

06 October 2026 · UPSC CSE

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1. Legislative Privileges vs Fundamental Rights: Supreme Court Reference

GS-II · Prelims + Mains · Legislative privileges vs free speech · Indian Express

Syllabus — Parliament and State Legislatures—structure, functioning, conduct of business, powers and privileges and issues arising out of these

Prelims — Polity — Constitutional Articles, Parliamentary Privileges, Supreme Court judgments



• LEGAL

House privileges vs free speech: The question before Supreme Court

Amaal Sheikh
New Delhi, October 5

THE SUPREME Court on Tuesday will begin hearing a long-pending reference on the scope of legislative privileges, special powers and immunities enjoyed by Parliament and state legislatures to protect their functioning, and whether they can be invoked against citizens, journalists and others for breaching the privileges of the House.

A seven-judge Constitution Bench comprising the Chief Justice of India Surya Kant will hear the matter.

At the heart of the case is whether these privileges, under Articles 105 and 194 of the Constitution, can override fundamental rights such as freedom of speech and expression under Article 19.

Legal framework

Article 194(3) grants legislatures certain privileges and immunities. Article 19(1)(a) guarantees freedom of speech and expression, including press freedom. The case turns on the interplay between these two rights and whether legislative privilege can override the right to free speech. The petitioners contend that such a privilege exists to protect the House's functioning, not to shield it from scrutiny.

Articles 14 and 21 provide for the right to equality and the right to life. The petitioners argue that when legislatures order arrests or imprisonment for alleged breaches of privilege, they affect personal liberty. According to them, any action affecting liberty must satisfy constitutional guarantees of fairness, due process and protection against arbitrariness.

History of the challenge

In 2003, *The Hindu* reported on sharper exchanges between Tamil Nadu Chief Minister J Jayalalithaa and the Opposition in the state Assembly. Speaker K Kalimuthu objected to those reports and referred them to a Privileges Committee, saying the descriptions were "contrary to truth" and "had affected the privileges of the legislature".

The controversy escalated after *The Hindu* published an editorial criticising the "crude use of state power against various sections including political opponents and the independent media". It stated that legislative privilege "exists to protect its free and independent functioning and not to protect the reputation of the government or of individual members". A Tamil translation published by Murasoli was also referred to the Committee.

The Assembly ultimately held five journalists of *The Hindu* and Murasoli editor S Selvam guilty of gross contempt and breach of privilege, sentencing them to 15 days imprisonment and issuing arrest warrants. The journalists approached the SC, which immediately intervened and stayed the warrants but referred the matter to a Constitution Bench.

Supreme Court precedents

The reference came about because of two conflicting Constitution Bench decisions. In 1959, the SC, in a 4:1 majority, in *Pandit M.S.M. Sharma v. Sri Krishna Sinha* (also known as the Searchlight case) held that Assembly privileges under Article 194(3) included the power to prohibit publication. It said that because Article 19(1)(a) is a general provision and Article 194(3) is a special provision, free speech must yield to legislative privilege.

But in the Special Reference No. 1 of 1964, the Uttar Pradesh Assembly jailed a citizen, Keshav Singh, distributing pamphlets accusing an MLA of corruption. When the Allahabad High Court granted him interim bail, the Assembly ordered that the two judges who passed the order, the lawyer and Keshav Singh himself be brought before the House in custody. While a Full Bench of the HC stayed those arrest warrants, the President referred the dispute to the SC.

The SC bench held that Constitutional courts could examine the legality of detention ordered in privilege proceedings, and that legislatures could not proceed against judges and lawyers for performing their duties. The court said that the Searchlight case did not lay down a universal rule that fundamental rights in Part III of the Constitution (Articles 12-35) always yield to legislative privileges.

What petitioners are arguing

The petitioners argue that the TN Assembly's action violated free speech, personal liberty, and basic principles of natural justice. They contend that "honest and courageous reporting" by the press is the bedrock of parliamentary democracy" and that journalists cannot perform their role "in an atmosphere of fear and terror".

They argue that legislative privileges are subject to Article 21 and that permitting a legislature to deprive a person of liberty "by mere passing of a resolution" would be "an anathema to the Constitution". The petitioners also argue that privileges exist to protect the functioning of the House, not the government, stating that there is "no concept of any parliamentary privilege being applicable to a Chief Minister... or to a 'government'" and that privileges are "not intended to protect the fame and reputation of the ruling party".

Past verdicts

- In 1954, the SC ordered the release of the editor of RSN, who had been detained under the UP Assembly Speaker's warrant, after finding that he had not been produced before the magistrate within 24 hours.
- In Jitu Soren (2018), it held that bribery is not protected by the Constitution. It overruled a 1998 ruling where the court had granted immunity to MPs accused of taking bribes to vote.

The Indian EXPRESS Tue, 06 October 2026 https://epaper.indianexpress.com/c/81213896

WHY IN NEWS

The 6 October 2026 source article revisits whether legislative privileges under Articles 105 and 194 can override fundamental rights, including freedom of speech under Article 19. The N. Ravi litigation arose from the Tamil Nadu Assembly's 2003 privilege action against journalists. On 8 December 2004, the Supreme Court referred the constitutional issues to a seven-judge Bench because of the apparent tension between Searchlight (1959) and Special Reference No. 1 of 1964 (Keshav Singh).

Constitutional Framework at Stake

- **Article 194(3)** grants State legislatures privileges and immunities, while **Article 105** provides the same for Parliament — both are special provisions.
- **Article 19(1)(a)** guarantees freedom of speech and expression, including press freedom — a general provision that the court must weigh against the special legislative privilege provisions.
- **Articles 14 and 21** (equality and personal liberty) are also invoked because legislative arrest or imprisonment for alleged breach of privilege directly affects personal liberty.
- The central question is whether legislative privilege, being a **special constitutional provision**, overrides fundamental rights or must itself satisfy constitutional guarantees of fairness and due process.

The Controversy That Triggered the Reference

- In **2003**, the Tamil Nadu Assembly referred reports by The Hindu and Murasoli to a Privileges Committee, alleging descriptions of exchanges between the Chief Minister and the Opposition were 'contrary to truth' and had 'affected the privileges of the legislature'.
- Five journalists of The Hindu and the Murasoli editor were found guilty of **gross contempt and breach of privilege**, sentenced to 15 days' imprisonment, and arrest warrants were issued.
- The Supreme Court **immediately stayed** the warrants but referred the matter to a Constitution Bench, recognising it raised unresolved constitutional questions.
- The case illustrates the core tension: the Assembly treated critical press reporting as an attack on its dignity, while the press argued that legislative privilege was being weaponised to **shield the government from scrutiny**.

Two Conflicting Constitution Bench Precedents

- In **Pandit M.S.M. Sharma v. Sri Krishna Sinha (1959)** — the Searchlight case — a 4:1 majority held that Assembly privileges under Article 194(3) included the power to prohibit publication, and that since Article 19(1)(a) is a general provision, **free speech must yield to legislative privilege**.
- In Special Reference No. 1 of 1964 (Keshav Singh), the Court recognised judicial scrutiny of detention in privilege proceedings and protected judges and lawyers acting within their jurisdiction. These safeguards should not be attributed to the Searchlight decision.

- In **Sita Soren (2024)**, the Supreme Court held that **bribery is not protected** by the Constitution and overruled a 1998 ruling granting immunity to MPs accused of bribe-taking to vote — signalling that privileges are not absolute.
- The apparent tension between Searchlight (1959) and Keshav Singh (1964) led to the seven-judge reference on 8 December 2004. Sita Soren (2024) is later jurisprudential context; it did not trigger the reference.

Arguments Raised by the Petitioners

- The Tamil Nadu Assembly's actions violated **free speech, personal liberty, and the basic principles of natural justice**; 'honest and courageous reporting' is the bedrock of parliamentary democracy.
- Legislative privileges are **subject to Article 21**: depriving a person of liberty by mere passing of a resolution would be 'an anathema to the Constitution'.
- Privileges exist to protect the **functioning of the House**, not the government — there is 'no concept of any parliamentary privilege applicable to a Chief Minister or to a government', and privileges must not protect the fame or reputation of the ruling party.
- Any action affecting liberty must satisfy constitutional guarantees of **fairness, due process and protection against arbitrariness** under Articles 14 and 21.

Constitutional Questions in the Reference

- Whether **Article 194(3) / Article 105** as special provisions categorically override Part III rights, or whether fundamental rights impose a floor that even special constitutional provisions cannot breach.
- Whether courts can **judicially review** the substantive exercise of privilege — not just the procedure — including the proportionality of punishment imposed by a House.
- Whether the **Searchlight case (1959)** should be overruled, distinguished, or affirmed, and what replaces it as the governing framework for press freedom versus legislative privilege.

HIGH-YIELD FACTS

- Reference bench — Seven judges; reference ordered on 8 December 2004 in N. Ravi v. Speaker, Legislative Assembly, Chennai
- **Parliament privilege article** — Article 105 of the Constitution
- **State legislature privilege article** — Article 194(3) of the Constitution
- **Free speech article** — Article 19(1)(a) of the Constitution
- **Searchlight case year** — 1959 — Pandit M.S.M. Sharma v. Sri Krishna Sinha, SC 4:1 majority
- **Sita Soren judgment year** — 2024 — SC held bribery not protected by constitutional privilege
- **1954 precedent** — SC ordered release of editor of Blitz detained under UP Assembly Speaker's warrant for not being produced before magistrate within 24 hours
- **Special Reference No. 1 of 1964** — UP Assembly jailed citizen Keshav Singh for distributing pamphlets; SC stayed arrest warrants, triggering a major privilege-vs-judiciary confrontation

VALUE ADDITION

REPORTS, BODIES AND INSTRUMENTS

Pandit M.S.M. Sharma v. Sri Krishna Sinha, AIR 1959 SC 395 (Searchlight case) — Supreme Court of India

Sita Soren v. Union of India, 2024 — Supreme Court of India (seven-judge bench on bribery and legislative immunity)

Article 105, Constitution of India — Parliamentary privileges

Article 194, Constitution of India — State legislature privileges

Article 19(1)(a), Constitution of India — Freedom of speech and expression

EXAMPLES FOR THE ANSWER

In the United Kingdom, the Bill of Rights 1689 established parliamentary privilege as absolute for proceedings in Parliament, but UK courts have increasingly scrutinised its scope — illustrating how privilege claims evolve under democratic accountability pressures.

The Keshav Singh episode (Special Reference No. 1 of 1964) — where the UP Assembly jailed a citizen and then tried to

punish the High Court judges who granted him bail — is a precedent for the proposition that legislative privilege cannot be used to override judicial authority, usable in questions on separation of powers.

