



# The Hindu Important News Articles & Editorial For UPSC CSE Wednesday, 06 Nov , 2024

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# Page 01: GS 2: Indian Polity - Judiciary

The Supreme Court, in a three-judge bench led by Chief Justice D Y Chandrachud, upheld the Constitutional validity of the Uttar Pradesh Board of Madarsa Education Act, 2004. This Act regulates madarsa education in Uttar Pradesh.

- Previously, in March, the Allahabad High Court struck down the Act, citing a violation of secularism principles. However, the Supreme Court stayed this High Court ruling in April, allowing the Act to remain effective until the Supreme Court's final decision.
- ➡ The recent verdict affirms the law's legitimacy, emphasizing its compliance with Constitutional standards.

# SC upholds U.P. Madrasa Act; State has regulatory powers

#### Krishnadas Rajagopal NEW DELHI

The Supreme Court on Tuesday partially upheld the constitutional validity of the Uttar Pradesh Madrasa Education Board Act of 2004 while confirming that the State can regulate madrasa education to ensure standards of excellence.

Though holding that the law secured the interests of the Muslim minority community in Uttar Pradesh, a three-judge Bench headed by Chief Justice D.Y. Chandrachud declared the provisions of the 2004 Act pertaining to higher education at the levels of Kamil (undergraduate studies) and Fazil (postgraduate stu-

dies) were in direct conflict with the provisions of the University Grants Commission Act, and thus, unconstitutional.

The Uttar Pradesh law had wandered into the Centre's exclusive domain under Entry 66 of the Union List in the Seventh Schedule of the Constitution. Entry 66 conferred the Union the authority to make laws to determine and regulate the standards of higher education.

The judgment, authored by the Chief Justice, said the 2004 Act, except at the Kamil and Fazil levels, was "consistent with the positive obligation of the State to ensure that students studying in recognised madrasas attain a minimum level



Maulana Khalid Rasheed Firangi Mahali, Imam of Eidgah, celebrates the Supreme Court verdict with madrasa students in Lucknow. PTI

of competency that allows them to effectively participate in society and earn a living".

He observed that the Act, which allowed the Board to prescribe the curriculum, qualification of teachers and standards of infrastructure, did not directly interfere with the day-to-day administration of recognised madrasas.

#### 'State interest'

The court, while noting that minorities had a right under Article 30 of the Constitution to establish and administer madrasas to impart religious or secular education, said the right was "not absolute".

"The State has an interest in maintaining the standards of education in minority institutions and may impose regulational conditions for grant of aid and recognition. The Constitutional scheme allows the State to strike a balance between ensuring the standard of excellence and preserving the right of the minorities to establish and administer its educational institutions."

The unanimous judgment, with Justices J.B. Pardiwala and Manoj Misra on the Bench, said that 'education' in Entry 25 of the Concurrent List must be given a wide meaning. Though recognised madrasas imparted religious in-

struction, their primary aim was education, bringing them within the ambit of Entry 25.

Chief Justice explained that Article 21A must be read consistently with the rights of religious and linguistic minorities to establish and administer educational institutions of their choice. The Madrasa Board under the Act, with the approval of the State government, was free to enact regulations "to ensure that religious minority institutions impart secular education of a requisite standard without destroying the minority character".

QUESTION OF LAW VALIDITY

#### 2004 UP Madarsa Act

# Background and Purpose of the Madarsa Act

- The Uttar Pradesh Board of Madarsa Education Act, 2004, establishes a legal framework for madarsa education in Uttar Pradesh.
- This Act enables madarsas to teach both the National Council of Educational Research and Training (NCERT) curriculum and religious studies.

#### Madarsa Board

 It also set up the Uttar Pradesh Board of Madarsa Education, primarily comprising members from the Muslim community, to oversee and standardize madarsa education.





- Roles and Functions of the Madarsa Board
- Under Section 9 of the Act, the Board's responsibilities include designing course material and conducting exams.
- o It provides standardized examinations for courses ranging from 'Maulvi' (equivalent to Class 10) to 'Fazil' (equivalent to a Master's degree).

### **Background of the present case**

# Legal Challenge to the Act

- A lawyer filed a petition against the Madarsa Act, arguing that it violated several constitutional provisions:
  - Article 14: Right to equality before the law
  - Article 15: Prohibition of discrimination on religious grounds
  - Article 21-A: Right to free and compulsory education for children aged 6 to 14
- The petitioner claimed that the Act did not provide quality compulsory education up to Class 8 or universal access to quality education, as mandated by Article 21-A.

#### **Matter reaches Allahabad HC**

# Key Issues Raised Before the Allahabad High Court

- o **Secularism and the Madarsa Act:** Whether the provisions of the Madarsa Act align with secularism.
- o **Religious Exclusivity in Board Membership**: The Act's requirement for Board members to belong to a specific religion was questioned, with arguments for allowing members from diverse backgrounds with expertise in education, regardless of religion.
- Administration Under the Minority Welfare Department: Whether it was arbitrary to place the Board under the Minority Welfare Department instead of the Education Ministry.
- Access to Educational Expertise and Policies: Whether it was unfair to deny madarsa students
  access to educational experts and their policies, which could enhance the quality of education
  provided in madarsas.

