Retail inflation goes past RBI's limit to 6.1% in Oct.

Almost all categories in the index hit series highs as inflation crosses the targeted comfort band for the first time in two years; inflation in food and beverages rises to 8.5%, transport sector at 5.8%

T.C.A. Sharad Raghavan
NEW DELHI

Retail inflation rose to 6.1% in October, crossing the Reserve Bank of India (RBI)'s upper threshold for the first time in two years.

The continued uptick in inflation, while driven by food and fuel prices, has now spread to nearly all sectors, data released by the government on Thursday showed.

The RBI targets an inflation rate of 4% with a comfort band of 2% higher or lower than figure. Inflation as measured by the Consumer Price Index (CPI) last crossed this upper threshold of 6% in October 2024, when it came in at 6.2%. Retail inflation in the corresponding month this year was the highest since then. The new series of the CPI, with a base year of 2024, has sectoral data that goes back to only January 2026, which means a historical analysis is possible only up to that point. Within that, the latest data show inflation across most categories rose to series highs in October.

The data showed that inflation in the food and beverages category rose sharply to 8.5% in October, the highest in the series.

Coupled with this, rising fuel prices meant that inflation in the transport category also rose to 5.8%, a series high.

As a result of accelerating food and transport prices, inflation in the restaurant and accommodation services category jumped to 10.1%, the first time it has come in at double-digits in the new series.

"Although inflation remains predominantly supply-driven, stronger consumer demand pull associated with festive-season purchases may have added to price pressures, reinforcing the RBI's decision to raise the repo rate by 25 basis points to 5.50%," Pranjal Ghate, economist at Brickwork Ratings said, referring to the Monetary Policy Committee's decision in October.

Apart from food and fuel, the data showed that other aspects of day-to-day life have also seen prices rising at a faster pace.

CONTINUED ON
» PAGE 12
'STRAINED HOUSEHOLDS'
» PAGE 13



Retail inflation crosses RBI's limit to 6.1% in Oct.

Clothing and footwear, for example, saw inflation coming in at nearly 5% in October 2026 – the highest in this series – from 3.9% in the previous month. The 'furnishings, household equipment, and routine household maintenance' category saw inflation quicken to 3.9% in October, also a series high.

Inflation in the health category quickened to 2.05% in October 2026, the highest since January, from 1.4% in September.

The 'housing, water, electricity, gas and other fuels' category saw inflation of 2.9% in October, also the highest in the series.

According to Madan Sabnavis, chief economist at the Bank of Baroda, some food prices could rise further in the coming months.

"The ongoing harvest prospects will throw more light on how food prices behave," Mr. Sabnavis said. "Area under cultivation was lower for rice, maize, oilseeds, cotton and sugarcane. It has also been reported that pulses production, especially tur, could be lower this time, which can lead to a spike in prices."

Other services get pricier too

Education services saw inflation touch the 4% target for the first time in the new series, while inflation in the information and communication category rose to a series-high of 3.2% in October 2026.

Recreation, sports, and culture saw inflation rise to 2.5% in October 2026, also the highest in the series.

The only category that saw some relief in October was the broad 'personal care, social protection and miscellaneous goods & services' category, which saw inflation ease to 10.1%, the lowest it has been in the new series of the CPI.

"The latest reading makes it increasingly difficult for the MPC to justify holding rates unchanged at its next meeting [in December], strengthening the likelihood of another 25-basis-point hike," Mr. Ghate said.

GS 3: Economy

Key Pointers:

- What is CPI?
- Functions of Monetary Policy Committee(MPC)
- What is India's inflation-targeting framework?
- Which sectors are experiencing the highest inflation?
- Difference between cost-push and demand-pull inflation

New infra projects sanctioned along Chinese border in Arunachal

Vijaita Singh
NEW DELHI

Amid continuing face-offs with the Chinese Army along the Line of Actual Control (LAC) in Arunachal Pradesh since late July, the Indo-Tibetan Border Police (ITBP) has sanctioned the construction of new border infrastructure in the northeastern State, a senior government official told *The Hindu*.

Earlier, in February, the Cabinet Committee on Security (CCS) had cleared the third phase of the Indo-China Border Roads (ICBR-III) project.

Under the scheme, as many as 26 roads are to be constructed along the LAC in Arunachal Pradesh, another government official said. The Union Government has not yet officially announced the ICBR-III project or publicly disclosed these details.



A bridge that is currently under construction in Arunachal Pradesh along the border with China. ABHINAY LAKSHMAN

This is only the second time after the 2020 Galwan clashes in eastern Ladakh that a critical road infrastructure project has been sanctioned along the border with China.

The first phase of the ICBR was initiated in 2005 when it was decided that the Union Home Ministry would construct 27 priority roads with a total length of 608 km along the border with China.

The second phase of the ICBR, comprising 32 roads with a total length of 683 km, was approved on September 21, 2020, just months after 20 Indian soldiers were killed in violent clashes with the Chinese People's Liberation Army in eastern Ladakh.

Since September, the ITBP has authorised the construction of 15 pedestrian suspension bridges and 18 log bridges in Upper Subansiri and Kurung Kumey districts, covering the areas bordering China in Arunachal Pradesh.

The project clearance came days after India hosted the 18th BRICS Summit from September 11 to 13 in New Delhi, which was attended by Chinese President Xi Jinping. A government release after the meeting stated that Prime Minister Narendra Modi emphasised that peace and tranquillity in the border areas remains an essential basis for the continued development of bilateral relations. He underlined the need for both sides to observe existing agreements and understandings on border-related issues.

In December 2020, the Union Home Ministry had approved construction of 18 pedestrian tracks, including foot suspension bridges, log bridges, and staging camps, measuring a total length of 598.27 km in the border areas of Arunachal Pradesh.

'Continuing face-offs'

On October 22 this year, former ITBP Director-General Shatrujeet Kapur mentioned that the "face-off" with Chinese troops "continues at several locations in Arunachal Pradesh."

Addressing the Himveer Samman Samaroh at the Central Training College at Alwar in Rajasthan, Mr. Kapur said: "In the past few days, a situation arose where face-offs happened at several locations in Arunachal and it still continues. Our Shaurya commandos played an exemplary role in this."

The 73-minute video recording of the former ITBP Director-General speech's – in which he also stressed the need to invest in and develop drone and counter-drone technology, noting that it may not be possible to face China through traditional methods as they have invested a lot in the modernisation of their weapons and infrastructure – has since been taken down from the ITBP's official YouTube page.

GS 3: Internal Security

Key Pointers:

- What is the Indo-China Border Roads (ICBR) project?
- Why is Arunachal Pradesh strategically important for India?
- What is the role of ITBP in India-China border security?
- Cabinet committee on Security is headed by whom?
- What are the major challenges in developing border infrastructure?

In a dilemma

India must improve ties with Bangladesh, and protect Hasina

Bangladesh's former Prime Minister Sheikh Hasina now in exile in India, has set off speculation about her imminent return to Dhaka by submitting an application for a new Bangladeshi passport and national identity card this week. The application, made through the Bangladesh High Commission in Delhi, was dismissed by Prime Minister Tarique Rahman's Foreign Affairs Adviser Humayun Kabir, who said that the government in Dhaka would not grant a passport to a "terrorist", and would seek her return via the extradition agreement as a "prisoner transfer process" with India. Ms. Hasina has already announced that she plans to return to Bangladesh in December this year, as she did after her previous stay in India in exile from 1975-1981, after the brutal assassination of her father Sheikh Mujibur Rahman and nearly every other member of her family. However, the situation is considerably different now. This time, Ms. Hasina came to India in 2024 fleeing mobs of protestors that overthrew her government, and has since been convicted by a tribunal for ordering a crackdown on thousands of students, and sentenced to death. In interviews, including to *The Hindu*, Ms. Hasina says she hopes to return to Bangladesh to argue her case and rebuild her party, the Awami League, but that is hardly likely, given the anger against her amongst the polity, and bipartisan consensus to ban the Awami League from politics. Despite the harsh rhetoric it employs against her, the BNP government is unlikely to wish for her return, as it would have to begin execution proceedings against the 79-year-old former Prime Minister, with international opposition to such a move expected to be voluble. Not doing so would only strengthen its opposition party, the Jamaat-e-Islami, that has accused the Rahman government of soft-peddling the issue. The government must also worry about possible protests and violence within the country in the event Ms. Hasina returns.