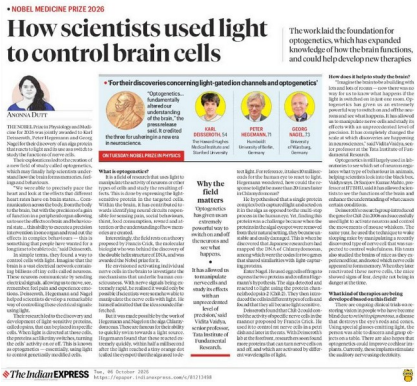
In Egan v. Willis (1998), Australia's High Court upheld the New South Wales Legislative Council's power to require ministerial documents and suspend a minister for non-compliance. The case links parliamentary powers to responsible government and executive accountability.

2. Nobel Prize 2026 in Physiology for Optogenetics Discovery

GS-III · Prelims + Mains · Optogenetics and neuroscience · Indian Express

Syllabus — Science and Technology- developments and their applications and effects in everyday life

Prelims — General Science – developments in science and technology; Nobel Prizes



• NOBEL MEDICINE PRIZE 2026

How scientists used light to control brain cells

The work laid the foundation for optogenetics, which has expanded knowledge of how the brain functions, and could help develop new therapies

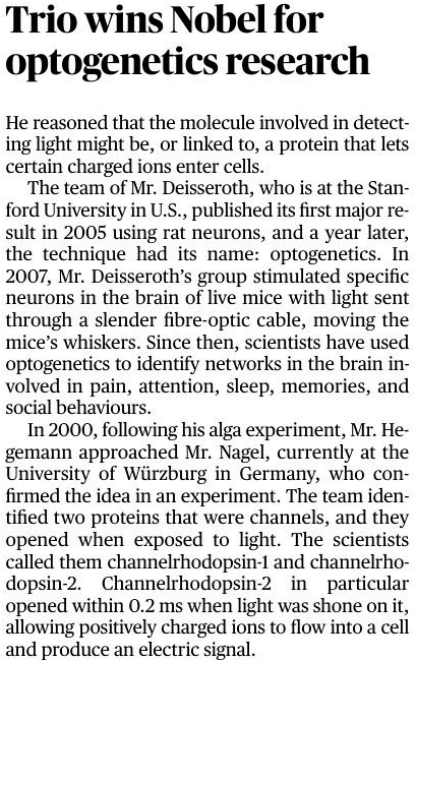
ANONNA DUTT

• For their discoveries concerning light-gated ion channels and optogenetics

KARL DEISSEROTH, 54 · PETER HEGEMANN, 71 · GEORG NAGEL, 71

Why the field matters

The Indian EXPRESS

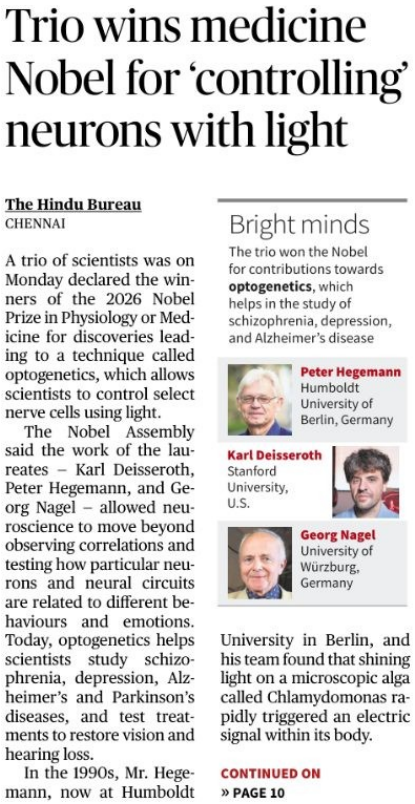


Trio wins Nobel for optogenetics research

He reasoned that the molecule involved in detecting light might be, or linked to, a protein that lets certain charged ions enter cells.

The team of Mr. Deisseroth, who is at the Stanford University in U.S., published its first major result in 2005 using rat neurons, and a year later, the technique had its name: optogenetics. In 2007, Mr. Deisseroth's group stimulated specific neurons in the brain of live mice with light sent through a slender fibre-optic cable, moving the mice's whiskers. Since then, scientists have used optogenetics to identify networks in the brain involved in pain, attention, sleep, memories, and social behaviours.

In 2000, following his alga experiment, Mr. Hegemann approached Mr. Nagel, currently at the University of Würzburg in Germany, who confirmed the idea in an experiment. The team identified two proteins that were channels, and they opened when exposed to light. The scientists called them channelrhodopsin-1 and channelrhodopsin-2. Channelrhodopsin-2 in particular opened within 0.2 ms when light was shone on it, allowing positively charged ions to flow into a cell and produce an electric signal.



Trio wins medicine Nobel for 'controlling' neurons with light

The Hindu Bureau
CHENNAI

A trio of scientists was on Monday declared the winners of the 2026 Nobel Prize in Physiology or Medicine for discoveries leading to a technique called optogenetics, which allows scientists to control select nerve cells using light.

The Nobel Assembly said the work of the laureates – Karl Deisseroth, Peter Hegemann, and Georg Nagel – allowed neuroscience to move beyond observing correlations and testing how particular neurons and neural circuits are related to different behaviours and emotions. Today, optogenetics helps scientists study schizophrenia, depression, Alzheimer's and Parkinson's diseases, and test treatments to restore vision and hearing loss.

In the 1990s, Mr. Hegemann, now at Humboldt University in Berlin, and his team found that shining light on a microscopic alga called Chlamydomonas rapidly triggered an electric signal within its body.

Bright minds

The trio won the Nobel for contributions towards **optogenetics**, which helps in the study of schizophrenia, depression, and Alzheimer's disease

Peter Hegemann Humboldt University of Berlin, Germany

Karl Deisseroth Stanford University, U.S.

Georg Nagel University of Würzburg, Germany

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WHY IN NEWS

On Monday, 5 October 2026, the Nobel Assembly announced the 2026 Nobel Prize in Physiology or Medicine jointly to Karl Deisseroth, Peter Hegemann, and Georg Nagel for their discoveries concerning light-gated ion channels and optogenetics. The prize recognises work that created an entirely new field allowing scientists to switch specific neurons on and off using light, transforming the study of brain function.

What Optogenetics Is and How It Works

- **Optogenetics** is a field that uses light to manipulate the activity of neurons or other cell types and study the resulting effects in living tissue.
- It relies on expressing **light-sensitive proteins (opsins)** in targeted cells; when light is directed at those cells, the proteins act like switches, turning neuronal activity on or off.
- The key channel, **Channelrhodopsin-2 (ChR-2)**, opens within 0.2 milliseconds when light is shone on it, allowing positively charged ions to flow in and generate an electric signal — far faster than the human eye's 10 millisecond response to light.
- Light can be delivered deep into the brain through a **slender fibre-optic cable**, enabling precise, region-specific control of neural circuits in living animals.

Each Laureate's Decisive Contribution

- **Peter Hegemann** (Humboldt University of Berlin) found in the 1990s that the alga Chlamydomonas responds to light more than 20 times faster than the human eye; he hypothesised a single protein complex both captured light and gated ions directly.
- In 2002 and 2003, Nagel, Hegemann and colleagues characterised channelrhodopsin-1 and channelrhodopsin-2, respectively, using expression in Xenopus frog oocytes.
- In 2005, Boyden, Zhang, Bamberg, Nagel and Deisseroth demonstrated light-controlled activity in cultured neurons using ChR2. Deisseroth's group extended the approach to living mouse brains in 2007.
- Deisseroth's team published its **first major result in 2005** using rat neurons, and by 2006 the technique had its name: optogenetics.
- Nagel's use of **frog egg cells** to express the algal proteins solved a key technical barrier: proteins removed from their natural algal environment became unstable, so a heterologous expression system was needed to study and confirm their function.

The Algal Biology That Made It Possible

- **Chlamydomonas reinhardtii** is a single-celled green alga famous for swimming rapidly toward light; Hegemann's lab mapped its DNA and found genes encoding light-capturing proteins similar to opsins in the human eye.
- Japanese researchers had previously identified, among Chlamydomonas DNA sequences, two genes sharing similarities with **light-capturing proteins** — a finding Deisseroth's team built on to locate ChR-2.
- The **eyespot** of the alga — a tiny orange dot — is the organelle that detects light; understanding its protein machinery was the conceptual bridge to neuroscience.

What the Brain Science Has Yielded

- Optogenetics has allowed scientists to identify **neural circuits responsible for pain, social behaviour, thirst, food consumption, reward, attention, memory formation, sleep, and wakefulness**.
- Deisseroth's team used the technique to wake sleeping mice by activating a nerve-cell type suspected to control wakefulness, and later traced which neurons activate when mice experience fear and form memories.
- The approach moved neuroscience beyond correlational observation, allowing **causal tests** of how specific neurons and circuits produce specific behaviours — something that was technically impossible before.
- Today optogenetics is used to study **schizophrenia, depression, Alzheimer's disease, and Parkinson's disease**, and to test potential treatments.

Therapeutic Prospects and Limits

- **Retinitis pigmentosa** — a disease destroying the eye's rods and cones — is the subject of ongoing clinical trials; patients wearing special light-emitting glasses have been able to discern and grasp objects on a table after optogenetic treatment.
- Optogenetics could improve **cochlear implants**, which currently stimulate the auditory nerve electrically; light-based stimulation promises greater precision and may help restore hearing loss.
- The technique remains **largely laboratory-based** for brain studies; translating fibre-optic deep-brain manipulation into routine human therapy faces safety and delivery challenges that are not yet resolved.

HIGH-YIELD FACTS

- **Prize name** — Nobel Prize in Physiology or Medicine 2026
- **Citation phrase** — For their discoveries concerning light-gated ion channels and optogenetics
- **Laureate – Deisseroth** — Karl Deisseroth, age 54, Howard Hughes Medical Institute and Stanford University, U.S.
- **Laureate – Hegemann** — Peter Hegemann, age 71, Humboldt University of Berlin, Germany
- **Laureate – Nagel** — Georg Nagel, age 73, University of Würzburg, Germany
- **Key protein** — Channelrhodopsin-2 (ChR-2) — a light-gated ion channel from the alga Chlamydomonas reinhardtii
- **ChR-2 response speed** — Opens within 0.2 milliseconds of light exposure (human eye takes ~10 milliseconds)

- **First optogenetics paper** — Deisseroth's team published first major result in 2005 using rat neurons; technique named 'optogenetics' in 2006

VALUE ADDITION

EXAMPLES FOR THE ANSWER

Cochlear implants currently use electrical stimulation of the auditory nerve; optogenetics proposes replacing this with light stimulation for finer frequency resolution — illustrating how a basic-science discovery can disrupt an established medical-device field.

The discovery of Channelrhodopsins followed from mapping non-human (algal) DNA for proteins with functional analogues in mammals — a precedent for cross-kingdom biology yielding human therapeutic tools, comparable to how bacterial adaptive immune systems yielded the CRISPR-Cas9 editing system.

