wine a day has kept them healthy. But there is no scientific evidence, no silver bullet, that guarantees longevity. As Morera herself put it, “I think longevity is also about being lucky.”

But there is something more important than living long that people can learn from the elderly — living well. In an age where information is unlimited, the thing most people lack is perspective. At a time when the “good life” is so often about consumption and accumulation, envy and anger, the lesson from Maria Branyas Morera’s life is not about getting to 117 — it’s being happy along the way.

## SINGLE SENIORS IN SHANGHAI ARE SHOWING THE WAY ON LOVE

In Shanghai, the city with the most number of elderly people in a country that has the world’s largest ageing population, love at twilight is a glimmer of hope. Lonely hearts of a certain vintage are hanging out in the city’s largest park and in the cafe of a global furniture chain to nurture their social lives and to find romance and companionship. The “fever of first love”, as Daphne du Maurier wrote in *Rebecca*, cannot happen twice but, as the single seniors of Shanghai show, it doesn’t need to. When age has sanded down its sharp edges and vapourised the sharp top notes so that the mellow base notes can kick in, love remains just as vital — and necessary — a force.

Consider the global context: According to the United Nations World Social Report 2023, population ageing is an irreversible trend — with the number of people aged 65 and above projected to rise from 761 million in 2021 to 1.6 billion in 2050. The question of how to care for a ballooning population of senior citizens has been pondered on by governments in some parts of the world, notably Europe, China and Japan, for a few years now. Yet, the question of love and companionship for the elderly — an essential component of well-being — receives little attention, thanks primarily to the entrenched belief that romance is a youthful preoccupation.

The sexagenarians (and older citizens) of Shanghai and other parts of the world who are actively seeking out love on dating apps, social clubs and elsewhere are challenging such shallow assumptions. In India, too, there is a growing number of older citizens using specialised matchmaking services and dating apps, with one app reporting a 30 per cent spike in users aged 50 and above since 2020. Love, songwriters over the decades have stated over and over again, can’t wait. It shouldn’t have to.

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



## THE RIGHT TO DISCONNECT: LEISURE IS ENDANGERED, IT MUST BE PROTECTED

If one were to go by 21st century work culture, the most hotly-contested resource in the world is neither gold nor oil nor water — it is the ever-dwindling leisure time of the average worker. While employers try to move into the shrinking real estate of weekends and off-hours, some governments are acting in the interest of the beleaguered workers' work-life balance. The latest is Australia where, just this week, a "right to disconnect" law came into effect. Barring a few exceptions, such as genuine emergencies, employers will no longer be allowed to penalise workers who refuse to respond to work calls and texts when they are out of the office.

The arguments in favour of such laws — as enacted not only by Australia, but also France, Italy and Belgium — emerge from the larger leisure rights movement. They have even found some resonance in India — Member of Parliament Supriya Sule drafted a Private Member's Bill on the right to disconnect in 2018. While that Bill ultimately languished, it advanced the same argument as legislation elsewhere has: Even as technology has made it possible for newer, more liberating forms of work, like remote and hybrid work, to emerge, it has also allowed the dismantling of the walls that, until the invention of the smartphone, stood between work and leisure. The result is that burnout rates have been steadily rising, affecting not only employee well-being, but also, ultimately, company bottom lines.

Because the truth about leisure is this: A bit of rest and diversion not only makes workers more productive and creative, but also more motivated. Consider what Iceland learnt from nationwide trials from 2015 to 2019, when work hours were limited without reducing pay. Not only did workers experience much less stress and burnout, their productivity remained unaffected or even improved. Australia has joined the ranks of enlightened countries in this regard. It's about time the rest of the world caught up.

## REASONABLE LIMITS

That free speech is not absolute and is subject to certain restrictions for public order, morals and public health is something that has been codified in the Universal Declaration of Human Rights. The founder and chief executive officer of Telegram, Pavel Durov, is a technology creator who has emphasised absolute free speech on his platform and has built an anti-establishmentarian image by risking the wrath of nation-states in allowing dissidents to use the messaging application. His detention and arrest by French authorities, in connection with investigations related to criminal activity on the app, has raised the question if this has been done to provide a chilling effect on freedom of expression on the Internet. But the answer is more complicated. His laissez-faire approach to content on the app has meant that it is host also to extremism, drug dealers, scammers and, according to France, child pornography as well. Mr. Durov has said, "privacy...is more important than our fear of bad things happening ...and that, to be truly free, you should be ready to risk everything for freedom". But can it be done to override the responsibility to prevent consequences which could endanger people's safety and freedom? This is a key question to ask about messaging apps and "free speech absolutists" such as Mr. Durov.