# Key highlights of the Judgement by Allahabad HC

- Allahabad High Court declared Madarsa Act to be unconstitutional.
- o It directed the State to take steps forthwith for accommodating the Madarsa students in regular schools recognized under various education Boards.

#### Matter reached to SC





- ▶ In April 2024, the Supreme Court stayed the Allahabad High Court's judgment, noting that while the state has a valid interest in ensuring quality education for students, the High Court erred in striking down the Madarsa Act.
- ▶ The Apex Court observed that the Act was primarily regulatory and did not warrant complete invalidation.

### Final Verdict by the SC

### Arguments before SC

- o Religious Education vs. Religious Instruction
  - The Court explored whether madarsas impart "religious education" (learning about religions) or "religious instruction" (compulsory participation in worship).
  - Referring to Aruna Roy vs Union of India (2002), the Court highlighted that while religious instruction is restricted in state-recognized institutions under Article 28, religious education aimed at promoting communal harmony is permissible.

# **Validity of Striking Down the Entire Act**

- → The Court questioned whether the High Court was justified in invalidating the entire Madarsa Act, rather than targeting specific provisions.
- → CJI noted that discarding the entire Act would be extreme, suggesting that the state could enforce rules under the Act to promote a more secular curriculum.

# Final verdict by SC

- SC upheld the constitutional validity of the 'Uttar Pradesh Board of Madarsa Education Act 2004'.
- It set aside the Allahabad High Court's judgement which had struck it down earlier.

# Key highlights of the judgement

# Regulation of Education Standards

 The Madarsa Act provides a regulatory framework to ensure educational standards in madarsas recognized by the Board.

# Alignment with State Obligations

 The Act aligns with the state's obligation to enable students in recognized madarsas to acquire skills and competencies necessary for social participation and employment.

# Balance with Minority Rights



- The Act must be interpreted alongside Article 21A and the Right to Education Act, respecting religious and linguistic minorities' rights to manage their educational institutions.
- With state approval, the Board may implement regulations that ensure secular education standards without compromising the institutions' minority character.

# Legislative Competence and Limits

 While the Madarsa Act falls within the State Legislature's jurisdiction under Entry 25 of List 3, provisions regulating higher degrees (e.g., fazil and kamil) are unconstitutional as they conflict with the UGC Act, which is governed by Entry 66 of List 1.

# Impact of the Supreme Court Decision on the Madarsa Act

- → The Supreme Court's decision will directly impact madarsa education in Uttar Pradesh, with broader implications for religious education nationwide.
- This ruling could influence other religious institutions, such as gurukuls and convent schools, by shaping how secularism principles apply to religious education within state-regulated educational frameworks.







# Page 01: GS 2: Indian Polity - Judiciary

The Supreme Court of India ruled that not all private property can be considered a "material resource of the community" for state use, challenging past doctrines favouring state control.

This reflects India's shift from socialism toward liberalisation and market reforms, stressing judicial restraint in economic policy decisions.

## **Key Judgement and Background**

- A nine-judge Constitution Bench of the Supreme Court, led by Chief Justice D.Y. Chandrachud − ruled that not all private property can be classified as "material resources of the community" for the state to use for the "common good."
- → This judgement dismissed the idea that private resources could be broadly controlled by the state, deeming this perspective as part of an outdated "rigid economic dogma."
- The majority opinion argued that India's economic system has evolved from a public investment model to a mix of public and private investments.

# Justice V.R. Krishna lyer's Doctrine and its Influence

- ▶ The notion of the state using private resources for the common good was originally proposed by Justice V.R. Krishna lyer in his 1977 dissenting judgement in the Ranganath Reddy vs. State of Karnataka case.
- → Justice lyer's views were later used as a reference by Constitution Benches in the Sanjeev Coke Manufacturing (1982) and Mafatlal Industries (1997) cases, leading to a need for this current interpretation by the nine-judge Bench.

# **Shift in Economic Policy Interpretation**

Chief Justice Chandrachud's majority opinion highlighted India's shift from socialism to a more market-based, liberalised economy.

# State has no right to acquire every private property, asserts SC

Krishnadas Rajagopal NEW DELHI

A nine-judge Constitution Bench of the Supreme Court, in a majority judgment, held on Tuesday that not every resource owned by private players can be considered a "material resource of the community" to be used by the government to serve the "common good".

The decision dismissed such a power of acquisition by the state while noting that it reminded of a particular "rigid economic dogma" of the past. The court noted that the Indian economy has already transitioned from dominance of public investment to co-existence of public and private investments.

The majority opinion authored by Chief Justice D.Y. Chandrachud said the interpretation that every private property could be used by the state as material resource to "subserve the common good" postulated a "rigid economic theory which advocates greater state control of private resources".

The interpretation was introduced by Justice V.R. Krishna Iyer in his dissenting opinion in Ranganath Reddy versus State of Karnataka in 1977.

