



IAS

THE



HINDU

# ANALYSIS

# Topics

1. Reconnect public health with people's needs – Pg 12
2. India's next challenge – from invention to global scale – Pg 12
3. Centre tightens norms for FCRA – Pg 1
4. Evident distress – Pg 12
5. India's patchy industrial climate strategy – Pg 13

→ GS II / GS III  
→ GS III / Essay

→ GS II

→ GS III

→ GS III

## Prelims :

1. El Niño – 111 districts of 'primary concern' – Pg 19
2. Padma Awards – Pg 16

## PIB

1. Auction of critical minerals
2. VOC port
3. INS Kavaratti and Udaygiri at Ho Chi Minh city

*Basics of*  
**GEOGRAPHY**  
**THROUGH MAPS**



*Mukesh Jha*



Mon Wed Fri 6pm



# SHIKSHA MAHOTSAV

## TRIPLE TREAT

| 2027 Aspirants                | 2027 Aspirants                                    | 2028 Aspirants                                       | 2029 Aspirants                                       |
|-------------------------------|---|--|--|
| 6 Months +<br>6 Months Free + | 9 Months +<br>9 Months Free +<br>9 Months Assure* | 12 Months +<br>12 Months Free +<br>12 Months Assure* | 18 Months +<br>18 Months Free +<br>18 Months Assure* |
| ₹16,999                       | ₹21,999   | ₹23,999  | ₹28,999  |

IASENGLISH

# Reconnect public health with people's needs

→ Gs III / Gs II

Public health policies, like other public policies, are crucial in determining the overall health of the population and are an important contributor to a nation seeking to reap the benefits of its demographic dividend. One of the major claims of health policies in recent years has been the achievement of universal health coverage (UHC), a novel idea that seeks to ensure that every individual has access to needed health services without suffering financial hardship. Yet, populist ideas often dominate public policy despite evidence to the contrary, as seen in the case of publicly funded health insurance schemes. The changing nature of public health policy in recent years is particularly concerning, not only because it has often failed to be evidence-based, but also because of its inability to guarantee even minimal health benefits to the population.

More troubling is the failure of public health policies to improve access to health care at a time when such access is deteriorating significantly owing to rising costs in the private sector and poor quality in the public sector. Two recent government initiatives – the Ayushman Bharat Health and Wellness Centres and the Digital Health Mission – illustrate these inadequacies.

## The interpretation

The Ayushman Bharat Health and Wellness Centres, introduced as a policy initiative in 2018, were intended to strengthen health infrastructure. What eventually happened, however, was that the names and identities of grassroots-level institutions – namely, the health sub-centres (SCs), primary health centres (PHCs), and community health centres (CHCs) – were altered by mandatorily adding “Health and Wellness Centre” as a prefix. The identity of these grassroots institutions and their mandates have evolved over time based on their roles within the district health system. The use of a common prefix has created considerable ambiguity among health professionals and policymakers regarding their actual mandate. Another consequence of the “health and wellness” approach has been a shift in focus from population health outcomes to individual well-being. The major challenge in using well-being as an outcome measure lies in the elusive and subjective nature of the concept itself.

A historical inquiry into the concept of wellness reveals that it was initially used to denote the absence of disease and was often contrasted with illness. It was also frequently used interchangeably with health. During the 1950s, the wellness movement popularised the idea of positive well-being by conceptualising health beyond its biological dimensions. The mental cure model similarly emphasised the psychological and spiritual aspects of healing. Influenced by these developments, the World



**Mathew George**

Professor with the Department of Public Health Sciences, Central University of Kerala, Kasaragod, Kerala

Access to curative care and stronger institutions must anchor India's health policy

Health Organization (WHO) defined health as not merely the absence of disease, thereby promoting the notion of positive well-being. Over time, wellness expanded beyond physiological health to include mental, spiritual, social and environmental dimensions, offering a more holistic understanding of health. In public health, however, the emphasis shifted towards health promotion – a population-based approach that recognises how social, economic and environmental conditions shape people's ability to adopt healthy behaviours.

Another reason for preferring health promotion over wellness was the greater rigour and feasibility associated with measuring the former. There are no universally accepted measures of well-being at the population level, as the concept is inherently individualistic and deeply subjective. Unlike health promotion, the concept of wellness places the primary responsibility on individuals, assuming that they possess the capacity and opportunity to modify their health-related choices. In doing so, it often underestimates the structural and social determinants that shape health outcomes.