Telegram is more than just a messaging app given some of its social networking features. While its encryption mechanisms allow for ease of access for dissidents and anti-state actors to use the app without scrutiny, it does not fully use "end to end" encryption — something that apps such as Signal do. This means that some messages related to criminal activity, disinformation, and child pornography can be read by Telegram; it can act on requests from law enforcement agencies if





needed. Telegram, in response to Mr. Durov's arrest, has said that its moderation "is within industry standards" and has questioned whether the platform/owner are liable or responsible for "abuse of that platform". That may well be the case, but if in investigations by France, the platform is seen to have wilfully refused to act upon requests to curb hate speech, disinformation and contents related to criminal activity, Mr. Durov cannot and should not escape the long arm of the law. In India, the baleful effects of misinformation on platforms such as WhatsApp were visible some years ago, before the application came up with certain restrictions. These helped tamp down the spread of misinformation. For Telegram to remain a free speech advocate and a platform, it must eschew absolutism and become more responsible in moderating content.

## CHILE'S ATACAMA SALT FLAT SINKING DUE TO LITHIUM MINING: WHAT A NEW STUDY SAYS

According to a new study, Chile's Atacama salt flat is sinking at a rate of 1 to 2 centimetres per year due to lithium brine extraction — a process in which salt-rich water is pumped to the surface and into a series of evaporation ponds to eventually obtain lithium.

The study, which was published in the journal *IEEE Transactions on Geoscience and Remote Sensing* last week, was carried out by researchers at the University of Chile.

In an interview with Reuters, Francisco Delgado, the lead author of the analysis, said that the sinking area is in the southwest part of the salt flat where lithium miners operate.

Lithium, also known as "white gold", is one of the most sought-after metals on Earth. It is used in rechargeable batteries, which power not only laptops and mobile phones but also electric vehicles — a crucial part of the world's plan to tackle climate change. However, over the years, research has shown that lithium mining has had severe environmental fallouts, especially in countries such as Chile which are the leading producers of the metal.

Here is a look at the findings of the new study and the impact of lithium mining on Chile's biodiversity.

### What does the new study say?

For their study, the researchers at the University of Chile analysed the satellite data collected between 2020 and 2023 to see deformations in the Earth's crust of Atacama salt flat — one of the largest sources of lithium in the world.

The researchers noted that the worst affected areas are those where mining companies are doing most of their pumping of lithium-rich brine.

That is happening because the pumping takes place at a faster rate than the recharge of aquifers, leading to subsidence, or the downward vertical movement of the Earth's surface, Delgado told Reuters.

The affected area measures approximately 8 km north to south and 5 km east to west, according to the study.

### What are the fallouts of lithium mining?

The brine evaporation method used to produce lithium requires massive quantities of fresh water, which is already scarce, especially in the Atacama Desert. In the Atacama, it takes 2,000 tons of



water to produce one ton of lithium, according to a 2020 study by Ingrid Garcés, a scientist at Chile’s University of Antofagasta. This leaves indigenous communities and wildlife living in the region parched.

Chemicals such as sulfuric acid and sodium hydroxide that are used for lithium extraction contaminate soil and water, poisoning ecosystems and endangering species.

A 2022 study found that lithium mining has led to a decline in the number of flamingos in the area — due to a drop in water levels in the Atacama, fewer flamingos are reproducing.

## NORTHERN BALD IBIS RETURNS FROM NEAR EXTINCTION

The northern bald ibis, hunted virtually to extinction by the 17th century, was revived by breeding and rewilding efforts over the last two decades.

But the birds — known for their distinctive black-and-iridescent green plumage, bald red head and long curved beak — do not instinctively know which direction to fly to migrate without the guidance of wild-born elders. So a team of scientists and conservationists stepped in as foster parents and flight instructors.

The northern bald ibis once soared over North Africa, the Arabian Peninsula, and much of Europe. The birds were also considered a delicacy and disappeared from Europe. These birds — known in German as Waldrapp — once soared over much of Europe, the Middle East, and northern Africa. By the 17th century, they were effectively hunted to extinction in the wild, with only a few colonies surviving in Morocco and Syria.

The efforts of biologist Johannes Fritz and the Waldrappteam, a conservation group in Austria, brought the Central European population from zero to almost 300 since the start of their project in 2002. The feat moved the species from a “critically endangered” classification to “endangered” and, Mr. Fritz says, is the first attempt to reintroduce a continentally extinct migratory bird species.