Justice Iyer's opinion was relied on by subsequent Constitution Benches in Sanjeev Coke Manufacturing and Mafatlal Industries judgments in 1982 and 1997, respectively; hence, necessitating a reference to the nine-judge Bench.

Rejecting the view of Justice Iyer as one present-

### 2 judges refer to CJI's remarks on V.R. Krishna Iyer

NEW DELHI

Two SC judges quoted a "harsh" observation made by Chief Justice D.Y. Chandrachud about Justice V.R. Krishna Iyer in a "proposed judgment", which said "the Krishna Iyer doctrine does a disservice to the broad and flexible spirit of the Constitution". » PAGE 4

ing a "particular ideology", the majority opinion penned by Chief Justice Chandrachud said India has moved on from socialism to liberalisation to market-based reforms.

"India's economic traiectory indicates that the Constitution, the custodians of the Constitution the electorate have routinely rejected the idea of one economic dogma being the exclusive repository of truth. As participants of a vibrant multi-party democracy, the people have voted to power governments with various economic and social policies based on the country's evolving developments, strategies and challenges. Chief Justice Chandrachud observed in the judgment.

#### Constitutional vision

The court said the vision of the Constitution framers to establish an economic democracy and trust the wisdom of the elected governments has been the "backbone of the high growth rate of India's economy, making it one of the fastest growing economies in the world".





- ▶ The judgement observed that India's democratic process allows the electorate to choose different economic policies, supporting diverse development strategies.
- → The court emphasised that India's high growth rate and global economic position result from the flexibility provided by this constitutional framework.

### Differing Opinions on Justice Iyer's Approach

- Chief Justice Chandrachud's majority judgement suggested that the rigid "Krishna Iyer Doctrine" no longer aligns with India's current economic and constitutional stance.
- Justices B.V. Nagarathna and Sudhanshu Dhulia expressed reservations about the Chief Justice's assessment of Justice Iyer.
- ▶ Justice Nagarathna argued that past judges should not be criticised for their views, given the context and economic realities of their time. She warned against devaluing historical judicial wisdom.

#### Justice Dhulia's Dissent

- ▶ Justice Dhulia authored the lone dissent, defending Justice lyer's approach, which he viewed as based on principles of "fairness and equity."
- ▶ He acknowledged the lasting impact of Justice Iyer's humanist philosophy, which placed people at the centre of judicial decision-making.

# **Broader Implications**

- ▶ The judgement underscores the Supreme Court's stance that it should not interfere with economic policy decisions, allowing elected governments to navigate the country's economic path.
- ▶ It also highlights a need for the judiciary to balance respecting past judicial doctrines while adapting to modern realities without disregarding former judges' contributions.

# **Broader Implications**

- This decision marks a pivotal shift in interpreting the state's powers over private property.
- It reinforces a market-driven approach aligned with constitutional democracy and the evolving economic landscape.



# Page 07: Prelims fact

The Sun exhibits differential rotation, with varied rotation periods across its latitudes, unlike Earth's uniform rotation.

▶ Despite extensive observations and calculations, the cause of this phenomenon remains a mystery for solar physicists.

#### **QUESTION CORNER**

# The sun's in a tizzy



Q: Does the sun rotate? A: Yes. the sun too rotates about its axis. But unlike the

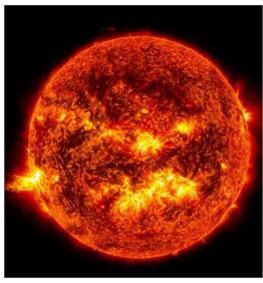
earth, which has a rotation period of one day, the sun has a differential rotation. That is, all parts of the sun do not have the same period of rotation.

The period of rotation near its equator is 26.5 days, at sun spot zone (16 degrees north) it is 27.3 days, and at the pole it is 31.1 days.

The sun's enormous core temperature of 15 million degrees K and a surface temperature of 6,000 degrees K leaves all its constituents in a high-pressure gaseous state called a plasma.

For the purpose of certain calculations, the top and the bottom ends of the visible sphere of the sun are designated as north and south poles respectively.

Photographs are taken daily and the movements of the spots, filaments, and plages are observed for various latitudes and longitudes, for a long period



This image shows a solar flare on the left side of the Sun and an eruption of solar material shooting through the Sun's atmosphere. NASA

of time. From this, the sidereal rotation period is calculated.

The reason behind this phenomenon is still a puzzle to solar physicists.



For feedback and suggestions

for 'Science', please write to science@thehindu.co.in with the subject 'Daily page'

#### **Rotation of the Sun**

- Unlike Earth, the Sun exhibits differential rotation, where different parts rotate at different speeds.
- Near the equator, the rotation period is about 26.5 days, while at the poles, it extends to 31.1 days.



- This differential rotation is observed through daily photographs of sunspots and other solar features across various latitudes.
- ▶ Observing sunspots and calculating sidereal rotation periods aid in understanding this complex rotation.

# **Unsolved Mystery**

▶ The cause of the Sun's differential rotation remains an ongoing puzzle for solar physicists.