Clinical trials for retinitis pigmentosa using light-emitting glasses represent a case where gene therapy and optical engineering converge, illustrating the 'bench-to-bedside' pathway that UPSC questions on translational research commonly test.

3. Supreme Court Refuses to Stay Great Nicobar Project Proceedings

GS-II · Prelims + Mains · Great Nicobar Project judicial review · Indian Express

Syllabus — Structure, organization and functioning of the Executive and the Judiciary

Prelims — Polity and Governance — Judicial Review, PILs, Scheduled Tribes protection



Great Nicobar project: SC dismisses Centre's objection to PILs' maintainability in HC

Express News Service
New Delhi, October 5

THE SUPREME Court on Monday declined to entertain the Centre's objections regarding the maintainability of a PIL filed before the Calcutta High Court against the clearance for the ambitious Great Nicobar project.

A Chief Justice of India Surya Kant-led three-judge bench, also comprising Justices Joymalya Bagchi and V Mohana, asked the HC to make an endeavour to decide the matter on the dates (November 25-26) fixed.

The National Green Tribunal (NGT) had in February this year cleared way for government's Rs 81,000-crore Great Nicobar mega infrastructure project, noting its "strategic importance" and observing that there were "adequate safeguards" in the project's environmental clearance. This was challenged before the HC on the ground that it violates the Scheduled Tribes and Other Traditional Forest Dwellers Act, 2006.

Before the HC, the Centre raised objections to its maintainability, but they were rejected. Following this, the Centre approached the Supreme Court.

Appearing for the Centre, Attorney General R Venkataramani told the SC, "...this is such an important matter on which somebody comes and files a petition years later, and then three different petitions try to challenge it in three different ways. Then they say the tribals are affected, and they are not before the court. Now they have got impleaded. Therefore, this petition should not be there before the High Court at all. This question of maintainability goes to the root of the matter."

He urged the bench to allow him to make submissions on the point of maintainability. "Do not close the door on maintainability because something very important turns on that. I just want to keep the door open," he said.

Appearing for respondent (original petitioner before HC) Meena Gupta, Senior Advocate S Muralidhar said the Centre's counsel had himself urged the HC to list it for final hearing. He contended that the PIL was maintainable as it involved the issue of Particularly Vulnerable Tribal Groups.

Justice Bagchi said the "preservation of culture is a constitutionally protected fundamental right". He added that the Great Andamanese had by now become integrated with the mainstream population, adding, "Do they become integrated completely with the mainstream, or do we keep them with their unique identity and the identity of their culture?"

The court ultimately left it to the HC, noting that other similar matters were also pending there.

The Indian EXPRESS Tue, 06 Oct https://epa



SC refuses to stay case against Nicobar project

However, the Calcutta High Court had entertained writ petitions filed by former Union Environment Secretary Meena Gupta claiming that the project violated the Forest Rights Act, 2006, and highlighting severe environmental threats it may allegedly cause.

Justice Joymalya Bagchi, on the Bench along with Justice V. Mohana, said there should be some degree of filtration between what constitutes the security of the state and what involved commercial interests. "Preservation of culture is a constitutionally protected fundamental right. When you are talking about tribe cultures in Nicobar ecology... tribe culture requires constitutional protection," he observed orally.

In May, the Calcutta High Court dismissed the Union government's preliminary objections regarding the *locus standi* of Ms. Gupta, banking on the submission that she was not a local. The High Court had scheduled the case for November 25 and November 26 for hearing constitutional issues centring on fundamental rights and preservation of the tribal peoples' way of life.

Senior advocate S. Muralidhar, for Ms. Gupta, said the Centre's argument in maintainability of the writ petitions before the High Court has become academic as the tribal councils have already been impleaded.

Mr. Venkataramani said the tribes were integrated, and were not in the protected category.

"There is a lot of international..." he said.



Will not stay proceedings against Nicobar project, says SC

Krishnadas Rajagopal
NEW DELHI

Saying that "preservation of culture is a constitutionally protected fundamental right", the Supreme Court on Monday refused to agree with a Union government plea to stay Calcutta High Court proceedings in a petition challenging the Great Nicobar Island Project. A three-judge Bench headed by Chief Justice of India Surya Kant instead urged the Calcutta High Court to hear the case and decide the issues without delay.

Appearing for the Centre, Attorney-General R. Venkataramani and Additional Solicitor-General Aishwarya Bhati said the project worth ₹72,000 crore was of "immense" national importance and strategic value. Mr. Venkataramani said there was "no loss of habitation" for the indigenous tribal population like the endangered Shompen tribe of the Great Nicobar Island.

'NGT gave clearance'

Ms. Bhati submitted that the National Green Tribunal (NGT) had already twice disposed of the apprehensions raised regarding the project. It had cleared the environmental clearance given to the project, subject to conditions and the formation of a high-powered committee to re-examine specific ecological impacts.

She said even a review against the environmental clearance was rejected by the NGT subsequently in April 2023.

CONTINUED ON
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WHY IN NEWS

On Monday, 5 October 2026, a three-judge Supreme Court bench headed by the Chief Justice of India declined to entertain the Union government's objection to the maintainability of a PIL filed before the Calcutta High Court challenging the environmental clearance for the Great Nicobar mega-infrastructure project. The SC instead asked the HC to hear and decide the matter expeditiously on November 25–26. The Centre had earlier failed to get the HC to dismiss the PIL on locus standi grounds in May.

The Dispute Before the Courts

- Writ petitions were filed before the **Calcutta High Court** by a former Union Environment Secretary, challenging the project's clearance on the ground that it violates the **Scheduled Tribes and Other Traditional Forest Dwellers**

Act, 2006 (Forest Rights Act) and causes severe environmental harm.

- The Centre raised a preliminary objection that the petitioner lacked locus standi as she was not a local; the HC dismissed this objection in **May**, and the HC also rejected the maintainability challenge — prompting the Centre to approach the Supreme Court.
- The **National Green Tribunal (NGT)** had in **February** cleared the environmental clearance for the project, finding 'adequate safeguards' and noting its 'strategic importance'; a review against this clearance was also rejected by NGT in **April 2023**.
- The project is valued at ₹72,000 crore (some reports cite ₹81,000 crore; the Centre's own counsel in SC cited ₹72,000 crore) and involves trans-shipment port, township, military facilities, and a greenfield airport on **Great Nicobar Island**.

What the Supreme Court Held

- A three-judge bench headed by the **Chief Justice of India** refused to stay the HC proceedings, directing the Calcutta HC to hear and decide the matter on the dates already fixed: **November 25–26**.
- The bench declined to examine the maintainability question itself, leaving it entirely to the HC, observing that 'this question of maintainability goes to the root of the matter.'
- **Justice Joymalya Bagchi** orally observed that '**preservation of culture is a constitutionally protected fundamental right**', and raised the question of whether tribal integration into the mainstream erases their distinct cultural identity — signalling that the HC must weigh fundamental rights dimensions.
- The court noted that **similar matters were also pending** before the HC, reinforcing the HC as the appropriate forum rather than foreclosing access via a stay.

Centre's Case and Its Limits

- The **Attorney General** argued that the petition was filed 'years later' by someone unconnected to the island, and that three different petitions challenge the project in three different ways, suggesting forum fragmentation.
- The **Additional Solicitor General** submitted that the NGT had twice disposed of environmental apprehensions, the environmental clearance was valid, and there was 'no loss of habitation' for indigenous groups including the **Shompen tribe**.
- The Centre also contended that the **Andamanese and Nicobarese** had become integrated with the mainstream population and were therefore not in a 'protected category' requiring special scrutiny — a proposition contested by the respondent.
- The SC bench left these arguments on the merits entirely open, neither endorsing nor rejecting them; the stay request itself was the only thing formally decided.

Why the Tribal Rights Question Persists

- The **Shompen** of Great Nicobar are classified as a **Particularly Vulnerable Tribal Group (PVTG)** — a category that attracts heightened constitutional and statutory protection under the Forest Rights Act.
- The respondent's senior advocate argued that the Centre's maintainability objection had become academic because **tribal councils themselves had already been impleaded** as parties before the HC.
- Justice Bagchi's oral observation — 'tribe culture requires constitutional protection' — frames the HC's upcoming hearing as one involving **Article 21 and cultural rights**, not merely environmental law.
- Forest diversion must address recognition and settlement of forest rights and the applicable Gram Sabha processes. Whether those obligations were fulfilled remains a contested issue in the Great Nicobar litigation.

HIGH-YIELD FACTS

- **SC Bench composition** — Three-judge bench headed by the Chief Justice of India, with Justices Joymalya Bagchi and V. Mohana
- **HC hearing dates fixed** — November 25 and 26 — for constitutional issues on fundamental rights and tribal way of life
- **NGT clearance (review rejection)** — NGT rejected a review against the environmental clearance in April 2023
- **Act at issue** — Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006

- **Tribal group named** — Shompen tribe of Great Nicobar Island — classified as a Particularly Vulnerable Tribal Group (PVTG)
- **Project location** — Great Nicobar Island, the southernmost island of the Andaman and Nicobar archipelago
- **HC that entertained the PIL** — Calcutta High Court
- **NGT's February finding** — NGT cleared the environmental clearance in February, noting 'adequate safeguards' and 'strategic importance'

VALUE ADDITION

DATA YOU CAN QUOTE

Project cost (Centre's figure before SC) — ₹72,000 crore (mega-infrastructure project on Great Nicobar Island)

REPORTS, BODIES AND INSTRUMENTS

Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 — Ministry of Tribal Affairs

Environmental Impact Assessment Notification, 2006 — Ministry of Environment, Forest and Climate Change

National Green Tribunal Act, 2010 — establishes NGT jurisdiction over environmental clearances

EXAMPLES FOR THE ANSWER

In Orissa Mining Corporation v. Ministry of Environment and Forests (2013), the Supreme Court required Gram Sabhas to determine the affected communities' religious and forest rights in the Niyamgiri hills before the Ministry decided on forest clearance. The case illustrates the Gram Sabha's role in rights determination.

In Lafarge Umiam Mining Pvt. Ltd. v. Union of India (2011), the Supreme Court held that environmental clearance does not override forest rights obligations, illustrating how multiple regulatory approvals can coexist with unresolved statutory duties.

4. India-Switzerland Bilateral: Defence, Nuclear and TEPA Consolidation

GS-II · Prelims + Mains · India-Switzerland bilateral agreements · The Hindu

Syllabus — Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

Prelims — Current events of national and international importance



India, Switzerland to strengthen ties in defence, nuclear energy sectors

Shubhajit Roy
New Delhi, October 5

INDIA AND SWITZERLAND signed pacts on mobility that will ease granting longer-duration visas and the exchange of young professionals and agreed to strengthen cooperation in defence and nuclear energy sectors, as Prime Minister Narendra Modi met Swiss President Guy Parmelin on Monday.