Though northern bald ibises still display the natural urge to migrate, they do not know which way to fly without the guidance of wild-born elders. The Waldrappteam’s early reintroduction attempts were largely unsuccessful because, without teaching the birds the migration route, most disappeared soon after release. Instead of returning to suitable wintering grounds in Italy, they flew in different directions and ultimately died. So the Waldrappteam stepped in as foster parents and flight instructors for the Central European population, which was made up of descendants from multiple zoo colonies and released into the wild in the hopes of creating a migratory group.

To prepare them for travel, the chicks are removed from their breeding colonies when they are just a few days old. They are taken to an aviary overseen by the foster parents in the hopes of “imprinting” — when the birds will bond with those humans to ultimately trust them along the migration route.

Barbara Steininger, a Waldrapp team foster mother, said she acts like “their bird mom.” “We feed them, we clean them, we clean their nests. We take good care of them and see that they are healthy birds,” she said. “But also we interact with them.”

Ms. Steininger and the other foster parents then sit on the back of a microlight aircraft, waving and shouting encouragement through a bullhorn as it flies through the air. The aircraft looks like



a flying go-kart with a giant fan on the back and a yellow parachute keeping it aloft. Still, three dozen birds follow the contraption, piloted by Mr. Fritz, as it sails over alpine meadows and foothills.

The first bird independently migrated back to Bavaria in 2011 from Tuscany. More have flown the route longer than 550 km each year, and the team hopes the Central European population will be more than 350 birds by 2028 and become self-sustaining.

## TRANSITION IN PLANTS

Scientists have found that developmental change from the vegetative to reproductive transition happens over a few days. During the transition, plants slow down the leaf growth and instead develop reproductive organs. This transition starts the process of nutrients in the leaves being diverted into the reproductive organs of the plant and their fruits and grains. Even in these highly controlled conditions, *Arabidopsis thaliana*— a kind of wild mustard— started showing signs of the developmental transition on different days. While the plants had the same chronological age, they were at different points along the path of plant ‘puberty’. The researchers identified specific genetic changes that correlated with the timing of this developmental change. The researchers also discovered that plants start the process of killing their leaves even before they can see visible reproductive structures. Like in the case of human growth, plants too grow in their unique way.

## SONOLUMINESCENCE: A LITTLE LIGHT

### What is it?

The human eye is adept at picking out the smallest glimmer of light in shadowed spaces and the faintest star in the heavens (but light pollution has made this very hard). Mysterious flashes of light have always piqued our interest — and this is perhaps where sonoluminescence was born.

When two German engineers were studying sonar — the use of sound to navigate, like bats — in 1934, they stumbled upon a strange phenomenon: when a small bubble trapped in a liquid is hit by powerful sound waves, it seems to produce a flash of light.

The cause turned out to be straightforward, if also fascinating: the alternating high- and low-pressure phases of sound waves caused the bubble to expand and collapse rapidly. During the collapse, the bubble compressed so intensely that the temperature inside soared to several thousand kelvin.

The extreme temperature caused gases within the bubble to ionise and release light energy in about a trillionth of a second.

We do not know how exactly this light is produced — yet.

The world has more mysteries than we like to admit.

Sonoluminescence is not restricted to labs. Pistol shrimp (family *Alpheidae*) possess a specialised claw that it can snap shut with incredible speed. The result is a jet of water moving so fast that it creates a low-pressure bubble in the water. And when this bubble collapses, it generates a loud sound, intense heat, and, if you’re lucky (or unlucky?) to be nearby, a fleeting flash of light.



## WHEN PHYSICS MERGED WITH BIOLOGY TO REVOLUTIONISE OPHTHALMOLOGY

Ophthalmologists, deeply familiar with the intricate workings of the eye, don't typically have the leisure time to spend in a physicist's lab studying LASER. So how did these two seemingly disparate fields merge to revolutionise vision correction in refractive errors and cataracts?

The word 'laser' is actually an acronym for 'Light Amplification by Stimulated Emission of Radiation', a phrase that encapsulates the physics underlying this transformative technology. The fundamental concept of stimulated emission was first introduced by Albert Einstein in 1917. He theorised that when an electron in an excited state drops to a lower energy level, it can release energy as a photon. If this photon interacts with another excited electron, it can stimulate the release of a second photon of identical energy, phase, and direction — a process that amplifies light.