# **Temperature and State**

- → The Sun has an intense core temperature of 15 million K and a surface temperature of 6,000 K.
- ▶ Due to these extreme temperatures, the Sun exists in a plasma state, a high-pressure gaseous form of matter.







# Page 10: GS 2: International Relations - Bilateral Relations

India and Canada are facing a diplomatic rift after Prime Minister Justin Trudeau alleged links between Indian intelligence and the killing of Hardeep Singh Nijjar, a Canadian citizen labelled a Khalistani terrorist by India.

- This dispute has roots in Canada's past failures to curb Khalistani separatism, exemplified by the 1985 Air India bombing.
- Legal, cultural, and media differences have deepened misunderstandings between the two nations.

# On India-Canada diplomatic relations

Why has India accused Canada of acting as a safe haven for Khalistani terrorists and sympathisers? Is Canadian Prime Minister Justin Trudeau pandering to the Sikh vote bank' with these allegations? Why has Canada been reluctant to extradite individuals to India?

#### EXPLAINER

Nissim Mannathukkaren

The story to far expelled their top diplomats due to the fallow general text expelled their top diplomats due to the fallow Lustin Trudeau's allegation last year that there were possible links of Indian intelligence with the killing of a Canadian reduces, I started possible village in Canadian timeligence with the killing of a Canadian timeligence with the killing of a Canadian timeligence with the killing of a Canadian teriorist (the had faced no criminal changes in Canadia, but was put on a notly list and his bank accounts were frozen). The row seems to be

Is there a historical context? India's long held complaint has been that seen that canada acts as a safe haven for Khalistann separatists/extremists. Its biggest grouse separatists/extremists. Its biggest grouse has been Canada's failure in preventing the 1985 Air India bombing (perpertared by Canada-based Khalistani extremists) and the lack of support in subsequent investigations.

investigations.

The bombing killed 329 people (including children), the biggest airline terrorist act before 9/11.

Is there a Sikh 'vote bank' in Canada' to the Area of the Canada' to the Area of the Canada of the C an partnes, not just the Luneral Party, have undiged in these kinds of acts. While Mr. affirmed the territorial integrity of India, affirmed the territorial integrity of India, they have not explicitly condemned Kladistani extremism. But this 'tote but hey have not explicitly condemned Kladistani extremism. But this 'tote but with the conservative Party and 21% for Trudeau's party in the next elections. The Trudeau's party in the next elections. The Trudeau's powerment has already been pilloried about its failures in Canadian nectrons. A public inquiry into foreign interference has currently been instituted by the Canadian government. Therefore, an accusation such as this could bolster its weak image.

Therefore, an accusation such as this could holster its weak image. But the Canadian newspaper, The Globe and Mail, which exposed Chinese interference and was about to publish the allegations regarding India last year (before Mr. Trudeau went public with it), and other news outlets, have criticised Mr. Trudeau only for using a serious national security issue for political grandstanding, rather than



Are there political and cultural

misunderstandings? There are misunderstandings on both sides. Canadian scholars have argued There are misunderstandings on both sides. Canadian scholars have argued that despite the fact that a vast majority of the victims of the Air finda bombing were Canadian citizens (of Indian descent), the Canadian government, for a long time, had seen it as a "foreign tragedy" and twictims as not "real Canadians," clearly betraying systemic real Canadians," clearly betraying systemic real governments real to the victims should be considered to the conservative Prime Minister Stephen Harper in 2010. This racial prejudice is also emphasised by the fact that despite it being Canada's worst terrorist act, 90% Canadians had little or no knowledge of it, and more than 50% under the age of 35 had never even heard of it. Further, as no Khalisani terrorist act has been perpetrated in Canada since then, the public is unaffected, and ignorant of Khalistani active the same as in Indian public conversely, assumes The Indian public conversely, assumes The lite of the little of the same as in India. The rule of faw is enforced in a

nuclearis party in the next elections. The Trudeau government has already muntering Chinese interference in another elections. A public inquiry into rotegin interference has currently been stituted by the Canadian government. Herefore, an accustion such as this could bolster its weak image. But the Canadian newspaper, The Globe and Mail, which exposed Chinese during the control of the control

closure of the Consulate General of Irolia, in Vancouve Khalistani extremists. The public inquiry that went into the Air India bombing, instead, was scathing about the security and investigation failures and terms. In comprehensible, incomprehensible, incomprehens

What are the legal complexities?
India's extradition requests, for those who
often denied not due to political reasons
but because they do not meet Canadian
legal standards. Western democracies are
wary of extraditions to countries with
much poorer human rights records,
where political dissenters and opponents
are juiled for prolonged periods without
criminal culpubility, and without trial and
bul, especially under anti-terror laws
under the control of the control of the control
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custody, and (as journalls Praveen's wain
has noted) the inadmissibility of Indian
intelligence evidence in courts shorod as
it is not gathered under the Indian What are the legal complexities?

Telegraph Act and the Information Technology Act. Only six wanted individuals have been extradited to India

individuals have been extradited to India from Canada from 2002-2002 (this number is 10 for the U.S., and just one for the U.S.,
Notably, India has not managed to secure the extraditions of Mehul Choksi,
Nirav Modi, Lalit Modi and Vijay Mallya (the last three from the U.K. with which India has friendly relations).

the last three from the U.K. with which india has friendly relations).