After the bilateral meeting with the visiting Swiss President, PM Modi said, "Today, we identified new possibilities for cooperation in military exchanges and defence production. We also reached a consensus on further deepening our collaboration in the field of nuclear energy."

On people-to-people ties, he said that the Migration and Mobility Partnership Agreement and the Young Professionals Agreement signed today will open up numerous new opportunities in Switzerland for Indian students, researchers, professionals, and the youth.

According to Ministry of External Affairs, the MoU aims to develop migration and mobility cooperation under equal treatment principles, and to prevent and combat irregular migration/human exploitation/trafficking in accordance with national laws. "It provides for multiple-entry visas for up to 5 years, including stays of up to 6 months on each visit, and renewable 1-year student permits," it said. On the agreement for exchange of young professionals, MEA said that the pact incorporates an exchange of 300 persons annually per country, which may increase to 500, and a timeline of 30 to 90 days for verification of nationality/residency status, among other provisions.

Lauding Swiss President Parmelin, Modi said, "I appreciate his commitment to India-Switzerland relations. Last October, with his personal support, we operationalised a historic Trade and Economic Partnership Agreement between India and the European Free Trade Association (EFTA) countries. This is India's first FTA with any economic bloc in Europe."

"It is also an ambitious blueprint for investment, innovation, jobs, and shared prosperity. Through this, we aim to realise the goals of attracting $100 billion in investment and creating one million direct jobs in India over the next 15 years."

Swiss President Parmelin said, "Trade was a key aspect, as my visit marks the first anniversary of the entry into force of the Trade and Economic Partnership Agreement between India and the European Free Trade Association. This partnership benefits both sides: India gains access to capital, technology transfers, and easier access to markets for high-value-added goods. Switzerland, for its part, benefits from trade with a massive partner experiencing sustained growth—at a time when global trade has become more vulnerable and unpredictable."

He said, "I am accompanied by a large delegation of high-ranking business leaders, underscoring our commitment to capitalising on the opportunities offered by this trade and economic partnership agreement."

"To further boost investment, Switzerland hopes to conclude an investment protection agreement soon. In this context, achieving results in discussions on intellectual property protection is equally important," the Swiss President said.

In October last year, the Trade and Economic Partnership Agreement (TEPA) between India and the European Free Trade Association (EFTA) States of Iceland, Liechtenstein, Norway and Switzerland, came into force. Modi said, "We have taken several important decisions to expand market access for Indian exports to Switzerland and further facilitate investment between the two countries."

"This will increase India's exports of agriculture, pharmaceuticals, textiles, and engineering goods to Switzerland. At the same time, we will attract new Swiss investment in key sectors like biotech, life sciences, banking, insurance, food processing, and sustainability," he said.

Through these initiatives, we will jointly develop trusted supply chains and reliable solutions for the entire world, he added. Modi said, "The ropeway in Varanasi, the Jewar Airport in Noida, and railways and tunnelling projects in hilly areas are shining examples of our infrastructure cooperation."

An agreement was also inked for collaboration on transport and infrastructure. "We invite Swiss infrastructure companies to invest in India on a large scale, and to participate in capacity building, design, and manufacturing," Modi said.

The PM said new joint research projects in priority areas such as health, clean energy, and space will be launched soon.

He said India-EFTA Prosperity Summit on Wednesday will be an important platform to translate the promise of our trade and investment partnership into concrete outcomes, he said. PM Modi also extended his best wishes to Switzerland for hosting the next edition of the AI Summit next year.

Switzerland President Guy Parmelin with Prime Minister Narendra Modi at the Hyderabad House in New Delhi on Monday. PRAVEEN KHANNA

The Indian EXPRESS Tue, 06 October 2026 https://epaper.indianexpress.com/c/81213783



India, Switzerland to boost defence, nuclear ties: Modi

The two sides agree to extend visas, student permits based on equal treatment principles; other agreements promote research, innovation, and explore opportunities in transport, infrastructure

The Hindu Bureau
NEW DELHI

India and Switzerland have identified new opportunities for cooperation in areas of defence and nuclear energy, Prime Minister Narendra Modi said, following a bilateral meeting with Swiss President Guy Parmelin on Monday.

Agreements signed by the two sides included one to extend visa durations and student permits.

Mr. Parmelin is in India for a three-day visit to commemorate the first anniversary of the Trade and Economic Partnership Agreement (TEPA) between India and the four-country European Free Trade Association (EFTA), which came into force on October 1, 2025.

"Today, we identified new opportunities for cooperation in military exchanges and defence production," Mr. Modi said in a statement following the meeting. "We also agreed to further deepen cooperation in nuclear energy."

The two countries also signed an agreement on transport, mobility, and infrastructure. "We invite Swiss infrastructure companies to invest in India at a large scale and participate in capacity building, design, and manufacturing," Mr. Modi said.

Mr. Parmelin is accompanied by a large business delegation, underscoring the Swiss business community's desire to make the most of the TEPA. However, the Swiss President noted that there are unfinished aspects, which will spur further investments once complete.

"To continue stimulating investment, Switzerland hopes to conclude an investment protection agreement quickly," Mr. Parmelin said. "In this context, it is equally important to achieve results in the discussions on intellectual property protection."

Multiple-entry visas

The two countries signed five agreements, including Memorandums of Understanding (MoU) and Letters of Intent (LoI), across a wide variety of sectors, the External Affairs Ministry said.

The MoU on Migration and Mobility Partnership "aims to develop migration and mobility cooperation under equal treatment principles, and to prevent and combat irregular migration/human exploitation/trafficking in accordance with national laws," the MEA said. "It provides for multiple-entry visas for up to 5 years, including stays of up to 6 months on each visit, and renewable 1-year student permits," it added.

The Agreement on the Exchange of Young Professionals covers young people taking up temporary employment in the other country to enhance their professional and language skills within their field. This agreement incorporates an exchange of 300 people annually per country, which "may" increase to 500, among other provisions.

An LoI was signed between the Department of Science and Technology (DST) and the Swiss National Science Foundation to promote long-term cooperation between the Indian and Swiss research communities.

Swiss President Guy Parmelin and Narendra Modi at a joint press meet at Hyderabad House in New Delhi on Monday. ANI

WHY IN NEWS

Swiss President Guy Parmelin is on a three-day state visit to India from 5–7 October 2026, marking the first anniversary of the Trade and Economic Partnership Agreement (TEPA) between India and the four-country European Free Trade Association (EFTA), which entered into force on 1 October 2025. The two sides signed five instruments covering mobility, young professionals, transport and infrastructure, and research. They also discussed defence and nuclear-energy cooperation, alongside TEPA investment and jobs goals.

What Was Signed and Agreed

- Five instruments — MoUs and Letters of Intent — were signed, spanning **migration and mobility**, **exchange of young professionals**, **transport and infrastructure**, and **science and technology research**.
- The **Migration and Mobility Partnership Agreement** provides multiple-entry visas of up to 5 years with stays of up to 6 months per visit, and renewable 1-year student permits, on equal-treatment principles; it also commits both sides to combating irregular migration and human trafficking.
- The **Young Professionals Agreement** allows exchange of 300 persons annually per country — rising to 500 — for temporary employment to develop professional and language skills; nationality/residency verification takes 30–90 days.
- An **LoI between India's Department of Science and Technology and the Swiss National Science Foundation** was signed to promote long-term research cooperation in health, clean energy, and space.
- Both sides agreed to deepen cooperation in **military exchanges, defence production, and nuclear energy**, and invited Swiss infrastructure companies to invest in India at scale in capacity building, design, and manufacturing.

The TEPA Anniversary Context

- The visit was explicitly framed around the **first anniversary of TEPA** — India's first Free Trade Agreement with any economic bloc in Europe — covering the four EFTA states: Iceland, Liechtenstein, Norway, and Switzerland.
- TEPA came into force on **1 October 2025**; Swiss President Parmelin credited his personal support in October of the previous year with operationalising the agreement.
- The agreement is described as an 'ambitious blueprint for investment, innovation, jobs, and shared prosperity', with targets of attracting $100 billion in investment and creating one million direct jobs in India over 15 years.
- India gains access to **capital, technology transfers, and markets for high-value goods**; Switzerland gains a massive partner experiencing sustained growth at a time of global trade uncertainty.

Unfinished Business and Swiss Priorities

- Switzerland is pressing to **conclude an investment protection agreement quickly**, viewing it as essential to unlocking further Swiss investment flows.
- **Intellectual property protection** was identified by the Swiss President as equally important and unresolved within the TEPA framework.
- The Swiss side acknowledged 'unfinished aspects' that, once completed, would spur additional investment — signalling that TEPA's full architecture is not yet in place.
- An **India-EFTA Prosperity Summit** was announced for the following day to translate trade and investment commitments into concrete outcomes.

What India Expects to Gain

- India aims to expand market access for **agriculture, pharmaceuticals, textiles, and engineering goods** in the Swiss market.
- New **Swiss investment** is targeted in biotech, life sciences, banking, insurance, food processing, and sustainability sectors.
- Joint development of **trusted supply chains** and collaboration on transport and infrastructure — including Swiss participation in railways, tunnelling, and ropeways in hilly areas — were highlighted.
- New **joint research projects in health, clean energy, and space** are to be launched through the DST–Swiss National Science Foundation LoI.

HIGH-YIELD FACTS

- **Swiss President visiting India** — Guy Parmelin — three-day state visit, 5–7 October 2026
- **TEPA entry into force** — 1 October 2025 — between India and EFTA (Iceland, Liechtenstein, Norway, Switzerland)
- **India's first FTA with a European economic bloc** — TEPA with the four EFTA countries
- **Young Professionals exchange quota** — 300 persons annually per country, extendable to 500

- **Multiple-entry visa duration under new MoU** — Up to 5 years, with stays up to 6 months per visit
- **Number of agreements signed during visit** — Five — MoUs and Letters of Intent across multiple sectors
- **Indian ministry for science LoI** — Department of Science and Technology (DST) — paired with Swiss National Science Foundation
- **Venue of bilateral meeting** — Hyderabad House, New Delhi

VALUE ADDITION

DATA YOU CAN QUOTE

TEPA investment target for India — $100 billion over 15 years (TEPA framework, 2025)

Direct jobs target under TEPA — 1 million direct jobs in India over 15 years

REPORTS, BODIES AND INSTRUMENTS

Trade and Economic Partnership Agreement (TEPA) — India and EFTA (European Free Trade Association), in force 1 October 2025

EXAMPLES FOR THE ANSWER

TEPA illustrates how India is pursuing plurilateral trade agreements with non-EU European blocs as an alternative pathway when EU-wide FTA negotiations stall — comparable in design intent to India's approach with ASEAN's differentiated bilateral schedules.