The situation puts the Modi government in a spot. Ever since Ms. Hasina announced plans to return, during a virtual press conference held in Delhi on August 5 this year, Delhi-Dhaka ties have been on a downslide. The government's decision not to prevent Ms. Hasina from addressing the press, where she used the opportunity to soundly criticise PM Rahman, meant the abrupt cancellation of the Bangladesh PM's visit. Next month, the Indo-Bangladesh Ganga Water treaty is set to expire, and talks on its extension have also become a casualty. Ms. Hasina has been an honoured guest in India, and the government cannot physically restrain her from taking the flight to Dhaka or travelling to the land border at Petrapole to cross over. Nor can it wash its hands of her situation once she crosses over. New Delhi must redouble its diplomatic efforts on improving bilateral ties while also ensuring Ms. Hasina's welfare.

GS 2: International Relations

Key Pointers:

- India- Bangladesh Relations
- Why is Bangladesh strategically important for India?
- What are the major areas of India–Bangladesh cooperation?
- Significance of the Ganga Water Sharing Treaty

The SIR exercise is also a technology failure



Priya Seetharaman

Professor, Management Information Systems Group, Indian Institute of Management Calcutta. Views are personal

Much of the public argument over the Special Intensive Revision (SIR) of India's electoral rolls is around law, power and politics. The autonomy of the Election Commission of India (ECI), the list of acceptable documents, and the burden placed on voters to prove eligibility are the key focus issues. There is, of course, no doubt that these questions matter. But a quieter, less spoken-about story runs underneath them. The 2025-26 SIR is the first revision of this scale to be run through a centralised digital platform, and the technology itself has become a source of exclusion. Viewed as a nationwide digital transformation project, the SIR fails on several counts that any student of technology would immediately recognise.

The irony stares right at us. India presents itself, with ample reasons to do so, as a leader in digital public infrastructure. From the IRCTC's (Indian Railway Catering and Tourism Corporation) ticketing system and the income tax department's e-filing to Aadhaar authentication, UPI, DigiLocker etc., India holds up proof, at home and abroad, that it can build technology that works at scale.

Yet when it came to one of the most fundamental processes of any democracy, that is, the revision of electoral rolls, India has failed to utilise that capability. The irony is sharper because the above-mentioned successes were not built in weeks. They came from years of piloting, iteration and published specifications – the very peer-backed disciplines that seem to have been omitted when it came to the SIR.

Age and name discrepancies

Let's begin with how voters are flagged. A large share of notices to voters across States have been issued under the head of 'logical discrepancy' – a term that reflects little to no context sensitivity. Flags were generated centrally by ERONet, the ECI's roll management platform, using filters such as parent-child age gap, the number of children linked to one parent and the like. It is generally known that the ages mentioned on Indian electoral rolls are often approximate, especially for older citizens born at home. Therefore, rules that treat them as precise are bound to misfire.

An analysis of Delhi's draft roll by *The Hindu* found that family-size checks flagged Muslim electors at a markedly higher rate. The Supreme Court has clarified that it has not yet ruled on the legality of the 'logical discrepancy' category; it had allowed it in West Bengal only as an interim arrangement.

Additionally, a rule coded into the software platform decides who must appear for a hearing. This rule has never been published by the Commission; it varies from State to State, and the burden of contesting its outcome falls largely on the voters themselves.

When code changes but the user manuals have not yet been updated, the software becomes the rulebook

Second, the platform relies on matching techniques that were not validated at scale. Linking a voter to a parent on the 2002 roll means comparing family names across decades. West Bengal's 2002 rolls which were in the Bengali language had to be digitised and rendered into English from old printed records, reportedly with machine tools. Many names that were correct on paper reached the software garbled. Over 1.3 crore entries in West Bengal were flagged, and the counsel told the Supreme Court that more than half the 'logical discrepancy' cases were name variations. Similar problems have surfaced in Telangana and Karnataka as well. The ECI's own search portal suggests trying different spellings, indicating that the difficulty was not unknown. Matching Indian names across scripts is a well-documented difficulty, given the ambiguity and variation. Pilots in a handful of constituencies across different States would have exposed it before it reached lakhs of households.

Overarching power

Third, the system and its features were repeatedly changed while the SIR was in progress. The ECI has in the past used de-duplication software to flag people who may hold more than one voter ID. It was not used in Bihar, and in late 2025, the Commission had told the Supreme Court that results from the software could not be relied on. However, it was switched back on in some States and Union Territories where the revision was underway. This is a failure of digital governance.

Another algorithm, which checks how voters are "mapped" to relatives on the old electoral roll, appeared on the app in some States, forcing Booth Level Officers (BLOs) to redo work that was already completed. If the app was being loaded with new protocols frequently, then it is only understandable that the key users of the app, the BLOs, experienced tremendous stress and frustration. In any well-run deployment of such scale, a live operation of this sensitivity would be under a change freeze, with new features being tested and documented before release.

Fourth, the encoded rules travelled by video rather than in writing. In October, some newly introduced ERONet options allowing Electoral Registration Officers (EROs) to dispose of notice cases without hearings were explained through demonstration videos. Interim instructions such as these often came through video conferences and WhatsApp groups with the software already reconfigured to enforce them. When code changes but the user manuals have not yet been updated, the software becomes the rulebook. The BLOs and EROs, as statutory custodians of the electoral roll, are left implementing decisions they are not privy to while citizens, on the other hand, have nothing to cite on appeal. Officials in some States have asked for the restoration of the discretion that the centrally controlled platform had taken from them, including the power to decide which flagged cases need a hearing.

Fifth, the digital workflow and legal forms seem to have drifted apart. The online Form 6 carried an SIR-related declaration about parents and grandparents that applicants could not skip, although it was not part of the statutory form. The Supreme Court said it had never approved that modification. In Delhi, voters whose enumeration forms were not received but were earlier on the roll were directed to submit Form 6, meant for first-time voters. The court has called this a "structural incongruity".

However, both are also system design failures. The screen a citizen sees should not demand what the law and the approved process do not.

Questions of timing

Time compounds these challenges. In Delhi, where no election is due, the Supreme Court questioned the need for a tight deadline. Voters in Tamil Nadu and West Bengal had no such cushion. In those States, enumeration went on for about six weeks with the final rolls being released in February while the polls were scheduled for April. West Bengal's final roll was published with over half-a-crore names still marked "under adjudication". In a system rollout, time is always a design parameter, not a backdrop. Here, it was set by the electoral calendar rather than by the system's and the context's readiness.

None of this is unique to elections. Validating 'business' rules against real data, testing name matching in different languages, freezing a system during live operations, issuing written SoPs (Standard Operating Procedures) prior to user training and keeping digital forms aligned with statutory ones are the ordinary, time-tested disciplines of digitising a manual process. Lawrence Lessig's warning over two decades ago, that "code is law" has rarely been more literal. With the SIR, rules written into software decided what statute did not.

In any such transformation, many of these failures could have been envisaged. Whether they were anticipated and set aside or not anticipated at all is an open question. Neither answer can ever reassure the citizens whose voting rights are on the line.

GS 2: Polity

Key Pointers:

- What is SIR?
- Functions of ECI
- What is ERONet and how was it involved in SIR?
- What are the major technological failures identified in the SIR exercise?
- What is the significance of Lawrence Lessig's statement "Code is Law"?
- Why is algorithmic bias a serious democratic concern?
- What are the concerns regarding the time frame of SIR?

India and U.K. are turning climate ambition into action



Ben Mellor

Acting British High Commissioner to India

Next week, Mumbai will become the stage for one of the world's boldest climate ideas. The largest ever Earthshot Prize edition will bring together innovators, investors, businesses, policymakers and young people to turn environmental solutions into impact at scale. Five winners will each receive £1 million to accelerate their work.

It all began with a simple but powerful idea: that human ingenuity, innovation and optimism can help repair our planet. Founded by His Royal Highness The Prince of Wales, The Earthshot Prize seeks solutions capable of delivering transformative environmental impact. Since the Prize was launched in 2020, India has produced more Earthshot finalists and winners than any other country (nine finalists including four winners). This year two of the 15 finalists are based in India. As the Prize arrives in Mumbai, India's growing influence in clean growth and climate innovation will be on full display.