It wasn't until 1960, however, this theory was practically realised. Theodore Maiman, a physicist at Hughes Research Laboratories, built the first working laser using a ruby crystal as the gain medium. The ruby laser emitted light at a specific wavelength (694 nm) in the red part of the spectrum and was the first of its kind to produce a concentrated beam of light with unique properties — coherence, monochromaticity, and the ability to be focused to a very small spot.

### Chirped Pulse Amplification

Another breakthrough came in the 1980s with the development of Chirped Pulse Amplification (CPA). This technique revolutionised the field of laser physics. Working at the University of Rochester, Gérard Mourou and his student Donna Strickland (the third woman to win a Nobel prize in physics) introduced CPA to amplify ultrashort laser pulses without damaging the amplifying material. Their innovation later earned them the Nobel Prize in Physics in 2018.

**But here the question still remains alive: how did physicists, who likely had little knowledge of eye anatomy, create a tool that would become vital in eye surgery?**

The answer lies in an accidental discovery that bridged the gap between the physics lab and the operating theatre.

A research assistant in Gérard Mourou's lab was accidentally struck by a laser beam in his eyes without wearing the goggles he was supposed to wear — a potentially dangerous situation. Seeking medical attention, the assistant visited an ophthalmologist.

But instead of focusing on treatment, the doctor who saw him became intensely curious about the physical qualities of the laser that had caused the injury, hitherto not witnessed in the clinic. The ophthalmologist was intrigued by the 'perfect' or precise damage to the retina in his eyes. This unusual interaction sparked a deeper investigation into the laser's potential, leading to the development of femtosecond ophthalmology.

This cross-disciplinary serendipitous accident — where a medical professional's inquisitiveness about a physics tool met the physicist's quest for practical applications — made room for perfect innovation. CPA allowed for the amplification of laser pulses in a previously-impossible way, opening the door to medical applications requiring extreme precision, such as in eye surgery.





Today, CPA-based lasers are at the heart of femtosurgery laser procedures, like the one I underwent for refraction correction. These lasers work by emitting pulses of light that last only a few quadrillionths of a second, making them extraordinarily precise.

The high-intensity, ultrashort pulses produced by CPA-based lasers allow for precise cornea reshaping with minimal damage to surrounding tissues, resulting in improved patient outcomes and faster recovery times.

This has also transformed cataract surgery, one of the most common surgical procedures worldwide. In traditional cataract surgery, a surgeon manually makes incisions in the eye and uses ultrasonic energy to break up the cloudy lens before replacing it with an artificial intraocular lens (IOL).

In laser-assisted cataract surgery, a femtosecond laser is used to create precise incisions and soften the lens, reducing the need for ultrasonic energy and allowing for more accurate placement of the IOL. This technology has improved the precision and safety of cataract surgery, leading to better outcomes and faster recovery times.

A femtosecond laser is an infrared laser with a wavelength of 1053nm used in eye surgeries, especially for its precision. It creates tiny, rapid bursts that break apart the tissue without damaging surrounding areas. Compared to the Nd laser, which operates in nanoseconds (10<sup>-9</sup> second), the femtosecond laser's pulse duration is much shorter — measured in femtoseconds (10<sup>-15</sup> second). This shorter duration significantly reduces the risk of damaging nearby tissues, making the femtosecond laser much safer for delicate procedures like corneal surgery. The femtosecond laser causes a million times less collateral damage than the Nd laser, allowing for extremely precise and safe surgeries. More than 10 million femtolaser surgeries have been performed globally so far using laser technology.

#### **Lasers in cancer therapy**

Moreover, the future of high-intensity lasers holds promise in cancer therapy. Researchers are exploring using these lasers to target and destroy cancerous cells with extreme precision, minimising damage to healthy tissues. By focusing the energy of an ultrashort laser pulse onto a tiny area, it's possible to induce a localised effect, such as generating shockwaves or heating, that can selectively destroy cancer cells. This approach is still in its experimental stages. It could one day lead to new, non-invasive treatments for cancer patients.

#### **A bright future ahead**

From accidental discoveries to intentional innovations, the story of laser technology continues to unfold whether in the operating theatre, the physics lab, or beyond. It's a reminder that sometimes, the most impactful innovations come from the unlikeliest of collaborations—where the physics of light meets the biology of sight, and curiosity knows no disciplinary bounds.

### **RED AND PROCESSED MEAT LINKED TO HIGHER TYPE 2 DIABETES RISK**

Consumption of processed meat and unprocessed red meat is associated with a higher type 2 diabetes risk across populations, an analysis of data from 1.97 million participants, published in the journal *The Lancet Diabetes and Endocrinology*, has found.