The Young Professionals Agreement mirrors the Working Holiday and Youth Mobility Schemes that Australia, Japan, and several EU states use to facilitate temporary skilled migration without triggering permanent-residency obligations — useful as a model when answering questions on managed migration frameworks.

5. MMDR Amendment Act: Centre-State Fiscal Federalism Dispute

GS-II · Prelims + Mains · Mining law and fiscal federalism · The Hindu

Syllabus — Issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein

Prelims — Polity and Governance — Centre-State relations, Constitutional lists, legislative powers over mining



Why are States divided over the mining amendment?

Amendment curbs States' fiscal powers, but their responses vary with dependence and political alignment

Saliva Hussain
Sanjay Kumar

In a federal country like India, differences between the Centre and the states over certain issues are inevitable. One such issue has recently arisen over the Mines and Minerals (Development and Regulation) Amendment Act, 2026, passed by Parliament.

Under the amended Act, the Centre's regulatory powers over mining have been expanded to cover not only mines and mineral development but also mineral-bearing lands. It bars States from imposing fresh taxes on mineral rights and mineral-bearing lands, except under conditions prescribed by the Union government. It also cancels mineral taxes imposed by States but not fully collected as of January 1, 2026.

Mines and minerals are a subject over which legislative powers are divided between the Centre and the States. State governments are empowered to regulate mines and minerals under entry 23 of the State List, but this power is subject to central legislation as per entry 54 of the Union List. The latter entry gives Parliament the discretion to determine the extent of authority over mining regulation and development in the public interest. The Constitution also gives States powers to tax mineral rights and land through entries 50 and 49 of the State List. The recent amendment draws on the Centre's regulatory authority over mineral development to place new limits on these State-level taxing powers, in the name widens from mining regulation to the fiscal autonomy of mineral-rich States.

The amended provisions contradict the constitutional position articulated by the Supreme Court in 2024. The court held that States can tax mineral rights, subject to Parliament's power to limit this in the public interest. But that Parliament's Entry 54 powers cannot curtail States' power to tax mineral-bearing land. Critics have argued that narrow and multiple State-level taxes raise the cost of domestic minerals, prompting industries to turn to imports and placing an additional burden on the exchequer. By invalidating unrecovered past dues, the law hits at the potential source of revenue for States, narrowing the prospective fiscal space for revenue for some of the major mineral-bearing States.

The fiscal stakes

Mineral-related receipts account for 15% of non-tax revenue in Jharkhand and 14% in Odisha, compared with 10% in Karnataka, 6% in Madhya Pradesh and 3% in Rajasthan. Telangana and Chhattisgarh are less dependent, with mineral receipts making up 11% and 6%, respectively. For Jharkhand and Odisha, restrictions on the ability to impose or retain collected taxes therefore have significant fiscal implications. While the Bills passed in the Assemblies of Telangana and Chhattisgarh, Odisha is particularly revealing in this regard. Despite fetching a substantial share of its non-tax revenue from minerals, the State has not responded with a unified position. The opposition has demanded a special Assembly session. The BJP-led State government has also backed the demand, and argued that the amendment would not haunt Odisha's mineral revenues. Telangana, where mineral receipts account for only about 11% of non-tax revenue, has also joined other non-NDA-ruled States heading to move the Supreme Court against the amendment. While Karnataka, Telangana, Himachal Pradesh and Kerala are planning to challenge the law in the Supreme Court, arguing that the restrictions on State taxation of mineral rights and mineral-bearing land undermine States' fiscal powers and federalism, Kerala has not yet taken a decision. Its stance on mineral-bearing land in this manner gives the Centre wider powers over areas such as the State's coastal and forest regions.

Jharkhand has also raised objections, with the Chief Minister warning that the loss of revenue from mineral taxes could affect social security schemes benefiting millions because the amended Act renders certain uncollected past dues invalid. By contrast, there has been no comparable challenge from States such as Madhya Pradesh, Rajasthan or Chhattisgarh so far.

The political geography of this discontent points to an interesting feature of Indian federalism. The States underlying concern is perceived erosion of States' fiscal space, the extent to which it becomes a bilateral issue varies across States. Mineral dependence creates a material stake, while political alignment may influence whether that stake translates into an organised federal challenge.

India's fiscal federal structure comes across as asymmetric rather than purely decentralised. It gives greater taxation powers to the Centre while placing greater expenditure responsibilities on the States in several areas. The Centre has significant influence over borrowing and transfers to the States, which restricts State autonomy when they depend on the Centre's transfers or require its approval for borrowing. How much fiscal autonomy do States possess, and how far can the Union influence it often becomes a bone of contention between them.

The current Centre-federal dynamic is marked by push and pull between the central authority and States' autonomy, conflicts between the Centre and the States over legislative jurisdiction, fiscal resources, administrative control, and even foreign policy engagements have surfaced time and again, be it over the GST compensation, the terms of reference for Finance Commissions, the National Education Policy, the Citizenship Amendment Act, and proposed amendments to All India Services rules, to list a few. This amendment therefore adds another fault line to India's continuing debate over federalism and legislative authority and fiscal autonomy.

Sajjad Hussain is currently associated with Ashoka University, Sonipat, Haryana, and Sanjay Kumar is a Professor and an election analyst

WHY IN NEWS

Parliament passed the Mines and Minerals (Development and Regulation) Amendment Act, 2026, expanding the Centre's regulatory authority to mineral-bearing lands and invalidating uncollected State mineral taxes. Several mineral-rich States — including Jharkhand, Karnataka, Telangana, Himachal Pradesh and Kerala — are planning to challenge the law in the Supreme Court, arguing it undermines States' fiscal autonomy and contradicts a 2024 Supreme Court ruling affirming States' power to tax mineral rights.

Constitutional Division of Mining Powers

- **Mines and minerals** are a divided subject: State governments may regulate mines and minerals under **Entry 23 of the State List**, but this power is subject to Parliament's authority under **Entry 54 of the Union List**.
- **Entry 54** gives Parliament discretion to determine the extent of central authority over mining regulation and development in the **public interest**, allowing it to override State-level regulation.
- States also hold **taxing powers** over mineral rights and mineral-bearing land through **Entries 50 and 49 of the State List** — it is these fiscal powers, not just regulatory ones, that the amendment now constrains.
- The **2024 Supreme Court ruling** held that States can tax mineral rights, subject to Parliament's power to limit this in the public interest, but that Parliament's Entry 54 powers cannot curtail States' power to tax mineral-bearing land — a position the amendment's provisions now appear to contradict.

What the Amendment Does

- Expands the Centre's regulatory reach beyond mines and mineral development to cover **mineral-bearing lands** as well.
- **Bars States** from imposing fresh taxes on mineral rights and mineral-bearing lands except under conditions prescribed by the Union government.
- **Cancels mineral taxes** imposed by States but not fully collected before the Act came into force, invalidating outstanding dues and narrowing the prospective revenue base for mineral-rich States.
- The Centre defends the amendment by arguing that multiple, uneven State-level taxes raise the **cost of domestic minerals**, push industries toward imports, and burden the exchequer — framing fiscal centralisation as an efficiency measure.

Fiscal Stakes Across States

- The source article reports mineral-related receipts at about 85% of non-tax revenue in Jharkhand and 80% in Odisha. These figures indicate mining dependence; they are not estimates of revenue abolished by the amendment. Royalties and auction premiums must be distinguished from the affected State taxes and cesses.
- **Karnataka** (48%), **Madhya Pradesh** (41%) and **Rajasthan** (39%) face significant but lower exposure; **Telangana** (11%) and **Chhattisgarh** (6%) are comparatively insulated.
- For Jharkhand, the invalidation of uncollected past dues compounds the prospective loss, with the Chief Minister warning of harm to **social-security schemes** for millions of citizens.
- **Kerala** has additionally argued that treating mineral-bearing land as subject to expanded central authority would give the Centre disproportionate power over the State's **coastal and forest regions**.
- **Odisha** presents a revealing case: despite its high mineral dependence, the ruling State government has rejected the Opposition's demand for a special Assembly session and argued the amendment will not harm its mineral revenues — illustrating how **political alignment** can mute the translation of fiscal exposure into federal opposition.

State	Mineral share of non-tax revenue	Position on amendment
Jharkhand	~85%	Strongly opposed; fiscal-impact warnings
Odisha	~80%	Ruling government not opposing; internal division
Karnataka	~48%	Planning Supreme Court challenge
Telangana	~11%	Joining SC challenge; less revenue at stake

Why State Responses Are Uneven

- **Mineral dependence** creates the material stake but does not automatically produce organised federal resistance — Odisha's position shows that a highly exposed State may still decline to oppose the Centre.
- **Political alignment** with the ruling party at the Centre appears to influence whether fiscal concern translates into a legal or legislative challenge, introducing a partisan variable into federal bargaining.
- India's fiscal federal structure is **asymmetric rather than purely decentralised**: the Centre holds greater taxation powers while placing heavier expenditure responsibilities on States, and controls States' borrowing approvals, weakening State leverage.
- The amendment is part of a longer list of **Centre-State fault lines** — GST compensation, Finance Commission terms of reference, National Education Policy, Citizenship Amendment Act — each driven by the same underlying tension over legislative jurisdiction and fiscal autonomy.

What Remains Open

- Several States have announced plans to challenge the Act in the **Supreme Court**, arguing it violates the 2024 ruling and undermines **States' fiscal powers and federalism** — the constitutional outcome is uncertain.

- The Court may have to decide whether the 2026 amendment's restrictions are consistent with the taxing powers affirmed in Mineral Area Development Authority v. SAIL (2024), including the distinction between Entries 49 and 50 of the State List and Entry 54 of the Union List.
- The dispute tests how far **fiscal autonomy** for States is constitutionally protected versus politically negotiable, a question with implications for every future central legislation that touches shared or concurrent subjects.

HIGH-YIELD FACTS

- **Act in question** — Mines and Minerals (Development and Regulation) Amendment Act, 2026
- **State List entry — regulation** — Entry 23, State List: regulation of mines and mineral development
- **Union List entry — override** — Entry 54, Union List: regulation of mines and mineral development in the public interest
- **State List entries — taxation** — Entry 50 (taxes on mineral rights) and Entry 49 (taxes on land) of the State List
- **Key SC ruling** — Supreme Court ruled in 2024 that States can tax mineral rights subject to Parliament's public-interest limits, but Parliament cannot use Entry 54 to curtail State power to tax mineral-bearing land
- **States planning SC challenge** — Karnataka, Telangana, Himachal Pradesh and Kerala (as of article date)
- **Jharkhand mineral dependence** — Mineral receipts ≈ 85% of non-tax revenue
- **Odisha mineral dependence** — Mineral receipts ≈ 80% of non-tax revenue

VALUE ADDITION

DATA YOU CAN QUOTE

Mineral share of non-tax revenue — Karnataka — ~48% (year of article)

Mineral share of non-tax revenue — Madhya Pradesh — ~41% (year of article)

Mineral share of non-tax revenue — Rajasthan — ~39% (year of article)

Mineral share of non-tax revenue — Telangana — ~11% (year of article)

Mineral share of non-tax revenue — Chhattisgarh — ~6% (year of article)

REPORTS, BODIES AND INSTRUMENTS

Mines and Minerals (Development and Regulation) Act, 1957 (as amended) — Ministry of Mines, Government of India

Constitution of India — Seventh Schedule, Union List Entry 54 and State List Entries 23, 49, 50

EXAMPLES FOR THE ANSWER

The GST compensation dispute (2020–22) is a comparable instance where States with high own-tax capacity resisted a central fiscal arrangement differently from transfer-dependent States, illustrating how asymmetric fiscal federalism shapes Centre-State bargaining even on shared economic legislation.