I have seen what this kind of partnership can achieve. I began my career as a diplomat working on the Montreal Protocol, when governments, companies, scientists and NGOs came together to tackle the hole in the ozone layer. It worked. Almost all ozone-depleting substances have been phased out and the ozone layer is on track to recover within decades. However, climate change is a far bigger and more complex challenge.

The need to accelerate climate action

The urgency behind Earthshot's message is stronger than ever. This year, the climate crisis has been exacerbated by El Niño, with conflict-driven energy shocks being felt globally. The surest way to safeguard our energy security and economic growth is to accelerate the transition to clean energy.

The U.K.-India climate partnership shows what delivery can look like in practice. Both our countries recognise that the shift to cleaner growth is not separate from the pursuit of prosperity. That is why climate and clean energy cooperation sit at the heart of the U.K.-India Vision 2035.

The U.K.-India climate partnership shows what delivery can look like in practice. Both our countries recognise that the shift to cleaner growth is not separate from the pursuit of prosperity

India's progress speaks for itself. Non-fossil fuel sources now account for more than half of India's installed power capacity – five years ahead of its 2030 target; it is aiming for 500 GW of non-fossil fuel capacity by 2030. Through the International Solar Alliance and the Coalition for Disaster Resilient Infrastructure, India is shaping global response. Meanwhile, the U.K. has also cut its greenhouse gas emissions by more than half since 1990 while growing our economy.

Earlier this month, the U.K. was proud to be a partner country at the Bharat Renewable Energy Summit and Expo 2026, which showcased the dynamism of India's clean energy sector.

India's Central Electricity Regulatory Commission and Ofgem (the U.K.'s Office of Gas and Electricity Markets) are working together on electricity market reform, and a joint offshore wind taskforce is supporting the development of the sector in India. The U.K. is learning from India's energy stack on data sharing across the energy system.

Financing climate action

Such innovation changes the world only if it is financed at scale. Last year, our governments launched the India-U.K. Climate Finance Initiative to help scale climate investment, unlock green growth and create new financing opportunities in both countries. The U.K. is already mobilising significant capital for India's transition. Our £330 million capital investment portfolio, in partnership with the Government of India, has leveraged more than £3.5 billion for green and inclusive businesses and technology start-ups. British International Investment (BII) has backed more than 600 businesses and committed $1.1 billion to climate-focused investments in India since 2022, making India its largest market. This money is funding initiatives that people in India will be witnessing and using in their day-to-day life such as electric buses, grid-scale batteries and the next generation of clean-tech start-ups.

A global security issue

Climate is also a security issue. At the UN General Assembly in September, U.K. Foreign Secretary Ed Miliband co-convened foreign Ministers to discuss climate and nature crises as national security challenges.

It is an agenda the U.K. and India share, reflected in our co-chairing of the UN Disaster Risk Reduction Senior Officials' Meeting in New Delhi in October. Both India's National Disaster Management Authority and the U.K.'s Centre for Disaster Protection, working together, are strengthening disaster risk financing, including assessing the feasibility of a sovereign disaster risk pool.

Earthshot coincides with COP31 in Antalya, Türkiye, where governments will meet to turn the Paris Agreement into delivery. The U.K. will work with India and other partners to accelerate the electrification of transport and industry, unlock finance, and keep the goal of limiting warming to 1.5 degrees Celsius within reach.

The Montreal Protocol showed that the world can fix a planetary problem when it chooses to. The innovators gathering in Mumbai are showing what is possible today. The task now is for governments, investors and businesses to back them with capital and the policy certainty that lets good ideas grow. From Mumbai to Antalya, the message is clear: climate action cannot wait. The U.K. and India are not just talking about the future we need, we are building it. We invite others to build it with us.

GS 2: International Relations

Key Pointers:

- India–UK climate partnership
- What is the Earthshot Prize and why is it significant?
- What is India's progress in renewable energy?
- What are the major areas of India–UK clean energy cooperation?
- What is the India–UK Climate Finance Initiative?
- What is Montreal Protocol?

Has the populist far right finally entered a period of decline globally?



Christophe Jaffrelot
Chair of the French political science association and the British association for South Asian Studies



Irfan Nooruddin
Hamad bin Khalifa Al-Thani Professor of Indian Politics in the School of Foreign Service at Georgetown University

PARLEY

Over the past few months, right-wing parties and leaders have faced electoral setbacks across countries including Romania, Hungary, Serbia, the U.S. and Brazil, while youth-led protests in India are challenging the grip of Narendra Modi's government. Do these developments signal a wider global shift? Has the populist far right finally entered a period of decline? Christophe Jaffrelot and Irfan Nooruddin discuss this question in a conversation moderated by **Sonikka Loganathan.**

Did Donald Trump's rise normalise the strongman style of populist politics, or was he a product of a global shift towards the right that was already underway?

Irfan Nooruddin: Donald Trump was a lucky guy in 2016 because backlash against the first African American president had galvanised prejudice among white voters who felt a diminution of their status. He also faced Hillary Clinton, who carried a lot of baggage. But 2016 also saw the impacts of the post-financial crisis economy and the rise of China. Trump was able to play grievance politics powerfully. I think Trump normalised a particular brashness and arrogance. The U.S. was suddenly led by someone who openly disdained liberalism, minority rights and basic due process. This empowered leaders around the world to believe they would not face the same criticism for doing so.

Christophe Jaffrelot: Trump was part of a wave that preceded his rise to power in 2016: Victor Orban, Netanyahu, Erdogan, Duterte, Rajapaksa and Modi. The new wave of populists related to their people directly, using social media, fear, anxiety and anger. We now call this national populism because these leaders claim to defend the sons of the soil against threats like migrants and globalisation. But we need to look at populism at large. We've had populists of the left as well, like Hugo Chavez. People are anxious and need security. They are prepared to abandon some liberty for security, and populists on the left and right can capitalise on that.

Trumpism is on the decline in the U.S. and the victory of Lula against Bolsonaro/the success of Serbian student movement indicate high noon for the populist far right in these countries. There is still the rise of the far right in Britain, France and Germany. What factors are predominant here?



GETTY IMAGES/ISTOCKPHOTO

CJ: Europe comes late in this process. The youth is very divided. In France, young men turn to far-right parties. Women are very much on the left. Age and gender, variables that had little role in elections until recently, are back. Whether this will become a wave across Europe remains to be seen. The European scene is still very fragmented.

IN: The cost of housing is a major factor. Young people are struggling with basic rites of passage like getting married, buying a house and having children. This generation can't imagine achieving these in the next decade. This creates anxiety about what it means to be an adult.

The other issue is the growth of oligarchic capitalism and the concentration of power and wealth in a handful of individuals and companies. The last point is impatience. The appeal of populism is partly because we're impatient for change. Everyday democracy seems so slow. But delivering on promises of radical change is difficult, and the system as a whole suffers a crisis of legitimacy.

Has growing global instability made people more receptive to authoritarian politics, or less tolerant of leaders who overpromise?

CJ: Instability is not only about terrorism or migration, but also the expectation that things will improve, and they're not. For example, previously, a degree guaranteed a job. That's no longer the case. Inequalities between northern and southern England, the Midwest and the two American coasts, and central France and the rest of the country have increased. These people have been abandoned by what used to be a welfare state. This is where we can connect neoliberalism to the rise of the far right and populism. People are looking for a saviour. Elites have used populism to distract people from socioeconomic issues. In India, Hindu

We must be careful not to mistake the rejection of Trumpism or Bolsonaro for a broader victory for liberalism. Would we get the same repudiation of Trump in an economy that's doing much better?
IRFAN NOORUDDIN

nationalism redirected attention towards Muslims when lower castes began to rise. For quite some time, this worked. But young people, like the CJP, increasingly want to focus on the basics: jobs and a decent life.

IN: Social media and the post-truth world, where we all have hyperlocal, hyper-specific newsfeeds, complement this trend. Populists can cut mainstream media out and go directly to consumers. The divides aren't just in our heads; they're in our daily lives. In India, surveys show that the number of young Hindus who report having a Muslim as one of their close personal friends is lower today than it's ever been. The democratic ideas of loyal opposition, deliberate discussion and respect for minority rights over majoritarian impulses are nowhere particularly well protected. We must be careful not to mistake the rejection of Trumpism or Bolsonaro for a broader victory for liberalism. Would we get the same repudiation of Trump in an economy that's doing much better?