What role has the media played? The Canadian media has adeed some tough questions of the government and presented India's version about the dangers of Khalistani diaspora politics. Conversely, the TV media in India, while rightly questioning Western hypocrisy on some matters, has substituted journalism with jingoism, and uncritically pushed the government's narrative. It has spire accorded for the Air India bombings (Inderji Singh Reyat, the bomb-masker, spent nearly 30 years in jailly that Mr. Trudeau "admitted" that there was no evidence for his accusations, etc.

Parallely, the Globe and Moil (and other newspapers) which had asked Mr. Trudeau to provide more fact on his fact of the provide more fact on this thin a consulting him for being soft on the "overtly hostile" actions of the Indian government, and for "curiously unwilling to acknowledge that this time around, the revelations are from the Canadian police and are not just vicidence." It remains to be seen if it passes muster in the courts.

Nissim Mannathukkarne is Professor, International Development Studies, Dalhousie University, Canada

#### THE GIST

India's long-held complaint h been that Canada acts as a safe haven for Khalistani separatists/extremists. Its biggest grouse has been Canada's failure in preventing the 1985 Air India bombing (perpetrated by Canada-base Khalistani extremists) and the

The Canadian media has ask some tough questions of the government and presented India's version about the dangers of Khalistani diaspo politics. Conversely, the TV media in India, while rightly questioning Western hypocri









- Canada and India expelled their top diplomats following Canadian Prime Minister Justin Trudeau's allegation of a possible link between Indian intelligence and the killing of Hardeep Singh Nijjar, a Canadian citizen categorised by India as a Khalistani terrorist.
- Nijjar faced no criminal charges in Canada, though he was placed on a no-fly list, and his accounts were frozen.
- The diplomatic fallout has heightened Hindu-Sikh tensions in Canada.

#### **Historical Context of India-Canada Khalistan Relations**

- ▶ India has long criticised Canada as a safe haven for Khalistani separatists, expressing frustration over Canada's handling of the 1985 Air India bombing, orchestrated by Canada-based Khalistani extremists.
- → The bombing, which killed 329 people, remains Canada's deadliest act of terrorism, yet Canadian authorities were slow in acknowledging it as a "Canadian tragedy" due to racial biases.

### The Sikh Community's Political Influence in Canada

- ▶ While Sikhs make up only 2% of Canada's population, their political influence is strong due to geographic concentration and representation, particularly within Trudeau's Liberal Party.
- Despite allegations from India, surveys indicate that the majority of Canadian Sikhs do not uniformly support Trudeau's party or Khalistani sympathisers.
- ▶ Canada's political landscape has seen gestures like dropping "Sikh" and "Khalistani" terms from terrorism reports, and leaders attending Sikh events where pro-Khalistan figures were honoured.

# **Canadian Cultural and Legal Frameworks**

- ► Canadians view vote bank politics differently than in India, and Canadian politicians have not explicitly supported Khalistani extremism.
- ▶ Canadian independence in law enforcement and high standards of evidence for extradition often hinder India's requests, especially given Western concerns over human rights in India.
- Canada's emphasis on freedom of speech allows Khalistan referendums and non-violent advocacy for separatism, while hate speech laws remain relatively stringent but open to further scrutiny.

# **Legal Complexities in Extradition and Anti-Terror Efforts**

▶ India's extradition requests are often declined due to differences in legal standards and human rights concerns.





- ▶ Between 2002-2020, Canada extradited only six individuals to India, reflecting Western reluctance to engage with nations where political dissent may lead to arbitrary imprisonment.
- ▶ Legal obstacles include insufficient evidence based on Canadian standards and the inadmissibility of Indian intelligence evidence.

# Media's Role in Shaping Public Perception

- Canadian media has questioned its government's handling of Khalistani activism and criticised Trudeau for political grandstanding, while maintaining balanced coverage by presenting India's perspective.
- ▶ Indian media, however, has pushed a one-sided narrative, with disinformation about the case, inflaming public sentiment without critical analysis.





# **In News: Tumaini Festival**

Tumaini Festival in Malawi unites refugees and locals through music, art, and crafts, fostering connection and hope.

#### **About Tumaini Festival:**

- ► Founded in 2014, the Tumaini Festival is a cultural event held annually within the Dzaleka Refugee Camp in Malawi.
- It is the only festival of its kind in the world that is held within a refugee camp.
- → The festival is organized and managed by refugees, creating a platform for displaced people that fosters community, solidarity, and cultural exchange.
- The Tumaini Festival attracts thousands of attendees every year and features performances by acts from all around the world.
- The festival showcases a diverse array of artistic expressions, including music, dance, theatre and visual arts.
- → It received a Cultures of Resistance Award (CoR Award) in 2024.