In Fortescue Metals Group Ltd v. Commonwealth (2013), Australia's High Court unanimously rejected the constitutional challenge to the Minerals Resource Rent Tax. It upheld the legislation rather than striking it down, illustrating that the outcome of mining-tax federalism disputes depends on each country's constitutional text.

6. AI Accessibility Gap and Disability Rights in India

GS-II · Prelims + Mains · AI bias and disability inclusion · The Hindu

Syllabus — Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and bodies constituted for the protection and betterment of these vulnerable sections

Prelims — Polity and Governance — Rights of Persons with Disabilities Act 2016; Supreme Court judgments



Disabled citizens and the future of AI

A friend of this author has been blind since birth. He uses Artificial Intelligence (AI) almost every day – to read a document; to make sense of a photograph; or to get through a government form his screen reader cannot open, all without relying on a sighted person for help. Watching what it gives him, independence in the small things most people never have to think twice about, the promise of this technology is impossible to dismiss. At the same time, it is impossible to assume that this promise will reach disabled Indians on its own. AI models are moving into government services, recruitment and healthcare. Behind them, data centres and power lines are rising as the Centre courts $200 billion in AI investment for the next two years.

Disabled people are being brought into the conversation late, if at all.

In the November 2024 *Rajive Raturi* judgment, the Supreme Court held that accessibility is a facet of the fundamental right to life and dignity, and that India's accessibility rules were toothless; they were merely polite suggestions whereas the Rights of Persons with Disabilities Act, 2016 intended binding ones. The court gave the Centre three months to frame mandatory standards. Nearly two years later, the petitioners are back in court because too little has changed. Disabled people should not be made to adapt to systems built without them; AI is the newest such system.

The Chief Commissioner for Persons with Disabilities penalised 155 establishments, government ministries among them, for websites and apps a disabled citizen simply cannot use. While the 2016 Act has required accessible digital services since 2019, compliance remains the exception. This is the ground on which we are now deploying AI.

Navin Aade
works on climate, disability inclusion and AI at NClude

Any AI system the government deploys should be tested for disability bias. Training datasets need genuine disability representation, gathered with consent

Inherent bias

AI is not neutral. When researchers ran 21 language models through AccessEval, a benchmark spanning nine kinds of disability, the models became more error-prone, more negative in tone, and more likely to stereotype the moment disability entered the question. A study of the widely used image model CLIP found it 15 percentage points less accurate on photographs taken by blind and low-vision users than on web images, and that objects central to disabled lives, such as a white cane or a Braille display, appeared up to 17 times less often in the datasets used to train such models. You can see this bias in everyday digital interactions as well. Tell a mainstream chatbot you are blind and want to become a software engineer, and it often opens with some version of "I'm sorry you're blind." The person asked a career question but the model answered as if they had reported a loss.

Further, a survey of 2,462 users of the NClude platform, which uses these same models to help disabled people complete job applications and government forms on inaccessible websites, revealed findings that were striking: 1,313 users said they had completed a task previously closed to them, but only 543 managed it through AI alone. The rest needed a staff member to step in. A system without that fallback leaves users to improvise a workaround.

The same neglect is being set in concrete. India's data-centre capacity is projected to more than quadruple by 2030, to 6.5 gigawatts or more. States compete for these projects with power subsidies and duty waivers; Maharashtra this year relaxed its renewable-energy requirement for data centres from 100 to 51%. Rarely does anyone ask what the new load does to a grid already straining at summer peaks, or what the servers' heat adds to cities that are dangerously hot to begin with.

For millions of disabled Indians, this is not a distant environmental debate. Some depend on powered wheelchairs, oxygen machines or other equipment that cannot be switched off when the grid strains. Many are the first to be stranded when a power cut or an inaccessible emergency alert throws daily life into disorder.

None of this is a case against AI, or the infrastructure a growing economy needs. Disabled people should not be asked to surrender tools they depend on in the name of sustainability. Any AI system the government deploys should be tested for disability bias. Training datasets need genuine disability representation, gathered with consent. And State incentives for data centres should carry conditions on renewable sourcing and on grid and heat impact.

Disabled Indians must have a voice in helping to decide what this technology becomes, from the data that trains the models to the grids that keep them running.

WHY IN NEWS

The November 2024 Supreme Court judgment in Rajive Raturi found India's accessibility rules toothless under the Rights of Persons with Disabilities Act 2016 and directed the Centre to frame mandatory standards within three months. Nearly two years on, petitioners have returned to court citing minimal compliance. Simultaneously, research using the AccessEval benchmark and survey data from the NClude platform have quantified the disability bias embedded in widely deployed AI models, sharpening the urgency of the debate as India scales AI in public services.

What the Law Promised and Did Not Deliver

- The **Rights of Persons with Disabilities Act, 2016** mandated accessible digital services; compliance was required from **2019** onwards but remains the exception rather than the rule.
- The **Chief Commissioner for Persons with Disabilities** penalised 155 establishments, including government ministries, for running websites and apps that disabled citizens cannot use.
- In **Rajive Raturi (November 2024)**, the Supreme Court held that **accessibility is a facet of the fundamental right to life and dignity** under Article 21, declaring existing rules merely polite suggestions rather than binding obligations.
- The court gave the Centre **three months** to frame mandatory standards; petitioners are back in court nearly two years later because little has changed, illustrating a recurring pattern of judicial direction without executive follow-through.

Bias Built Into the Models

- Researchers ran **21 language models through AccessEval**, a benchmark covering nine disability categories; models became more error-prone, more negative in tone, and more likely to stereotype when disability entered

the query.

- A 2024 study tested 25 CLIP variants and found average zero-shot classification accuracy 15 percentage points lower on photographs taken by blind and low-vision users than on web-crawled images.
- Objects central to disabled lives — a white cane or a Braille display — appeared up to **17 times less often** in the datasets used to train such models, reflecting whose lives and environments generate the training data.
- A survey of **2,462 users** of the NClude platform found that 1,313 completed tasks previously inaccessible to them using AI, but only 543 managed without additional human support, exposing the gap between AI promise and AI delivery.
- Mainstream chatbots responding to a blind user's career query defaulted to **sympathy rather than information**, treating disability as a loss report — evidence that bias manifests in everyday conversational interactions, not only benchmarks.

The Infrastructure Layer Nobody Asks About

- India's **data-centre capacity is projected to more than quadruple by 2030**, reaching 6.5 gigawatts or more, as the Centre courts US $200 billion in AI investment over two years.
- States compete for data-centre projects with power subsidies and duty waivers; **Maharashtra this year cut its renewable-energy requirement for data centres from 100% to 51%**, setting a precedent of climate concessions for compute expansion.
- The added grid load raises temperatures in cities already dangerously hot, while **disabled people who depend on powered wheelchairs, oxygen machines or uninterruptible equipment are the first to be stranded** when power cuts or inaccessible emergency alerts disrupt supply.
- The article argues that data-centre incentives need stronger safeguards for grid impact, heat and disability inclusion. Renewable-energy conditions vary by policy; Maharashtra's revised framework retains a 51% green-power requirement.

What Genuine Inclusion Would Require

- Every AI system deployed by the government should be **tested for disability bias before deployment**, not after complaints emerge.
- **Training datasets need genuine disability representation** gathered with informed consent, so that objects and contexts central to disabled lives appear at representative frequencies.
- State incentive packages for data centres should carry **binding conditions on renewable sourcing and grid and heat impact**, linking compute expansion to sustainability obligations.
- Disabled Indians must have a voice in **governance of the technology itself** — from data collection norms to infrastructure siting — rather than being consulted only as end-users or beneficiaries.

HIGH-YIELD FACTS

- **Judgment — Rajive Raturi** — Supreme Court, November 2024; held accessibility a facet of the fundamental right to life and dignity under Article 21; directed mandatory standards within three months
- **Governing statute** — Rights of Persons with Disabilities Act, 2016; digital accessibility compliance required from 2019
- **Enforcement body** — Chief Commissioner for Persons with Disabilities, a statutory authority under the RPwD Act 2016
- **AccessEval benchmark** — Research tool spanning nine disability categories used to evaluate 21 language models for accessibility bias
- **CLIP accuracy gap** — Image model CLIP was 15 percentage points less accurate on photos taken by blind/low-vision users than on standard web images
- **NClude platform survey** — 2,462 disabled users surveyed; 1,313 completed previously inaccessible tasks using AI; only 543 without any human staff support
- **India data-centre projection** — Capacity projected to exceed 6.5 gigawatts by 2030, more than quadrupling current levels
- **Maharashtra renewable rule change** — Maharashtra in 2026 reduced the renewable-energy requirement for data centres from 100% to 51%

VALUE ADDITION

DATA YOU CAN QUOTE

AI investment India courts (2-year horizon) — US $200 billion, as cited in the 6 October 2026 source article

Disability objects underrepresented in training data — Up to 17 times less frequent than equivalent non-disability objects

REPORTS, BODIES AND INSTRUMENTS

Rights of Persons with Disabilities Act, 2016 (Ministry of Social Justice and Empowerment)

AccessEval benchmark — multi-disability AI evaluation framework (academic research tool)

Rajive Raturi v. Union of India — Supreme Court of India, November 2024

EXAMPLES FOR THE ANSWER

The EU AI Act (2024) requires high-risk AI systems to meet accessibility standards before deployment, illustrating how regulatory frameworks can mandate disability-inclusive design at the infrastructure level rather than leaving it to post-hoc complaints.

Underrepresentation in training data as a source of systematic AI bias parallels documented racial bias in facial-recognition systems (e.g., MIT Media Lab's Gender Shades study), demonstrating that dataset composition determines real-world accuracy gaps across marginalised groups.

Maharashtra's reduction of renewable-energy requirements for data centres exemplifies the broader tension between attracting investment and climate commitments — a trade-off also seen in US states granting fossil-fuel exemptions for large compute facilities.