How much of the rise in right-wing politics has to do with actual policies versus the persona?

CJ: It goes beyond the personas. These entrepreneurs in identity politics capitalise on fears and anxieties. They use religion, race and identity markers to get support. In Europe, we have the phrase 'the great replacement', the idea that white people will be replaced by non-white people. We can regulate this discourse by returning to the rule of law. But that's difficult. You need a robust civil society, a judiciary and an election commission willing to draw the line. Once red lines have been crossed, it's very difficult to come back. If a Congress-led government comes to power, how will it return to the situation of 2013? How do you repeal laws on cow protection and inter-religious marriages? You need institutions that prevent ideologues from taking politics to a point of no return.

Are voters supporting the ideology of the parties they elect, or are they voting against the governments they want to remove? Is that why the illiberal pendulum exists?

IN: Evidence that voters have strict or coherent ideologies is pretty limited. Party labels, identity and pocketbook politics matter a great deal. Voters also react badly when they think elites are bending rules in their favour. In the U.S., exit polls showed corruption as a major reason voters wanted change. One of the nice things about elections is that it's a referendum on how well you have done your job over the last four years. And if that means I want to try the other side, that's good. These are movements and not just people. But a particular leader can alter politics in a way that makes it very hard to go back to. The delegitimisation of elections is also part of the populist playbook. In the U.S., this takes the form of 'Stop the Steal'. In India, the SIR is in many ways the worst legacy. Once citizens lose faith in elections, there's no coming back from that, at least in the short term. The CJP, by shining a light on the Election Commission's actions, is making an important contribution to the protection of democracy.

What would a sustained decline of the populist far right look like?

CJ: Democracy has two sides. The demos decide, and minorities have the same rights as majorities. The other side is the rule of law and institutions that ensure elections are free and fair. We have to make it work sufficiently well for everyone to believe in it. If not, you have what happened in Bangladesh, with people boycotting elections.

IN: The key words are really the far-right part of it. Elections need alternatives and actual choice. Democrats winning every election is not healthier than Republicans winning every election. Far-right ideology is toxic because it has an exclusive vision of who's part of the nation and who deserves constitutional protection. It's a vision of othering people. There's a cruelty to far-right politics that cannot have a role in modern democracy. That's not the same as the right. We have to prevent the co-option of conservatism by the ultra-far right. The centre right must reassert itself and make clear that it will not ally with the far right simply to win an election.

To listen to the full interview
Scan the code or go to the link
www.thehindu.com

GS 2: Polity

Key Pointers:

- What is populism and how is it different from far-right populism?
- What are the major characteristics of populist far-right politics?
- Which global developments indicate possible electoral setbacks for the populist far right?
- What is the role of social media in the growth of populist politics?
- What is meant by post-truth politics?

Why is the Siang project contentious?

The proposed Siang Upper Multipurpose Project in Arunachal Pradesh has triggered protests by the Adi community, which says at least 40 villages would be affected, 27 of them submerged; the government, however, says the project will store and regulate water, reduce flood risks and generate employment for the youth

EXPLAINER

Jacob Koshy

The story so far:
The proposed Siang Upper Multipurpose Project (SUMP) in Arunachal Pradesh has triggered protests by the Adi community, and activists have been arrested or detained since October. Protesting groups have rejected the State government's offer to hold talks on November 5.

What is the SUMP project?
It is a proposed dam on the Siang – as the Brahmaputra is known in Arunachal Pradesh – to be built by the National Hydroelectric Power Corporation (NHPC).

First declared a national project in 2008, its estimated power capacity is between 11,000 and 11,200 MW. The Deputy Chief Minister, Chowna Mein of the BJP, has cited a dam height of 280 to 300 metres and about 9.2 billion cubic metres of live storage, which refers to the usable water in a dam that can actually be released, excluding the unusable bottom layer.

However, India has an established process for approving such projects. Clearing such large dams involves multiple steps, such as forest and environmental clearance from the State as well as Central Government-constituted expert appraisal committees.

What stage is the project at?
So far, the project is only at the stage of a Pre-Feasibility Report (PFR), being prepared by NHPC, which is an early study of whether the project can be built safely.

They also require a full impact study with a year of baseline data, a dam-break analysis and a disaster management plan. Parong, Ditte Dime and Uggeng are among the sites identified for it.



Raising their voices: The Adi community protests against the dam, in Yingkom village in Upper Siang district of Arunachal Pradesh. RITU RAJ KONWAR

What does it promise?
The Government says it will store and regulate water, cut flood risk in Arunachal Pradesh and Assam, create jobs for the youth, and strengthen water and energy security. Mr. Mein has said power is a "secondary" benefit from the dam.

Why are people protesting?
Adi villagers say that at least 40 villages would be affected, of which 27 would be submerged. They say this would destroy paddy fields and orange orchards, as well as ancestral burial grounds and river-linked religious practices. There are also objections to the way authorities are gathering consent. Villagers allege that signatures on Memoranda of Understanding for the PFR were obtained through deceit, pressure and threats to withhold welfare benefits. *The Hindu* reported that a copy of the MoU it reviewed describes the consent as being for the PFR study alone and not for the dam.

Tensions have nevertheless escalated, with elderly protesters allegedly being *lathi*-charged on October 4, injuring 54. Activists were arrested under the State's unlawful activities law on October 9. A march in Pasighat, a major town and the headquarters of the East Siang district, on October 23, turned violent, and NHPC premises were set on fire.

What is the government's rationale?
Rejecting talks, one youth leader, quoted by *The Hindu*, said that discussions cannot happen "while they are pointing guns at us." The Adi have also proposed damming smaller tributaries instead.

China's planned Medog dam upstream, reported at 60,000 MW, is cited as the main driver. Mr. Mein says that the Medog dam is built for power generation, with about 5.5 billion cubic metres of storage. SUMP's larger storage capacity, he argues, could cushion sudden upstream releases. Some villagers ask why they should bear the cost of the Centre's failure to secure a water treaty with China.

What is the backdrop of hydropower in Arunachal Pradesh?
The State has long been seen as India's hydropower frontier. *The Hindu* reports that a veteran politician says the State signed 143 hydropower agreements in the late 2000s, opening up its rivers, and most never took off. An earlier environmental assessment brief for a 3,750 MW "Stage-II" Siang Upper project shows that the idea has existed in other forms for years.

Have States weaponised water?
Yes, though rarely as a standalone cause of war. A 2025 Geneva Graduate Institute study notes that water has long been used in conflict, for instance by flooding through destroyed dams, and that some scholars say upstream states manipulate flows to pressure downstream neighbours.

Ethiopia's Grand Ethiopian Renaissance Dam on the Blue Nile, formally inaugurated in 2025, has been contested by downstream Egypt and Sudan for over a decade. The two countries have sought binding rules on how the reservoir is filled and operated, though no agreement has been reached.

At home, the Indus Waters Treaty (1960) gave India the eastern rivers and Pakistan the western ones. After the April 2025 Pahalgam attack, India placed it "in abeyance". A Court of Arbitration ruled unanimously on August 31, 2026, that the treaty remains in force and abeyance is unauthorised. However India has stated that it does not recognise that court.

THE GIST

- The SUMP is a proposed dam on the Siang — as the Brahmaputra is known in Arunachal Pradesh — to be built by the National Hydroelectric Power Corporation (NHPC)
- The Deputy Chief Minister, Chowna Mein of the BJP, says the SUMP's larger storage capacity could cushion sudden upstream releases from the Medog dam planned by China

AMRITA IAS
An Amrita Group Institution

GS 3: Environment

Key Pointers:

- What is the Siang Upper Multipurpose Project (SUMP)?
- Why is the project important for India?
- Why is the Adi community opposing the project?
- Why is the issue also about tribal rights and governance?

Why did Ladakh groups decry the announcement of polls?

Why did LAB and KDA seek the postponement of polls? What led to the impasse in talks with the Centre?

Peerzada Ashiq

The story so far:

The Lieutenant Governor-led administration of Ladakh has announced back-to-back elections in the Union Territory (U.T.). The three-tier polls – hill councils, panchayat and municipal elections – will be held in the next one month. While the panchayat and municipal elections are slated for November 21, the hill council elections will be held on December 4.