# **Key Facts about Malawi:**

- → It is a landlocked country in Southeastern Africa.
- ▶ It shares borders with Tanzania, Mozambique, and Zambia.
- ▶ Capital: Lilongwe
- Major languages: English and Chichewa (both official)
- Currency: Malawi kwacha (MWK)
- ▶ Endowed with spectacular highlands and extensive lakes, it occupies a narrow, curving strip of land along the East African Rift Valley.
- Lake Nyasa (one of the deepest lakes in the world), known in Malawi as Lake Malawi, accounts for more than one-fifth of the country's total area.
- ▶ Malawi remains one of the poorest countries in the world. The economy is heavily dependent on agriculture, which employs over 80% of the population.

# **About Dzaleka Refugee Camp:**

- ▶ It is the only permanent refugee camp in Malawi.
- ▶ It was established in 1994 in response to a surge of forcibly displaced people fleeing genocide, violence, and wars in Burundi, Rwanda, and the Democratic Republic of Congo (DRC).





For the past 30 years, the camp has received refugees and asylum seekers from Somalia, Ethiopia, and other countries.







# Page : 08 Editorial Analysis Rising STEM research demands revitalised education

igher educational institutions in India face significant challenges. While private engineering colleges, the newer Indian Institutes of Technology (IIT) and universities have expanded access to education over the last few decades, studies show that a vast majority of students graduating from these colleges lack the basic skills that are required by industry. Research institutes have also voiced concerns about the quality of students who wish to pursue higher studies. While industries and premier research institutions have managed with top students from these colleges, there is a problem now. Across various sectors, there is a struggle to find students who are skilled, and it is alarming that the number of students pursuing higher education has dwindled. At this rate, institutions, which are already grappling with the issue of faculty shortages, will face even greater challenges in the years ahead. Large sums of money announced for initiatives such as quantum computing, cybersecurity or artificial intelligence could go underutilised in the absence of qualified talent. This widespread problem threatens the socio-economic fabric of the country.

#### Quality of training is an issue

The root cause lies in the quality of training in teaching institutions. Many faculty members are products of their own institutions and are often pressured to chase papers and patents for their colleges to maintain their rankings, often at the expense of scholarship and pedagogy. This results in poor-quality graduates, with a domino effect on industry standards, research output, and faculty quality. While upskilling programmes, outreach initiatives, internships and online courses could address the problem to some extent, these efforts are not scalable enough to meet ever-increasing demand for skilled professionals. This article offers some broad ideas, based on the experiences of the writers, which may be of help. These suggestions call for a rebalancing of current efforts and a more imaginative use of existing resources.

Premier institutes such as the IITs, the Indian Institutes of Information Technology, the National Institutes of Technology, the Indian Institutes of Science Education and Research, the Indian Institute of Science (IISc), and other centrally funded institutions recruit about 5% of India's undergraduate students. For instance, IIT Bhubaneswar admits fewer than 60 students annually for its computer science programme. In comparison, the private KIIT University admits over 2,000 students a year for the same discipline. Similar comparisons can be made between IIT Madras and private institutions such as SRM and VIT. This means almost all the students in the pipeline to industries and research institutions come from colleges where 95% of the students study. The proposals in this article aim to strengthen this pipeline and foster

#### Venkatesh Raman

Professor of Theoretical Computer Science at the Institute of Mathematical Sciences, Chennai, and the past President of ACM India

#### <u>Rajagopalan</u> <u>Balaji</u>

Professor of Civil and Environmental Engineering at the University of Colorado, Boulder, U.S., and a Fulbright-Kalam Climate Fellow

#### Murty Bhallamudi

Professor of Civil Engineering at IIT Madras

With large sums of money being announced for initiatives such as quantum computing, cybersecurity, or artificial intelligence, it is essential to find students who are skilled; it is a struggle now greater collaboration between research institutions and teaching institutions. To make the distinctions clear in this article, institutions with large undergraduate programmes will be referred to as "teaching institutions" and those focused on research (such as premier institutes) as "research institutions," even though they engage in both teaching and research. The ideas in this article are for research institutions. teaching institutions, and the agencies that monitor them - all geared toward improving research, pedagogy, and incentive structures These proposals echo the objectives of the National Education Policy (NEP) and the Anusandhan National Research Foundation (ANRF).

The first idea is to stop ranking teaching institutions and their faculty members based heavily on research output, such as papers and patents. Given the lack of a robust research environment in many teaching institutions, this emphasis on research output encourages participation in predatory conferences and publications. India, unfortunately, is a country with a large presence of predatory outlets. As a result, limited resources are diverted from improving pedagogy to producing low-quality research, further degrading student learning outcomes. Ranking teaching institutions separately, based more on their teaching quality, could alleviate some of this pressure.

#### Change focus

Until the quality of students entering the pipeline improves, faculty at teaching institutions should focus more on pedagogy and less on research. While this may reduce research output in the short term, it will significantly enhance the quality of education and research in the long term. Teaching institutions should lay greater emphasis on faculty development programmes, mentorship, teacher evaluations, and newer courses, online and offline. Collaborations with research institutions on teaching methods and pedagogy should be strongly encouraged. One way to achieve this is by creating a dedicated teaching track within the academic hierarchy at these institutions, such as 'teaching assistant, associate and full professor'. Faculty members interested in pursuing research should be encouraged to collaborate with their counterparts in research institutions. Funding agencies can incentivise and mandate such collaborative projects. The ANRF's Partnerships for Accelerated Innovation and Research (PAIR) programme already calls for such initiatives.