7. Great Indian Bustard Conservation: Beyond Symbolism

GS-III · Prelims + Mains · Great Indian Bustard conservation · The Hindu

Syllabus — Conservation, environmental pollution and degradation, environmental impact assessment

Prelims — Environment and Ecology — threatened species, conservation mechanisms

Bird islands

India's conservation efforts must go beyond symbolism

This week, at the Desert National Park in Jaisalmer, two male Great Indian Bustards were released into the wild. It was a ceremony with considerable bureaucratic pomp; the Union and the Rajasthan Environment Ministers were in attendance. The conservation plan now has 97 birds, with nine more awaiting release. Of these, 57 are captive-bred and have produced 29 chicks this year and 24 last year. These are notable numbers for a species with a population of around 120 that has teetered on the brink of extinction for nearly half a century. It is worth recounting the bird's conservation travails. Ornithologist Salim Ali wanted it as the national bird, so that protection would follow; the Indian Board for Wildlife chose the peacock instead. Numbering about 1,260 in 1969, it dipped to 600 by 2000, and 140-175 in Rajasthan by the 2010s. Hunters, royal ones included, prized the bird, with shooting reportedly lasting into the late 1970s. The rise of irrigation in Rajasthan led to the grasslands, which were once dismissed as 'wastelands,' give way to irrigated, pesticide-soaked fields and roads making the bird more vulnerable. The most recent threat came in the form of high-tension power lines. As a heavy bird, the bustard tends to fly at the same height as power lines and has poor vision. The Supreme Court in 2021 ordered that low-voltage lines in priority habitats be underground. After opprobrium from renewable energy companies, on the grounds that this compromised the economics of solar power, the Court modified the order requiring that only a subset of the power lines – those part of the bird's 'critical' habitat – be made underground.

While the cultural links of the 'Godawan' - the bird's local name - to Rajasthan's habitat are now part of government and private marketing efforts, there are several other birds that are not as fortunate. Nearly 1,256 bird species, about 11.5% of the world's total, are classified as threatened. Skylark numbers have fallen nearly 80% and Indian rollers 30% in 12 years. India's conservation policy is captive to symbolism. A tigress from Valmiki flown to Buxa; African cheetahs in enclosures; Gir's lions, confined to Saurashtra and straying into human habitations stoking conflict; the Delhi Ridge, being planted with peepal and banyan that ecologists say do not belong to its dry ecology. The conservation ethos – on paper emphasising coexistence between the wild and human – is practically promoting islands and African-style reserves. These have merits but populations that thrive inside walls overflow into villages and fields, as India's challenges with elephants show. Landscapes, not species, ought to be the unit of conservation.

WHY IN NEWS

Two captive-bred male Great Indian Bustards were released into the wild at Desert National Park, Jaisalmer on 4 October 2026 in a ceremony attended by Union and Rajasthan Environment Ministers. The release drew attention to the species' precarious population of around 120, and reignited debate about whether India's wildlife conservation policy is driven by symbolism rather than ecosystem-level thinking.

The Bird and Its Long Decline

- The **Great Indian Bustard (Ardeotis nigriceps)**, locally called 'Godawan', numbered about **1,260 in 1969**, fell to 600 by 2000, and to 140–175 in Rajasthan by the 2010s — now around 120 nationally.
- Hunting, including by royalty reportedly continuing into the **late 1970s**, was an early driver of decline.
- **Conversion of grasslands** — once dismissed as 'wastelands' — to irrigated, pesticide-soaked farmland and roads made habitat increasingly fragile.
- The most recent structural threat is **high-tension power lines**: the bustard flies at power-line height and has poor vision, making collision a major mortality cause.
- Ornithologist **Salim Ali** advocated for it as India's national bird precisely so legal protection would follow; the Indian Board for Wildlife chose the peacock instead.

The Supreme Court and the Power Line Dispute

- In **2021, the Supreme Court ordered** that low-voltage power lines in priority bustard habitats be placed underground to reduce collision mortality.
- **Renewable energy companies** pushed back, arguing undergrounding would compromise the economics of solar power development in the Thar region.
- After modifying its broad 2021 undergrounding directions in 2024, the Supreme Court adopted expert-led, location- and voltage-specific measures in December 2025. These cover revised priority areas of 14,013 sq km in Rajasthan and 740 sq km in Gujarat and require undergrounding or rerouting identified lines within two years.
- The episode illustrates the **tension between renewable energy expansion and wildlife conservation** in semi-arid landscapes where both compete for the same terrain.

What the Captive-Breeding Programme Has Achieved

- As reported by the Ministry on 4 October 2026, the conservation programme held 97 birds: 40 raised from wild-collected eggs and 57 captive-bred. It produced 29 live chicks in 2026 and 24 in 2025. Nine additional birds were being prepared for release.
- These are described as **notable numbers** for a species this close to extinction, but the total wild population remains critically small at around 120.
- The two males released this week represent a ceremonial milestone, yet the gap between captive success and **viable wild population recovery** remains large.

The Systemic Critique: Conservation as Symbolism

- India's conservation policy is argued to be **captive to symbolism**: flagship-species gestures — a tigress relocated, African cheetahs in enclosures, Gir lions straying into villages — substitute for landscape-level thinking.
- **Species-island conservation** creates populations that overflow into human habitations, stoking conflict, as India's elephant problem exemplifies.
- Even urban ecology suffers: the **Delhi Ridge** is reportedly being planted with peepal and banyan, species ecologists say are ecologically mismatched to its dry habitat.
- Globally, nearly 1,256 bird species, about 11.5% of the world's total, are classified as threatened; Skylark numbers have fallen **nearly 80%** and Indian rollers **30% in 12 years**.
- The article's central normative argument: **landscapes, not individual species, should be the unit of conservation** — an approach that sustains biodiversity rather than managing charismatic animals in isolation.

HIGH-YIELD FACTS

- **Wild GIB population (current)** — Approximately 120 individuals
- **GIB population in 1969** — About 1,260
- **GIB local name** — Godawan
- SC power-line directions — The 2021 directions were modified in 2024; the December 2025 judgment adopted location- and voltage-specific protection measures in revised priority areas.

- **Desert National Park location** — Jaisalmer, Rajasthan
- **Threatened bird species globally** — ~1,256 species, approximately 11.5% of the world's total
- **India's national bird** — Peacock (Indian Peafowl), chosen over the Great Indian Bustard
- **Skylark population decline** — Nearly 80% decline; Indian rollers down 30% in 12 years

VALUE ADDITION

DATA YOU CAN QUOTE

GIB captive-bred chicks — 29 live chicks in 2026 and 24 in 2025, as reported on 4 October 2026

Conservation programme stock — 97 birds as reported on 4 October 2026; nine additional birds being prepared for release

REPORTS, BODIES AND INSTRUMENTS

Wildlife Protection Act, 1972 — Schedule I (Great Indian Bustard listed)

Supreme Court order in MK Ranjitsinh & Ors. vs Union of India (2021) — power line undergrounding in GIB habitat

EXAMPLES FOR THE ANSWER

The Cheetah reintroduction programme (Kuno National Park) illustrates the same species-centric, symbolism-driven model the article critiques — transplanting a flagship animal without addressing the landscape-level prey base and corridor connectivity needed for long-term viability.

South Africa's approach of managing entire biomes (e.g., the Cape Floristic Region as a UNESCO World Heritage landscape) rather than single species offers a contrasting model where landscape integrity is the primary conservation unit.

The Delhi Ridge peepal-banyan planting controversy is usable in questions on urban biodiversity and the mismatch between afforestation drives and ecological suitability of species chosen.

8. Global Youth Unemployment and the Demographic Dividend Trap

GS-III · Prelims + Mains · Demographic dividend and employment deficit · The Hindu

Syllabus — Indian Economy and issues relating to planning, mobilisation of resources, growth, development and employment

Prelims — Indian Economy — employment, demographic dividend, World Bank projections



The looming crisis of world unemployment

A recent World Bank forecast reveals that the global economy stands at the precipice of a silent catastrophe. A recent warning issued by Bank President Ajay Banga is stark: over the coming decade, an astonishing 1.2 billion young men and women in the Global South will reach working age, but the global economy is projected to generate no more than 400 million viable jobs. This creates a staggering deficit of 800 million opportunities in the job market, a demographic chasm of such unprecedented magnitude that it threatens to convert what should be the greatest economic dividend of the 21st century into a catalyst for widespread instability.

A failing blueprint

For decades, economic theorists have championed the demographic dividend as the primary engine for lifting developing nations out of poverty. The formula appeared straightforward: as fertility rates decline, the proportion of working-age adults relative to dependents increases, creating a temporary window of high productivity, elevated domestic savings, and rapid capital accumulation that fuelled the East Asian economic miracle in the late 20th century. Today, however, that classic blueprint is failing. Developing nations such as India are experiencing their youth bulges at a historical moment when the traditional escalators of economic mobility are stalling. The sheer velocity of demographic growth in many countries is outstripping the rate at which domestic markets, infrastructure, and institutional frameworks can absorb new labour, turning the potential dividend into a looming crisis.

Central to the dilemma is the rapid evolution of global trade, technology, and manufacturing. Historically, light manufacturing served as the indispensable bridge for low-income nations transitioning away from subsistence agriculture, absorbing millions of unskilled and semi-skilled workers into productive urban employment. Today, automation, robotics, and advanced industrial software have drastically reduced the labour intensity of manufacturing. As a result, developing nations are experiencing premature deindustrialisation: their manufacturing sectors are losing jobs before reaching the income thresholds of industrial economies of the past. Furthermore, the modern global economy increasingly rewards high-skilled, technology-driven labour, widening the chasm for millions of youth in developing countries who lack access to modern digital infrastructure, quality vocational training, or tertiary education.

There is no easy solution. The World Bank recommends unlocking private sector capital and dismantling the regulatory sclerosis that throttles domestic enterprise in many developing economies. Potential entrepreneurs face prohibitive costs of capital, erratic regulatory environments and predatory taxation. Complex legal frameworks and weak property rights scare away long-term foreign direct investment, confining capital to speculative assets rather than employment-generating ventures. Simplifying regulatory regimes, establishing transparent governance structures, and bolstering institutional integrity are essential preconditions for creating environments where small and medium-sized enterprises, the main engines of global job creation, can launch, grow, and hire.

India lags here, but does better in improving infrastructure, another key recommendation. A small business cannot compete in global supply chains, nor can it grow locally, if it suffers from routine power failures or exorbitant logistics costs caused by dilapidated roads and port congestion. Modernising physical and digital infrastructure serves a dual economic purpose: the construction and deployment phase itself absorbs massive quantities of immediate labour, while the resulting assets lower the cost of doing business across the economy.