Ladakh is a U.T. without a legislature. So, these polls are key to provide platforms to public representatives in the region. However, the short window provided by the State Election Commission (SEC) is likely to make it hard for political parties to chart the course for their campaigning and enter into possible alliances.

How are these elections different?

Previously, Ladakh operated with only two hill development councils – the Ladakh Autonomous Hill Development Council (LAHDC) in Leh and LAHDC in Kargil – which together covered 52 constituencies, split evenly with 26 in each district. However, the Ladakh administration restructured the region's local governance by creating six new districts and establishing dedicated hill councils for each of them.

As a result of this administrative expansion, the upcoming local elections will be held across 100 constituencies. Each new district council will now comprise between seven and 24 elected members, down from the previous 26. In a first, 36 of the 100 total LAHDC seats have been reserved for women.

Meanwhile, Chief Secretary Ashish Kundra assured that the newly formed hill councils "would retain all powers vested in them under the existing law."

What makes polls difficult in Ladakh?

Conducting elections in Ladakh comes with logistical and geographical challenges. The region, spread across 59,146 square kilometres, has a sparse population of just 2.74 lakh, according to the 2011 census.

The region has 1.90 voters, according to the Election Commission of India (ECI) figures of 2025. So, the 100 constituencies going to voting will have an average 1900 voters per constituency.

Several villages are located at altitudes as high as 15,000 feet above the sea level and there are many passes, connecting the valleys and higher reaches, which get closed due to snowfall in winters. To overcome these conditions, the Ladakh administration has promised to provide heating and specialised logistical support to facilitate the polling.

According to Mr. Kundra, a portion of local representatives has already been decided without a contest.

Out of 192 *panchayat halqas*, 55 *sarpanches* have already been elected unopposed, leaving polls to be held in only 137 seats. Similarly, 1,186 out of 1,428 *panch* candidates were elected unopposed. While all 21 wards in the Leh Municipal Council will go to the polls, four of the 17 wards in the Kargil Municipal Council have already elected their representatives unopposed.

Meanwhile, the Ladakh Chief Secretary has termed these elections as steps to "strengthening democratic institutions and ensuring their early constitution".

Why have civil society groups questioned the polls?

Ladakh has two key civil society bodies – Leh Apex Body (LAB) and Kargil Democratic Alliance (KDA). These bodies, which are amalgams of socio-political and religious groups, have been negotiating with the Centre over their core demands of Statehood and Sixth Schedule. Now, both the bodies are questioning the timing of these elections.

LAB co-chairperson Tsering Dorjey Lakrook expressed concern over likely poor participation because a sizable population of the region have moved to warmer places, especially students and elderly population. The region was facing "unilateral decisions and order-after-order without consultation," KDA co-chairperson Sajjad Kargilli added.

These groups are demanding postponement of hill council elections to April-May next year. Echoing this, Ladakh Member of Parliament (MP) Haji Haneefa urged the Lieutenant Governor and the State Election Commissioner (SEC) "to consider the region's geographical and climatic conditions before scheduling polls" and claimed that elections in winter could deprive many people of their right to vote.

Mr. Lakrook alleged that the Centre was taking negotiating civil society groups "for granted" and stated he suspected the government "was up to some mischief." He also demanded that the government make public the judicial inquiry report into the September 2025 Leh violence and ensure "justice [is] delivered to the victims." Four civilians died and around 80 were injured in alleged security forces firing in September last year.

What is the status of Ladakh-Centre talks?

Since the violent unrest in 2025, multiple rounds of talks have been held between Ladakh and the Centre, which has constituted a High Powered Committee and a Sub-Committee to engage the civil society groups of the region. However, the dialogue has recently hit an impasse.

In May this year, the Centre floated the idea of "a customised sui generis model" to meet the demands of the region and special status under a special provision of Article 371. On October 15 this year, a team of the Ministry of Home Affairs (MHA) presented a 32-page draft. Both the LAB and KDA rejected it, terming it as "a departure from the earlier promises".

Later, on October 17, Ladakh Chief Secretary Mr. Kundra reiterated that the Centre was committed to the process of shaping the constitutional structure and called for a discussion over the MHA draft proposal. A proposed meeting on October 22 in New Delhi failed to take place with the Centre not divulging the reason.

Mr. Lakrook stated that they have received no communication from the MHA since October 15.

GS 2: Polity

Key Pointers:

- Why is the Sixth Schedule important?
- What is the significance of Article 371?
- Why is Ladakh strategically important?

FULL CONTEXT



Beyond the numbers: The Kurumba language is a significant element of the community's identity and plays a pivotal role in its cultural practices. REPRESENTATIVE IMAGE

Kurumba: a language and community fighting for visibility

The Kurumbas of Keralam are an Adivasi community with a population of only 2,719 as of 2024, who speak Kurumba, an oral language without a script; with the Census classifying languages with fewer than 10,000 speakers as 'others', the future of the language appears bleak

Rohan Pillay A.

The Kurumbas of Keralam are an Adivasi community who reside in the hilly forest regions of Attappady in Palakkad district. The community has been classified as a Particularly Vulnerable Tribal Group (PVTG) by the Ministry of Tribal Affairs, Government of India. They are one of the five PVTGs in Keralam. As the Census exercise is under way, one of the most significant identifiers of the community is faced with a troubling question.

The community members speak Kurumba, an oral language with no script. This language is widely spoken by the people, even today, and is the primary language of communication among the Kurumba people. However, most outsiders do not use the language and therefore the community members are forced to either learn Malayalam or other languages in order to converse with others.

The Kurumba people often have to live in areas quite far from their native land, primarily for education and employment. This results in a situation in which they live with members of other communities who do not understand the Kurumba language. To engage with these people, the community members speak the language of the land that they reside in.

Influence of other languages

The influence of other languages on the Kurumba language can be understood from the changes that have occurred in the language over time. Being a purely oral language, it lacks proper documentation. Therefore, the only way to understand the nuances that have affected it is often through the help of the older generations of the community.

However, the increased migration among the Kurumbas is one of the factors that poses a threat to the survival of the Kurumba language as well.

Many children from the community migrate to nearby places for formal education, as there are almost no schools offering education beyond the primary level in the areas where community members live. This forces them to adapt to the dominant language of the area, which is mostly Malayalam. As a result, Malayalam words have been incorporated into their vocabulary. For instance, the Kurumba word for elder sister is *akke* while the Malayalam equivalent is *chechi*. Community members have shared that youngsters today use the word *chechi* more commonly than *akke*.

Loss of linguistic diversity

When the number of speakers of a language starts declining across generations, it gets classified as an "endangered language". Often what ensues is a rise in the mean age of the speakers of a language until the younger generation stops speaking it altogether. The younger generation adopts the dominant regional or national language. This process is called 'language shift'. It also results in the loss of linguistic diversity.

Language shift is a dynamic process. There is no fixed duration for this. It has been documented to occur rapidly, across one or two generations. On the other hand, it has also been documented as a slow but long-lasting process that quietly replaces the original language and consumes the space that it once occupied.

This process is significantly difficult to identify among the languages that are purely oral and only have very few speakers. If steps are not taken to ensure the preservation of these languages, they may become completely extinct.

In 2010, the Bhasha Research and Publication Centre under the leadership of Prof. G.N. Devy, undertook the People's Linguistic Survey of India (PLSI) and published a multi-volume series of books providing an overview of the languages spoken in India.

In an effort to identify and protect endangered languages, the Ministry of Education initiated the Scheme for Protection and Preservation of Endangered Languages (SPPEL) in 2013. It aims at "documenting, archiving, and revitalising endangered and lesser-known mother tongues, particularly those spoken by fewer than 10,000 people". This initiative shows that the government has recognised the need for protecting endangered languages.

The ongoing Census exercise is the first since the SPPEL was initiated.

As part of the Census exercise, a mother tongue having 10,000 or more speakers are grouped under appropriate languages while those having less than this number are classified under "others". Under this classification, there are 121 languages in India – 22 scheduled and 99 non-scheduled.

However, the PLSI does not follow this rigid and arbitrary rule and has identified around 800 languages across the length and breadth of India.

The risk of erasure

With a population of only 2,719 individuals as of 2024, the Kurumba language is not expected to have more than 10,000 speakers. This would mean that the language would not be classified separately after the enumeration phase. In this light, the future looks bleak for languages such as Kurumba.