For this idea to succeed, it is important that faculty promotion criteria in teaching institutions are based on pedagogical skills, assessed through appropriate metrics. This can be incentivised through State and Central government funding to establish centres of excellence in pedagogy, such as centres of excellence in research, and by mandating pedagogical components and inter-institutional collaborations when evaluating

grant proposals.

#### **Explore joint agreements**

The second idea is for research institutions to establish joint degree agreements with teaching institutions. These agreements should be stronger than one-off workshops or outreach programmes. For instance, top-performing students at teaching institutions could spend their final two years in research institutions, receiving a "hyphenated degree" bearing the insignia of both institutions. To make this feasible, the curricula at teaching institutions must be aligned with those of research institutions, in content and pedagogy. Faculty from research institutions can engage with their counterparts in teaching institutions through regular workshops, on-site visits, and hands-on training in the best pedagogical practices. Resources must be allocated to support these partnerships as they will help reverse the decline in the quality of teaching in undergraduate-focused institutions. This initiative can begin with one research institution partnering with one teaching institution for a couple of degree programmes, and expand gradually.

Such joint agreements would yield three major benefits: improved student quality in research institutions, enhanced teaching and curriculum quality in teaching institutions, and revitalisation of the teaching institutions themselves. Variations of this model already exist on a small scale. For instance, select third-year civil engineering students from NIT Surat spend their final year at IIT Bombay and are automatically admitted to the M.Tech. programme. Similar student-transfer programmes exist between community colleges and research-intensive universities in the United States, significantly improving both access and quality. Many Indian teaching institutions already have agreements with international universities, so there is no reason why such agreements cannot be established in India, and even within the same city. These agreements would not only facilitate student mobility but also promote faculty exchanges between the two types of institutions. The ideas proposed in this article, which advocate a rebalancing of current efforts, can produce two key outcomes: a much needed refocus on pedagogy that will raise the quality of undergraduate education; and an improvement in research output as a result of less pressure on faculty. These proposals do not require major additional resources, but only a willingness to embrace creative thinking. While science and engineering have been used as examples, the ideas here are equally applicable to fields such as the arts, humanities, and social sciences Revitalising the country's teaching institutions is critical to producing a larger, higher-quality talent pool, capable of driving innovative research and scientific discoveries.

The views expressed are personal



**GS Paper 02:** Social Justice

GS Paper 03: Science and Technology

PYQ: (UPSC CSE (M) GS-3 2014): Scientific research in Indian universities is declining, because a career in science is not as attractive as our business operations, engineering or administration, and the universities are becoming consumer oriented. Critically comment. (200 words/12.5m)

UPSC Mains Practice Question: Discuss the challenges faced by India's higher education system in aligning graduate skills with industry needs. Analyse how separating teaching and research functions in institutions could enhance educational quality. (250 words/15m)

# **Context:**

- ▶ India's higher education sector faces major challenges with skill gaps among graduates and declining student enrollment.
- ▶ Teaching institutions often prioritise research output over pedagogy, impacting student quality.
- Proposed reforms focus on separating teaching and research roles, promoting pedagogical excellence, and establishing joint degrees to improve educational outcomes.

#### Introduction

- Higher educational institutions in India face significant challenges.
- ▶ While private engineering colleges, the newer Indian Institutes of Technology (IIT) and universities have expanded access to education over the last few decades, studies show that a vast majority of students graduating from these colleges lack the basic skills that are required by industry.

#### Some core concerns

- Research institutes have also voiced concerns about the quality of students who wish to pursue higher studies.
- ▶ While industries and premier research institutions have managed with top students from these colleges, there is a problem now.
- Across various sectors, there is a struggle to find students who are skilled, and it is alarming that the number of students pursuing higher education has dwindled.
- At this rate, institutions, which are already grappling with the issue of faculty shortages, will face even greater challenges in the years ahead.





- ▶ Large sums of money announced for initiatives such as quantum computing, cybersecurity or artificial intelligence could go underutilised in the absence of qualified talent.
- ➡ This widespread problem threatens the socio-economic fabric of the country.

### Quality of training is an issue

- ▶ The root cause analysis: lies in the quality of training in teaching institutions.
- Many faculty members are products of their own institutions and are often pressured to chase papers and patents for their colleges to maintain their rankings, often at the expense of scholarship and pedagogy.
- This results in poor-quality graduates, with a domino effect on industry standards, research output, and faculty quality.
- Current Solutions and Limitations While upskilling programmes, outreach initiatives, internships and online courses could address the problem to some extent, these efforts are not scalable enough to meet everincreasing demand for skilled professionals.
- This article offers some broad ideas, based on the experiences of the writers, which may be of help.
- ▶ These suggestions call for a rebalancing of current efforts and a more imaginative use of existing resources.