Global meat production has increased rapidly in recent decades and meat consumption exceeds dietary guidelines in many countries. Earlier research indicated that higher intakes of processed meat and unprocessed red meat are associated with an elevated risk of type 2 diabetes, but, the results have been variable and not conclusive.

Poultry such as chicken, turkey, or duck is often considered an alternative to processed meat or unprocessed red meat, but, fewer studies have examined the association between poultry consumption and type 2 diabetes. To determine the association between the consumption of processed meat, unprocessed red meat, and poultry, and type 2 diabetes, the team led by researchers at the University of Cambridge used the globalInterConnect project to analyse data from 31 study cohorts in 20 countries. Their extensive analysis took into account factors such as age, gender, health-related behaviours, energy intake, and body mass index.

The researchers found that the habitual consumption of 50 grams of processed meat a day—equivalent to 2 slices of ham—is associated with a 15% higher risk of developing type 2 diabetes in the next 10 years. The consumption of 100 grams of unprocessed red meat a day—equivalent to a small steak—was associated with a 10% higher risk of type 2 diabetes. Habitual consumption of 100 grams of poultry a day was associated with an 8% higher risk, but when analyses were conducted to test the findings under different scenarios, the association for poultry consumption became weaker, whereas the associations with type 2 diabetes persisted.

“These findings highlight the importance of reducing meat consumption for public health and should inform dietary guidelines,” the authors write.

#### EIGHT YEARS ON, NIV STILL RELIES ON U.S. CDC FOR ZIKA TEST KITS

The lack of accurate test kits and assays necessary for testing the Zika virus is faced by most national labs and government medical colleges across India. The reason: as of February 16, 2023, the Indian drug regulator (CDSCO) has not approved any test kit for Zika virus testing, as per the drug regulator’s response to an RTI. That would mean that even NIV (National Institute of Virology) is not using a test kit developed in India and approved by the drug regulator for Zika virus testing.

#### Test kit

#### So what test kit does NIV use for testing Zika virus samples?

The first Zika virus case was detected in November 2016 in a pregnant woman in Ahmedabad and then again in February 2017 was detected by NIV using the CDC Trioplex RT-PCR kit supplied by the Atlanta-based CDC. NIV has been using the CDC Trioplex RT-PCR test kits for the Zika virus and relying on CDC for the supply of the kits ever since the first case was reported in India in November 2016, as per reports published in journals by NIV researchers.

For instance, the Trioplex RT-PCR test supplied by CDC was used to confirm the Zika outbreak in Rajasthan in 2018, to confirm the first case in Uttar Pradesh in 2021, the first Zika outbreak in Kerala in 2021 in a pregnant woman, and retrospectively in 13 samples, and to confirm circulation of Zika virus in several States in 2021.



### Accurate diagnosis

In a few papers published in journals, the authors from NIV have acknowledged and thanked the CDC for supplying the Trioplex RT-PCR kits for Zika testing.

The Trioplex RT-PCR kit for Zika virus testing was developed by CDC and granted emergency use authorisation by the U.S. FDA. The CDC Trioplex RT-PCR test can detect dengue, chikungunya and Zika viruses. These viruses often cross-react making accurate diagnosis a challenge. The CDC Trioplex RT-PCR test was developed to address this challenge specifically.

Unlike the U.S. FDA which approves diagnostic tests based on synthetic genomic fragments like in the case of the COVID-19 tests and the CDC Trioplex RT-PCR assay, the Indian drug regulator insists on validation using clinical samples. The insistence on clinical samples has greatly hampered the development of diagnostic tests especially since all novel or dangerous virus samples have to necessarily be shipped to NIV for testing thus depriving other labs from accessing clinical samples. This was the case in the early months of the pandemic too. In the absence of wide availability of Zika tests, timely detection and control of outbreaks become a problem.

Unlike NIV, the Institute of Advanced Virology (IAV) in Thiruvananthapuram has through concerted efforts developed an in-house assay for Zika virus testing and validated the assay using multiple methods. The Institute of Advanced Virology got access to 18 Zika samples during a smaller Zika outbreak in the coastal area of Thiruvananthapuram in January 2022. Also, while investigating a dengue outbreak in Kollam district, the institute detected PCR-positive and IgM-positive cases of Zika.

### Less cost

Since the test has been developed in-house it costs less. "Since the tests cost less, they can be used for surveillance, both in people and mosquitoes, in addition to testing patient samples," says Dr. Vinod Scaria, a senior consultant at Vishwanath Cancer Care Foundation.