The Kurumba language is a significant element of the community's identity. It plays a pivotal role in the cultural practices as well as the everyday routines of the community.

Such intertwined relationships between language and the community's identity are evident across Adivasi societies. By trying to delineate one from the other, critical aspects of both may get lost. Therefore, the survival of one is also very much dependant on the survival of the other.

With the Census exercise under way, it is imperative to understand what the future holds for the existence of languages such as Kurumba.

GS 1: Indian Society

Key Pointers:

- Why is the Kurumba language endangered?
- Scheme for Protection and Preservation of Endangered Languages (SPPEL), 2013
- People's Linguistic Survey of India (PLSI), 2010
- National Education Policy (NEP), 2020
- Why does preserving tribal languages matter?

India sees 38% drop in TB mortality since 2015: WHO report

Bindu Shajan Perappadan
NEW DELHI

India has seen a 38% reduction in tuberculosis (TB) mortality since 2015, compared to a global average of 35%, and a 94% treatment success rate among patients with drug-susceptible TB, according to the World Health Organization (WHO)'s Global Tuberculosis Report 2026.

Last year, the South-East Asia Region recorded the largest number of new TB cases (35%), followed by the Western Pacific Region (27%) and the African Region (25%).

Around 88% of new TB cases occurred in 30 countries. India (about a quarter), Indonesia (10%), the Philippines (6.8%), China (6.5%), Pakistan (6.4%), Nigeria (4.9%), the Democratic Republic of the Congo (3.9%) and Bangladesh (3.7%).

Globally, about 50% of people treated for TB and their households face total costs (direct medical expenditures, non-medical expenditures, and indirect costs such as income losses) that are catastrophic (greater than 20% of total household income).

People with compromised immune systems, such as those living with HIV, undernutrition or diabetes, or people who use tobacco have a higher risk of falling ill.

High toll

The report showed a total of 1.13 million people died from TB in 2025. Multidrug-resistant TB remains a public health crisis and a health security threat.

Between December 7, 2024 and November 8, 2026, the TB Mukt Bharat Abhiyaan achieved significant progress, identifying and bringing over 25 crore individuals within the scope of screening.

GS 2: Social Justice_ Health

Key Pointers:

- What are the key findings of the WHO Global TB Report 2026?
- Why is India particularly vulnerable to TB?
- What is multidrug-resistant TB (MDR-TB)?
- What is India's strategy to eliminate TB?

AMRITA IAS

Govt. mulls Special Session to pass Bill on delimitation

Centre is yet to disclose the dates or duration of proposed Parliament session; it is confident of having 'at least 15-16 more votes than needed' to pass Bill; move will not work, says Congress leader

The Hindu Bureau
NEW DELHI

The Centre is mulling a plan to convene a Special Session of Parliament to attempt to pass the Delimitation Bill, 2026, linked, as per the government, to operationalising the Women's Reservation Act, 2023.

Sources in the government said the Centre is confident of the numbers, of having "at least 15-16 more votes than needed", but did not disclose the dates or duration of the proposed Session.

The Centre needs 361 votes to secure a two-thirds majority to pass the Constitution Amendment Bill. The House of 543 has three vacancies.

The proposed amendment to the Delimitation Bill seeks to increase the Lok Sabha strength from 543 seats to a maximum of 850, paving the way for the implementation of 33% quota for women in Parliament and State Legislative Assemblies. This will be based on the 2011 Census.



Another attempt: Govt. needs 361 votes to secure a two-thirds majority to pass the Constitution Amendment Bill. FILE PHOTO

'Failed to get numbers'

The government's proposed move comes after a similar Constitution Amendment Bill failed to secure the required numbers in the Lok Sabha during a special sitting of the Budget Session on April 17.

The possibility of convening Parliament on short notice remains alive as the Monsoon Session, during which both Houses were adjourned *sine die* (for an indefinite period) on August 13, has not yet been prorogued. The session has remained unprorogued for 91 days now, breaking the previous record of 87 days set in 2008.

In its discussions with Opposition parties, especially from South India, in April, the Centre had said that it proposed to increase the Lok Sabha seats for all States by 50% to maintain the existing inter-State seat ratios based on the 1971 Census. The Bill circulated in April did not have this amendment, but there is now talk that an amendment to increase seats in States by 50% may be made.

Reacting to the reports, Congress leader Jairam Ramesh said Union Minister Amit Shah has revived the "delimitation plantation" while talking informally to a group of journalists.

He said that Mr. Shah has said that the Bills will be passed by a 15-18 vote margin, but that will not happen. "His bulldozer did not work then and will not work again," he added.

GS 2: Polity

Key Pointers:

- What is delimitation?
- Why is the proposed delimitation politically contentious?
- 106th Constitutional Amendment Act, 2023
- Why is the proposed delimitation particularly sensitive for Southern States?

'India-EU FTA can be a game changer'

German Ambassador terms deal a 'win-win' situation; he says German firms manufacturing in India can re-export to Europe, India's auto industry can become internationally more competitive through supply chain integration, and Tamil Nadu and other industrial hubs stand to benefit from the FTA

INTERVIEW

Jasper Wieck

Narayan Lakshman

In a wide-ranging interview, German Ambassador to India Jasper Wieck spoke to Narayan Lakshman about evolving European security architecture, the potential for growth in the India-EU FTA, bilateral clean energy and defence initiatives, and opportunities for skilled Indian workers in Germany.

The India-EU FTA negotiations concluded earlier this year. Which market access provisions would German manufacturers be looking for in areas like automobiles?

This agreement has the potential to become a game changer. We have a thriving trade and investment partnership already today.

Once German companies manufacture in India, they can better re-export to Germany and Europe as a whole, a market of 450 million people. That will be a huge momentum for [Indian] industry in terms of additional investments.

Regarding the potential sectors of investments, you have to consider the entire breadth of German industry and economy: engineering and machinery, automotive, pharmaceuticals and medical equipment, semiconductors, software, automation, defence and many more sectors. Our economy in Germany is very diversified, and they find the entire spectrum here as a potential market to make additional investments and increase trade.

If, e.g., the automotive sectors in Germany and India better integrate their supply chains, we can more easily procure production parts in India, and vice versa; your car industry can procure cheaper production parts and spare parts in Germany. Your automotive industry becomes internationally more competitive as it will be the case with ours. It is a win-win situation.

Are there areas where Germany and India can jointly deliver results on their climate commitments despite energy pressures?

Annually, we commit roughly €10 billion to support decarbonization worldwide, and India is a privileged partner in this endeavour. We have launched the Green and Sustainable Development Partnership four years ago, under which we offer technical support and loans amounting to more than €1 billion each year. These investments go into energy transition from fossil fuels to renewable energy, cleaner mobility and clean tech. This year we celebrate 20 years of Indo-German Energy Partnership, which shows that India and Germany have a long-standing tradition in this domain.

At the same time, I firmly believe that the most exciting chapter of this energy partnership is still ahead of us, because now it is about developing a renewable energy industry in India itself. In order to avoid replacing one dependency through another in buying solar panels or battery storages from other countries, you should rather produce them in India.



J. JOHAN SATHYADAS

Where does Tamil Nadu fit for German supply chains that might move to India?

Tamil Nadu is already a primary destination for German investments. This has to do with the level of wages and energy prices, but also with a benign environment and incentives that the government of Tamil Nadu has put in place for foreign direct investments or joint ventures.

We have just been to Daimler Trucks, which has a huge plant producing trucks and buses not only for India, but also for Southeast Asia, Africa, and Latin America. They have decided to invest another ₹4,000 crore into their plant, also with a view to exporting to Europe in the future.

Are there more such projects from Germany being contemplated?

[A key] indicator is that we have high-level visits from various Länder of Germany. They always bring huge business delegations. We had Thüringen and Hessen; next week we will have Lower Saxony, a delegation of 60 people, most of them from business. That indicates a conjunction between the business that wants to get ready for the free trade agreement and the political side, which wants business to get ready.

Has the focus of German investors been mainly on industrial hubs such as the Chennai-Oragadam industrial belt, or does it expand beyond the metropolis to areas like Hosur, Coimbatore and tier two towns?

You mentioned two other important places where German companies have already invested and are keen to invest even more. In Coimbatore, it is automotive and clean-tech, wind energy. The company ZF provides equipment for wind energy power plants. In Hosur, it is two-wheelers, a joint venture between BMW with TVS.