Sector-specific strategies are ideal

Within this broader macroeconomic overhaul, targeted sector-specific strategies offer the most realistic pathway toward mass labour absorption. Agriculture still remains the largest employer in the developing world. Transitioning from low-yield subsistence farming to high-value, technology-enabled agri-tech and commercial agribusiness can transform rural economies. By investing in cold-chain logistics, localised food processing, and climate-resilient farming techniques, nations can create sophisticated rural value chains that offer meaningful, remunerative employment to young people, reducing the desperate tide of distress migration to the cities.

Health care and the broader care economy offer other possibilities for employment expansion. The demand for trained health-care workers, nurses, community health personnel, and elder-care specialists is exploding. Investing in health human resources delivers a powerful double dividend: it creates millions of resilient, non-outsourceable domestic jobs (predominantly for young women who are often excluded from formal labour markets) while simultaneously building the human capital necessary to sustain long-term national productivity.

Similarly, tourism and culture offer an extraordinary vehicle for decentralised job creation. Tourism is inherently labour-intensive, engages semi-skilled and unskilled workers and is resistant to total automation. It possesses a uniquely broad multiplier effect, driving revenues down to local transport providers, hospitality workers, artisans, and historical preservation efforts. Strategic investments in sustainable tourism infrastructure and international destination marketing translates directly into widespread employment.

Manufacturing, too, must be reimagined. Modern light assembly, green-transition manufacturing (such as the production of solar components, electric two wheelers, and energy-efficient materials) and decentralised production networks can still absorb substantial labour if paired with agile skill-building programmes.

History demonstrates that when vast cohorts of educated, energetic, and ambitious young people are denied access to productive economic life, the resulting frustration erodes trust in governments, fuels social polarisation, and creates fertile ground for extremist or criminal ideologies and civil unrest. In an interconnected world, failure to generate livelihoods in the Global South will inevitably accelerate forced migration flows toward the Global North, exacerbating political tensions worldwide.

Preventing prolonged youth unemployment from leading to global catastrophe requires an unprecedented alignment of international finance, domestic political courage, and private sector dynamism. Developed economies and multilateral financial institutions must facilitate affordable, long-term development financing and technology transfers, while developing nations must undertake the hard, often politically painful work of institutional reform. The global economy possesses the financial resources and technological tools required to meet this challenge. But can the international community muster the collective resolve to build an inclusive global order where every young person is afforded a fair opportunity to work, contribute, and thrive? In today's climate this writer would not count on it.

As the world's most populous nation, India sits at the epicentre of this dynamic, adding millions of young entrants to its workforce each year while grappling with an economy that has struggled to match GDP growth with employment creation. The nation's immediate challenge, in a dwindling demographic window, includes matching skills to markets, persistent underemployment, low female labour force participation, and an agrarian sector that still absorbs nearly half the population despite producing just 16% of GDP (FY24). India, with a median age under 30, must move toward labour-absorbing value creation. Otherwise its celebrated demographic dividend could collapse into a demographic disaster.

Shashi Tharoor

Four-term Member of Parliament (Congress) for Thiruvananthapuram, who served nearly three decades at the United Nations, where he rose to the position of Under-Secretary-General. He has also been Minister of State for External Affairs and for Human Resource Development in the Government of India and is the bestselling author, among others, of 'Pax Indica: India and the World of the 21st century'

A widening jobs gap threatens the promise of demographic dividends; the Global South faces an unprecedented employment challenge

WHY IN NEWS

A World Bank forecast projecting a gap of about 800 million jobs in developing economies over the next 10–15 years has prompted renewed debate about the demographic dividend turning into a demographic disaster. The World Bank President's public warning has sharpened attention on premature deindustrialisation in developing economies and India's specific challenge of matching GDP growth with employment creation.

Why the Dividend Formula Is Failing

- The **demographic dividend model** — declining fertility → rising working-age share → savings and growth — powered the East Asian miracle but is stalling in today's developing world.

- **Automation, robotics and advanced industrial software** have drastically reduced the labour intensity of manufacturing, eliminating the traditional bridge from subsistence agriculture to urban employment.
- Developing nations are experiencing **premature deindustrialisation**: manufacturing sectors are shedding jobs before countries cross the income thresholds reached by earlier industrialisers.
- The modern global economy increasingly rewards **high-skilled, technology-driven labour**, widening the chasm for youth who lack access to digital infrastructure, vocational training or tertiary education.
- The World Bank projects that about 1.2 billion young people in developing countries will reach working age over the next 10–15 years, while those economies are on course to create about 400 million jobs: a potential gap of roughly 800 million opportunities.

Structural Barriers Throttling Job Creation

- **Regulatory sclerosis** — prohibitive capital costs, erratic regulatory environments, predatory taxation and weak property rights — deters small and medium enterprise formation, the main engine of job creation.
- **Infrastructure deficits** impose dual costs: power failures and exorbitant logistics from poor roads and port congestion prevent small firms from competing in global supply chains.
- Weak **institutional integrity** and opaque governance structures deter long-term foreign direct investment, channelling capital toward speculative assets rather than employment-generating ventures.
- Failure to generate livelihoods in the **Global South** accelerates forced migration toward the Global North, fuelling political tensions and social polarisation worldwide.

Sector-by-Sector Pathways to Mass Absorption

- **Agri-tech and commercial agribusiness** — cold-chain logistics, localised food processing, climate-resilient farming — can create sophisticated rural value chains and reduce distress migration to cities.
- **Health and broader care economy**: exploding demand for nurses, community health personnel and elder-care specialists creates millions of resilient, non-outsourceable domestic jobs, disproportionately benefiting women excluded from formal labour markets.
- **Tourism and culture** offer a uniquely broad multiplier — labour-intensive, resistant to automation, engaging semi-skilled workers and driving revenues to transport providers, artisans and hospitality workers; strategic investment in sustainable tourism infrastructure translates directly into widespread employment.
- **Light manufacturing reimagined** — green-transition manufacturing such as solar components, electric two-wheelers and energy-efficient materials — can still absorb substantial labour when paired with agile, decentralised skill-building programmes.

India's Narrowing Window

- India sits at the epicentre of the global dynamic, adding millions of young workforce entrants each year while struggling to match **GDP growth with employment creation**.
- Persistent challenges include **skills-market mismatch**, low female labour force participation, and an agrarian sector absorbing nearly half the workforce despite contributing only 16% of GDP (FY24).
- With a **median age under 30**, India must pivot urgently toward labour-absorbing value creation; otherwise the celebrated demographic dividend collapses into a demographic disaster.
- The article frames India's immediate challenge as operating within a **dwindling demographic window** — implying the structural reforms required are time-bound, not open-ended.

What an Adequate Response Requires

- An **unprecedented alignment** of international finance, domestic political courage and private sector dynamism is identified as the minimum condition for averting catastrophe.
- **Multilateral financial institutions** must facilitate affordable long-term development financing and technology transfers, not just short-cycle lending.
- Developing nations must undertake **institutional reform** — often politically painful — to create environments

where small and medium enterprises can launch, grow and hire.

- The article's implicit normative conclusion: the scale of the crisis is within the global economy's **financial and technological capacity** to address, but the collective political resolve is the uncertain variable.

HIGH-YIELD FACTS

- **Projected jobs gap in developing economies — About 800 million over 10–15 years: 1.2 billion young people reaching working age versus around 400 million jobs**
- **India agriculture share of GDP (FY24)** — Approximately 16% of GDP, yet absorbs nearly half the workforce
- **India median age** — Under 30 years
- World Bank warning — President Ajay Banga, 4 March 2026: job creation in developing countries must catch up with the number reaching working age over the next 10–15 years
- **East Asian precedent** — Late 20th-century East Asian economic miracle cited as the last successful realisation of the demographic dividend model
- **Key SME role** — Small and medium-sized enterprises identified as the main engines of global job creation in the article's framework

VALUE ADDITION

DATA YOU CAN QUOTE

Young people reaching working age in developing countries — About 1.2 billion over the next 10–15 years, World Bank projection

Jobs projected in those economies — About 400 million over the same 10–15-year period

Resulting employment deficit — 800 million opportunities — the structural gap driving the crisis argument

REPORTS, BODIES AND INSTRUMENTS

World Bank Group President Ajay Banga, "Laying the Groundwork for Jobs", 4 March 2026

ILO World Employment and Social Outlook (International Labour Organization)

EXAMPLES FOR THE ANSWER

East Asian miracle (South Korea, Taiwan, 1960s–1990s): illustrates how the demographic dividend can be successfully harvested when manufacturing absorption, institutional reform and export orientation align — usable as a counter-model in answers on industrialisation strategy.

Premature deindustrialisation in sub-Saharan Africa: economists Dani Rodrik and Margaret McMillan documented manufacturing job losses before income thresholds were reached, showing the demographic dividend trap is not unique to South Asia — usable in comparative development answers.

Kerala's investment in health human resources: the State's early emphasis on nursing and paramedic training created an exportable, non-outsourceable skilled workforce that delivered both domestic employment and remittance income — usable as a subnational example of care-economy strategy.

Prelims Pointers

ECONOMY

Central Electricity Authority (CEA) – Critical Coal Stock Norms [Prelims - Economy]

CEA data showed 84–85 of 191 thermal power plants had critically low coal stocks amid rising power demand.

- Critical threshold A plant is classified as critical when coal stock is below 25% of its prescribed normative requirement; the required days vary by plant type and season.
- Coal share Coal remains India's largest primary-energy source. Coal and lignite supplied 552,315 Ktoe out of total primary energy supply of 932,816 Ktoe in FY2024–25, approximately 59.2% (Energy Statistics India 2026).
- **Peak demand** India's all-time highest power demand recorded at 270.8 GW on May 21, 2026.
- **Demand rise** India saw a 10% year-on-year increase in power demand in 2026 — highest in past decade.
- **El Niño link** El Niño warms central/eastern Pacific, weakens monsoon winds, reduces hydro generation, raising coal plant reliance.
- **Data source** CEA monitors plant-wise coal stocks; IEA links unprecedented temperatures to rising global electricity

demand.

The Hindu

ENVIRONMENT & ECOLOGY

Buxa Tiger Reserve [Prelims - Environment]

Tigress T138 from Valmiki Tiger Reserve released at Buxa, marking a phased tiger reintroduction programme.

- **Location** Alipurduar district, **West Bengal**; corridor to Bhutan forests in the north.
- **Area & Size** 760.87 sq. km; 50 km west-east, 35 km north-south; declared tiger reserve in **1983**.
- **Project Tiger Buxa joined the Project Tiger network in 1982–83; its tiger-reserve status dates to 1983.**
- **Linkages** Connected to Kochugaon forests, Manas Tiger Reserve, Jaldapara National Park, and Bhutan forests.
- **Source Reserve** Valmiki Tiger Reserve (Bihar) chosen as source; lies in easternmost part of Terai Arc Landscape.
- **Monitoring method** Reintroduced tigress monitored via telemetry, camera trapping, and field-based monitoring.

The Hindu

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