When new mutations that arise in viruses happen to be in the primer binding sites, the efficacy of the tests can be compromised. This was seen in the case of the Omicron sublineage BA.2, which does not have the S gene dropout unlike the BA.1, and thus escaped identification when RT-PCR was done. Similarly, a mutation in the primer binding site of the clade 1b has led to a drop in the sensitivity of RT-PCR tests. "This is the reason why genome sequences should be made publicly available very soon after each outbreak so that suitable assays can be developed quickly," says Dr. Scaria.

## ADVANCING EQUITY, FROM COVID-19 TO MPOX

Less than five years after the COVID-19 pandemic, the world faces the threat of another global health crisis. The World Health Organization (WHO) has, once again, declared mpox (formerly known as monkeypox) a Public Health Emergency of International Concern (PHEIC), following its outbreak in the Democratic Republic of the Congo (DRC), Africa, and subsequently spreading to over a dozen African countries. This comes on the heels of the Africa Centres for Disease Control and Prevention's (Africa CDC) declaration of a Public Health Emergency of Continental Security (PHECS), marking the first instance where both regional and global health emergencies have been declared concurrently for the same disease. In the days following the PHEIC declaration, cases of mpox were identified in Sweden, Pakistan and the Philippines, indicating that the virus has likely spread beyond the African continent.

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Telegram: [http://t.me/DreamIAS\\_Jamshedpur](http://t.me/DreamIAS_Jamshedpur)



This WHO declaration is significant as it is the first PHEIC announced since the May 2024 amendments to the International Health Regulations (IHR). And of all the IHR reforms, the inclusion of equity as a core principle was perhaps the most important. Although these amendments will not take effect until 2025, it is crucial that the global response to the mpox outbreak is grounded in this principle from the outset. Those amendments further expand WHO's role as a facilitator of essential medical products during emergencies.

A PHEIC is intended to foster international cooperation. Countries, international organisations, and non-governmental organisations must collaborate to coordinate their responses, share information, and provide mutual assistance. The declaration should trigger the rapid mobilisation of financial and technical resources, including emergency funding, deployment of trained health-care workers, and provision of medical supplies.

#### **Mirroring the COVID-19 pandemic response**

One of the most glaring shortcomings exposed by the COVID-19 pandemic was the inadequacy of vaccine manufacturing capabilities in the Global South, exacerbated by the lack of technology transfers and the know-how to produce vaccines developed in the West. So far, the global response to the mpox outbreak appears to be following a similar trajectory.

However, the present response to mpox differs significantly from COVID-19 in one key aspect: the availability of a vaccine. The Modified Vaccinia Ankara-Bavarian Nordic (MVA-BN), also known as Jynneos, is already in production by Danish manufacturer Bavarian Nordic. This vaccine, produced using primary chick embryo fibroblast (CEF) cell cultures, shares its production process with several other vaccines, including those for measles, mumps, rabies, and tick-borne encephalitis. Regulatory authorities in the European Union and United Kingdom (marketed as Imvanex®), United States and Switzerland (marketed as Jynneos®), and Canada (marketed as Imvamune®) have already approved the vaccine.

The mpox outbreak presents an opportunity to apply lessons from the COVID-19 pandemic by ramping up vaccine production in the Global South, and leveraging the existing MVA-BN vaccine. Indian manufacturers, in particular, have the potential to play a critical role in ensuring equitable access to this vaccine, ensuring it reaches the populations that need it the most, at the right time. Indeed, India was a critical partner during COVID-19, facilitating the mass production of the vaccine largely credited with saving the most lives — Oxford/AstraZeneca's vaccine marketed in India as Covishield.

#### **Ensuring technology transfers**

As countries closely monitor the mpox outbreak, the demand for vaccines is expected to surge. The AfricaCDC estimates that 10 million doses are needed to stem the outbreak, yet only about 0.21 million doses may be available immediately. Bavarian Nordic has informed the AfricaCDC that it has the capacity to manufacture 10 million doses by the end of 2025. The price of an mpox shot has been estimated at \$100. This underscores the need for sustainable, low-cost production of the MVA-BN vaccine.

India is well-positioned to meet this challenge. Three major vaccine manufacturers — the Serum Institute of India, Bharat Biotech, and Zydus Cadila — already have the experience of producing vaccines using CEF cells. Notably, the Serum Institute of India and Bharat Biotech played pivotal roles in both the national and global responses to the COVID-19 pandemic.