Under Project 75(I), what would substantive technology transfer actually mean?

The final design of these submarines, which will be an Indian submarine, will be developed by both the Indian and the German shipyard together. It is not parachuted from Germany into India.

All six submarines will be produced in India, and the local content will increase over time, starting with 40% for the first submarine and then 60% or even more for the sixth submarine. Indian technology included in the construction will increase over time.

The German shipyard TKMS is ready to set up a production hub on the basis of the production of these six submarines for the Indian Navy, for the production of submarines for third markets: Southeast Asia or Latin America. Today most of the countries in Latin America are operating German submarines from the 1980s, so they have to have a new generation. Since our capacities for production in Germany are limited, it would be a win-win situation if this could also be done in India.

In addition, there are plans to develop together a heavy-weight torpedo. This would be a genuine Indo-German developed torpedo.

There are skilled Indians looking to migrate. Does Germany offer visas, schemes and initiatives for skilled Indians to move there and fill labour skill gaps in the German economy? What are their prospects? Do they get to stay on?

One very essential incentive is the studying opportunities at German universities. During my first stint, 17,000 Indian students were enrolled in German universities. Now we are at 70,000. Over a span of nine years, the number has increased fourfold. Once they have finished their studies in Germany, they are in a very good position to enter the German labour market. Roughly half of them stay in Germany.

For blue-collar jobs, German companies offer vocational training, which many Indians make use of. Here also, the numbers are going up steadily.

We issue 60,000 long-term visas each year, including those for students. I think we are now at 180,000 Indians who have come to Germany over the past years since the migration mobility agreement was signed in 2022. The numbers are going up, and there's huge satisfaction with these programmes.

GS 2: International Relations

Key Pointers:

- Why is the India–EU FTA significant?
- Why is Tamil Nadu emerging as an important destination?
- How can the FTA strengthen India's clean energy transition?
- What is the significance of Project 75(I)?

CAG widens purview of power sector audit, starts with discoms

Saptaparno Ghosh
NEW DELHI

The Comptroller and Auditor General of India (CAG) is undertaking a comprehensive audit of the power sector, beginning with distribution companies (discoms), where consumer satisfaction, power trading and financial sustainability emerging as key focus areas. The exercise will subsequently cover transmission, generation, renewable energy and the Revamped Distribution Sector Scheme (RDSS), with each segment's operational and financial performance being assessed over the preceding five years, according to officials familiar with the development.

Discoms will be the first to be audited, with the ongoing phase covering their performance between FY21 and FY26. As many as 39 discoms across the country, along with five departmental undertakings, will be assessed.

Private out of scope

Privately owned discoms, however, will remain outside the scope of the exercise. The audit commenced in July this year, with the report expected to be finalised around the middle of the next financial year.

The audit of the transmission segment is scheduled to begin with FY27.

GS 2: Polity

Key Pointers:

- What is the CAG auditing?
- Why are Discoms important?
- Why is this audit significant?

AMRITA IAS

Pichai tops global Indian leaders' list as Alphabet hits $4.2 trillion

The Hindu Bureau
BENGALURU

Sundar Pichai, CEO of Alphabet, has topped the HSBC Hurun Global Indians List 2026, with the company's valuation reaching $4.2 trillion. Microsoft CEO Satya Nadella ranked second, with Microsoft valued at $2.6 trillion, followed by Sanjay Mehrotra of Micron Technology at $1.4 trillion.

The list recognises people of Indian origin, irrespective of nationality, who have founded or lead some of the world's most valuable companies headquartered outside India.

Alphabet's valuation surged 98%, overtaking Microsoft, whose value declined 17%. Collectively, companies led by global Indians are now worth $15 trillion, up 53% since 2024. The top five account for $9.1 trillion, or 61% of the total, while the top 10 represent nearly 70%, at $10.5 trillion.


Sundar Pichai

These companies employ 5.3 million people and generate annual revenues of $2.5 trillion.

The 2026 edition features 236 individuals leading 200 companies, with 89 newcomers. Among the prominent entrants are Shailesh Jejurikar of Procter & Gamble, ranked sixth, and Kunal Shah of WhatsApp, ranked 14th. The entry threshold more than doubled to $2.5 billion from $1.2 billion.

Women account for 16 entrants, led by Jayshree V. Ullal of Arista Networks, valued at $208 billion. Companies led by women are collectively worth $699 billion.

GS 3: Economy

Swabbing public transport to identify urban microbiomes

A recent study in the Chennai Metro Rail showed a wide range of microbes found on high-touch surfaces, though researchers said there was no cause for fear and no immediate reason to act; it showed that the city had a distinctive 'transit biome' — influenced by coastal climate, humidity, urban density and nearby agricultural activity

Ramya Kannan

From waste-water surveillance to public transport surfaces, mankind is constantly on the lookout for diverse microbial sources to test, to understand anti-microbial resistance patterns in a particular society. The latest in the urban transport systems sweep, performed at Chennai Metro Rail stations, showed that Chennai had a distinctive 'transit biome' – influenced by the city's coastal climate, humidity, urban density and relatively nearby agricultural activity.

A team of researchers from IIT Madras swabbed 96 samples from 12 stations and trains on Chennai Metro's Blue and Green Lines in December 2021 and January 2022, targeting four high-touch surfaces: station handrails (bannisters), ticket-vending kiosks, train handrails (rods), and ticket counters. The team swabbed 96 samples from 12 stations and trains and after quality control, 47 samples were sequenced using whole-genome metagenomic sequencing. Metagenomics is defined as the direct genetic analysis of genomes contained with an environmental sample.



Understanding patterns: From waste water surveillance to public transport surfaces, mankind is constantly on the lookout for diverse microbial sources to test, to understand anti-microbial resistance patterns in a particular society. B. JOTHI RAVIKUMAR

City's signature

The researchers, in a paper published in the peer-reviewed journal *Msphere*, said they found a distinct Chennai-specific microbial community, with kiosks being the most microbially diverse surface, and detected generally low but widespread antimicrobial-resistance (AMR) genes – especially for sulfonamide and rifamycin resistance. "Understanding these environments is crucial for public health, especially in light of the COVID-19 pandemic and growing concerns about antimicrobial resistance (AMR). This study is the first of its kind to investigate the microbial communities and the presence of AMR genes in the Chennai Metro system," the authors said.

Talking about the research, Karthik Raman, of the Department of Biotechnology, Bhupat and Jyoti Mehta School of Biosciences, and Centre for Integrative Biology and Systems Medicine, Wadhwani School of Data Science and Artificial Intelligence, IIT Madras, Chennai, said, the key aspect of the study was the discovery of the microbe signature for Chennai.

"It has been done in many metro systems across the world. Every city has a different signature, influenced by the city itself. As far as CMRL goes, there is no immediate worry for the people at this point. The metro route is routinely sanitised. Also our sampling work was done during the COVID-19 pandemic, so there was regular sanitisation in the stations." In fact, he adds, the sanitisation was so thorough that many samples actually failed the quality control process.

Researchers found that nine 'unique-core' species were common in Chennai that were not core or sub-core in other global cities. These included salt-tolerant, tropical-air, soil/water, poultry-associated, and human-skin-associated bacteria, suggesting influences from Chennai's coastal climate, humidity, urban density, and nearby agricultural activity. "We also found, surprisingly that the kiosks, and not the train bars or poles were the more diverse surfaces."

The study annotated 206 AMR gene families across 25 drug classes; and among them sulfonamide- and rifamycin-resistance genes had a comparatively higher abundance. Dr. Raman explains: "We have a sort of a baseline data, on microbes in key public transport in Chennai. We also have a pathogen support index – all key microbes get support from microbes nearby. We have quantified the metabolic support that microbial communities (here, CMRL stations and trains) provide to persistent or keystone pathogens. We have looked at the dynamic interactions between these microorganisms."

The researchers said: "Despite their relatively low abundance, several AMR families were widely distributed across the data set, with over 80% of samples containing at least one gene associated with AMR, including families linked to rifamycins, multidrug resistance, and sulfonamides."

They make a case for routine microbial and AMR surveillance in Indian transit systems. This study lays a foundation for understanding the urban microbiome in India, emphasising distinct regional characteristics and underscoring the need for sustained monitoring to mitigate disease transmission risks in high-density transit settings.