### The key statistics and comparisons

- Premier institutes: such as the IITs, the Indian Institutes of Information Technology, the National Institutes of Technology, the Indian Institutes of Science Education and Research, the Indian Institute of Science (IISc), and other centrally funded institutions recruit about 5% of India's undergraduate students.
- ► For instance, IIT Bhubaneswar admits fewer than 60 students annually for its computer science programme.
- ▶ In comparison, the private KIIT University admits over 2,000 students a year for the same discipline.
- ▶ Similar comparisons can be made between IIT Madras and private institutions such as SRM and VIT.
- → This means almost all the students in the pipeline to industries and research institutions come from colleges where 95% of the students study.
- ➡ The proposals in this article aim to strengthen this pipeline and foster greater collaboration between research institutions and teaching institutions.
- → Terminology for Clarity: To make the distinctions clear in this article, institutions with large undergraduate programmes will be referred to as "teaching institutions" and those focused on research (such as premier institutes) as "research institutions," even though they engage in both teaching and research.
- ▶ Alignment with national policies: The ideas in this article are for research institutions, teaching institutions, and the agencies that monitor them all geared toward improving research, pedagogy, and incentive structures.





These proposals echo the objectives of the National Education Policy (NEP) and the Anusandhan National Research Foundation (ANRF).

#### What are the main recommendations?

- ▶ The first idea is to stop ranking teaching institutions and their faculty members based heavily on research output, such as papers and patents.
- Given the lack of a robust research environment in many teaching institutions, this emphasis on research output encourages participation in predatory conferences and publications.
- ▶ India, unfortunately, is a country with a large presence of predatory outlets.
- As a result, limited resources are diverted from improving pedagogy to producing low-quality research, further degrading student learning outcomes.
- Ranking teaching institutions separately, based more on their teaching quality, could alleviate some of this pressure.

# **Change focus**

- Focus on Pedagogy Over Research: Until the quality of students entering the pipeline improves, faculty at teaching institutions should focus more on pedagogy and less on research.
  - While this may reduce research output in the short term, it will significantly enhance the quality of education and research in the long term.
- **Emphasis on Faculty Development**: Teaching institutions should lay greater emphasis on faculty development programmes, mentorship, teacher evaluations, and newer courses, online and offline.
- **▶ Encouraging collaboration on pedagogy:** Collaborations with research institutions on teaching methods and pedagogy should be strongly encouraged.
  - o One way to achieve this is by creating a dedicated teaching track within the academic hierarchy at these institutions, such as 'teaching assistant, associate and full professor'.
- Support for faculty interested in research: Faculty members interested in pursuing research should be encouraged to collaborate with their counterparts in research institutions.
  - o Funding agencies can incentivise and mandate such collaborative projects.
  - The ANRF's Partnerships for Accelerated Innovation and Research (PAIR) programme already calls for such initiatives.
- ▶ **Criteria for faculty promotion**: For this idea to succeed, it is important that faculty promotion criteria in teaching institutions are based on pedagogical skills, assessed through appropriate metrics.
- → This can be incentivised through
  - State and Central government funding to establish centres of excellence in pedagogy, such as centres of excellence in research, and by mandating pedagogical components and interinstitutional collaborations when evaluating grant proposals.

### **Explore joint agreements**





- The second idea is for research institutions to establish joint degree agreements with teaching institutions.
- ▶ These agreements should be stronger than one-off workshops or outreach programmes.
- For instance, top-performing students at teaching institutions could spend their final two years in research institutions, receiving a "hyphenated degree" bearing the insignia of both institutions.
- → To make this feasible, the curricula at teaching institutions must be aligned with those of research institutions, in content and pedagogy.
- Faculty from research institutions can engage with their counterparts in teaching institutions through regular workshops, on-site visits, and hands-on training in the best pedagogical practices.
- Resources must be allocated to support these partnerships as they will help reverse the decline in the quality of teaching in undergraduate-focused institutions.
- This initiative can begin with one research institution partnering with one teaching institution for a couple of degree programmes, and expand gradually.

### **Way Forward**

- Such joint agreements would yield three major benefits:
  - o improved student quality in research institutions, enhanced teaching and
  - o curriculum quality in teaching institutions, and
  - o revitalisation of the teaching institutions themselves.
- Variations of this model already exist on a small scale.
  - o For instance, select third-year civil engineering students from NIT Surat spend their final year at IIT Bombay and are automatically admitted to the M.Tech. programme.
  - o Similar student-transfer programmes exist between community colleges and research-intensive universities in the United States, significantly improving both access and quality.
  - Many Indian teaching institutions already have agreements with international universities, so there is no reason why such agreements cannot be established in India, and even within the same city.
  - These agreements would not only facilitate student mobility but also promote faculty exchanges between the two types of institutions.

#### Conclusion

- ▶ Revitalizing India's teaching institutions is crucial to building a stronger talent pipeline, enabling innovative research, and supporting the country's socio-economic growth.
- → These proposals align with the National Education Policy and ANRF's objectives, offering practical steps to elevate education quality without significant additional resources.