A global swab

Chennai has only followed the experience of transport and transit point surveillance for AMR across the world. In 2013, a project called PathoMap was launched in the United States. The primary goal was to study the microbiome of an urban, metropolitan environment – New York City. In the summer of 2013, 468 NYC subway stations were sampled. Interestingly, nearly half (48%) the DNA matched no known organism, it was reported.

The success of the project led to the creation of the Metagenomics and Metadesign of Subways and Urban Biomes (MetaSUB) International Consortium in 2015, initiated by Christopher Mason, an associate professor at Weill Cornell Medicine; and Evan Afshin, a medical student at New York Medical College. The consortium officially launched with Global City Sampling Day on June 21, 2016.

2016 marked the first annual event of simultaneous sampling around the world, spanning six continents, 32 countries and 54 cities; the event collected more than 6,000 samples of DNA, RNA and microbes from surfaces in subways, buses, airports and other well-travelled public meeting spaces. Today, the MetaSUB International Consortium aims to create geospatial metagenomic and forensic genetic maps, identify and track antimicrobial resistance markers (AMRs) in the urban built environment and identify novel biosynthetic gene clusters (BCGs) for drug discovery.

David Danko et al, in a 2021 paper in *Cell*, "A global metagenomic map of urban microbiomes and antimicrobial resistance' analysed the data sets from two Global City Sampling days (in 2015 and 2016) and a pilot study. This yielded a global atlas of 4,728 metagenomic samples from mass-transit systems in 60 cities over three years, representing the first systematic, worldwide catalogue of the urban microbial ecosystem. The researchers wrote: "We identified 4,246 known species of urban microorganisms and a consistent set of 31 species found in 97% of samples that were distinct from human microorganisms. Profiles of AMR genes varied widely in type and density across cities. Cities showed distinct microbial taxonomic signatures that were driven by climate and geographic differences."

Resistant bacteria

A 2020 study reported in the *Journal of Antimicrobial Chemotherapy*, designed to understand the prevalence of antibiotic-resistant bacteria in the Beijing subway environment, for instance, found the potential transmission of carbapenem-resistant Enterobacteriaceae in a public transportation environment. This is a type of Gram-negative bacterium that has developed resistance to carbapenems, which are a class of powerful 'last-line' antibiotics used to treat severe multi-drug-resistant infections. The study on the Hong Kong Mass Transit Railway System proceeded on the fact that the "skin functions as the primary interface between the human body and the external environment." "To understand how the microbiome varies within urban mass transit and influences the skin microbiota, we profiled the human palm microbiome after contact with handrails," the researchers wrote.

The study provided an important reference for future public health strategies to mitigate intracity and cross-border pathogen and Antibiotics Resistance Genes transmission.

Swabbing public transit networks in Belgrade, the London Underground, and networks in East Africa and South Asia has also helped identify the baseline microbiome population in these nations.

What do these swabbing exercises help with? Dr. Raman says "there is no immediate need to act, or there is absolutely no reason to fear for the commuter. However, the microbial signature of the city is now available and can be built upon with follow-ups and expanding the points of testing."

As Kang Kang et al summarise in *Cell Reports* on the Hong Kong experiment, "our investigation of the microbiome associated with public transit reveal that communities are decidedly shaped by human interactions and traffic flows, and we hope to have established a baseline for further studies by incorporating multidimensional influences from the host, time, environment, geography, and varied civic characteristics."

(ramya.kannan@thehindu.co.in)

THE GIST

- A team of researchers from IIT-Madras swabbed 96 samples from 12 stations and trains on Chennai Metro's Blue and Green Lines in December 2021 and January 2022, targeting four high-touch surfaces: station handrails (bannisters), ticket-vending kiosks, train handrails (rods), and ticket counters
- The researchers, in a paper published in the peer-reviewed journal *Msphere*, said they found a distinct Chennai-specific microbial community, with kiosks being the most microbially diverse surface, and detected generally low but widespread antimicrobial-resistance (AMR) genes
- Swabbing public transit networks in Belgrade, the London Underground, and networks in East Africa and South Asia has also helped identify the baseline microbiome population in these nations

GS 3: Science and Technology

Key Pointers:

- What is an urban microbiome?
- What is metagenomics?
- What is antimicrobial resistance (AMR)?
- What are the major international initiatives?
- What is one-health Approach?

Deepavali pollution and how it affects lung function and respiratory health

Athira Elsa Johnson

A toxic smog descended over the country following the Deepavali weekend. Days later, many cities are yet to fully recover from the effects caused by the air pollution. What happens to your respiratory system when it is exposed to hours of pollutants?

Even a few hours of exposure to firecracker smoke can be enough to trigger coughing, wheezing or breathlessness, particularly in people living with asthma or other respiratory conditions. And the effects are not limited to those with an existing diagnosis: high concentrations of particulate matter and gases can irritate the airways in anyone, say doctors.

What the smoke contains

Firecrackers release a mixture of pollutants, including sulphur dioxide, nitrogen oxides, carbon monoxide and particulate matter. The size of the particles determines how deeply they travel into the respiratory system.

"Coarse particles such as PM10 are largely trapped in the nose, throat and larger airways, while fine particles such as PM2.5 can travel deep into the lungs," says Vallabhaneni Viswambhar, senior consultant interventional pulmonologist, Apollo Speciality Hospitals, OMR, Chennai.

R. Sridhar, senior consultant, interventional pulmonology, MGM Healthcare, Chennai, explains that the lungs' natural clearance mechanisms remove some larger particles, but PM2.5 can reach the alveoli, the tiny air sacs where oxygen exchange takes place. Ultrafine particles may also enter the bloodstream.

Even brief exposure to concentrated firecracker smoke can irritate the respiratory tract, particularly in people with sensitive airways, says Dr. Viswambhar. "In people living with asthma or chronic obstructive pulmonary disease (COPD), this may trigger an acute exacerbation or an asthma attack."



Toxic air: Firecrackers release a mixture of pollutants, including sulphur dioxide, nitrogen oxides, carbon monoxide and particulate matter. K.V.S. GIRI

Once inhaled, pollutants irritate the airway lining and trigger inflammation. This can increase mucus production, narrow the airways and make them more sensitive.

Mild irritation after short-term exposure is usually reversible once exposure stops. However, recovery may take longer if the airways have become inflamed or if the person has an underlying respiratory condition.

Low wind speeds and temperature inversion can trap pollutants close to the ground, allowing elevated pollution levels to persist for several days after firecracker use, says Sekar Natrajan, senior consultant, interventional pulmonology, SRM Prime Hospital, Ramapuram.

Long-term exposure to fine particulate matter and gases such as nitrogen dioxide has been associated with declining lung function and a higher incidence of chronic respiratory diseases, including COPD. Persistent inflammation can also lead to structural changes in the airways. Experts add that prolonged exposure may contribute to emphysema and pulmonary fibrosis, and increase the risk of lung cancer.

Who is vulnerable?

Children, older adults and people living with heart or lung conditions are particularly susceptible to pollution spikes. Children's lungs are still developing, while lung function and respiratory defence mechanisms can decline with age.

Pregnant women are another vulnerable group. Prolonged exposure to air pollution during pregnancy has been associated with adverse birth outcomes, including low birth weight and premature birth. Experts also point to possible effects on maternal and foetal health.

Minimising exposure is the first step. Experts advise avoiding areas where firecrackers are being burst and reducing outdoor activities when pollution levels are high. If going outdoors is unavoidable, a properly fitted N95 mask can help filter fine particles.

Keeping windows closed during severe pollution episodes and using an air purifier with a HEPA filter, if available, can also reduce indoor exposure.

Experts also recommend avoiding indoor sources of pollution such as smoking, incense and mosquito coils.

While the lungs can recover from mild, short-term irritation after exposure stops, repeated or prolonged exposure can accelerate the decline in lung function and contribute to chronic respiratory disease. Improving outdoor air quality and reducing exposure are therefore important even after the immediate Deepavali pollution spike has passed.

(athira.elsa@thehindu.co.in)

GS 3: Environment

Key Pointers:

- What pollutants are released by firecrackers?
- How does firecracker pollution affect lung function?
- What are the long-term health consequences?
- Why does pollution persist after Deepavali?