## The individualisation of health

The shift from population health status to individual well-being is a consequence of the changing wellness narrative brought by the public health policy. The implication is that health status, which was previously assessed through unmet needs in preventive, promotive, curative and rehabilitative care – including access to basic services such as drinking water, food and nutrition, chronic disease management, emergency care, and maternal and child health services – is increasingly being replaced by the aspiration to achieve individual well-being. This shift in focus has contributed to the rise of health coaches and the proliferation of social media messages promoting individual well-being, often under the banner of public health.

When health outcomes are framed primarily in terms of individual well-being, there is a risk of failing to systematically capture a wide range of unmet health needs that remain significant for the population. The broader narrative increasingly suggests that the achievement of individual well-being is the ultimate objective of health and wellness centres. This presents a serious challenge. As the well-known principle in management states, “If you cannot measure it, you cannot improve it”. Given the inherently subjective nature of well-being, an excessive policy focus on this outcome may undermine the ability to evaluate health systems effectively and address concrete deficiencies in health care access and service delivery.

Another major public health policy initiative of recent years is the Ayushman Bharat Digital Health Mission (ABDHM), whose principal

objective is to create a digital repository of health information for every individual through a unique health ID, known as the ABHA card. In addition, the mission seeks to maintain registries of health facilities, health-care professionals and information related to health insurance. However, an information portal containing health records and details of health infrastructure cannot, by itself, address the challenges posed by inadequate access to health care. Nor does it justify the annual budget of around ₹300 crore to the ABDHM in the absence of measurable outcomes.

## Factors behind inadequate access to care

It is well established that inadequate access to health care in India stems from the unaffordability of care in the private sector and the lack of quality health-care facilities in the public sector. Merely creating databases of individual health records, health facilities and health-care professionals cannot improve access to health care. If the argument is that information is the first step towards strengthening the health system, there exists a substantial body of reports and datasets that provide such information.

The more pertinent question is how information contained in an individual's health record, through an ABHA card, can guarantee access to health care when health-care infrastructure remains grossly inadequate and unaffordable for large sections of the population. Even if every individual in a district possesses an ABHA card and all health facilities and health-care professionals are digitally mapped, the delivery of health care still requires a robust institutional mechanism. Unfortunately, the ABDHM, as currently designed, has little to say about the provisioning of care. It primarily generates information on individuals, facilities and health-care professionals, all of which continue to operate largely in silos.

It is therefore difficult to identify a compelling public health rationale for this scale of data generation. What is missing from current policy initiatives are concrete measures to strengthen public health-care institutions, as envisaged under India's three-tier health-care system. Instead, these institutions continue to weaken in many parts of the country.

For most people, access to curative care constitutes an immediate and pressing need. Only after these basic health-care requirements are met can individuals meaningfully engage with preventive and promotive health interventions. When public health policies fail to recognise people's felt needs, they risk becoming mere vehicles for advancing the priorities of policymakers and health-care providers rather than addressing the actual concerns of the population.

# Context

- India's public health policy has increasingly shifted away from addressing population-level health needs and towards promoting individual wellness and digital health initiatives.
- This shift risks weakening the core objective of public health: ensuring equitable access to essential healthcare services.

# Changing goals

1:52000

## Ayushman Bharat Health and Wellness Centres (AB-HWCs)

- Introduced in 2018 to strengthen primary healthcare infrastructure.
  - Intended to expand preventive, promotive, curative, rehabilitative and palliative care services.
- 
- Existing institutions such as:
    - Sub-Centres (SCs),
    - Primary Health Centres (PHCs),
    - Community Health Centres (CHCs) were rebranded as "Health and Wellness Centres."

- Improve the infra
- Practitioners
- Cheap diagnostics & medicines.
- Doctor to patient ratio.

1:800



## Ayushman Bharat Digital Mission (ABDM)

### Objectives :

- Create a digital health ecosystem.
- Provide every citizen with a unique Ayushman Bharat Health Account (ABHA) ID.
- Maintain registries of:
  - Patients,
  - Health facilities,
  - Healthcare professionals.

# Wellness vs Health

Physical

Mental

Emotional.

# Beyond the Article

Issues

→ Wellness

Solution: -

→ Infra investment

→ Centre

→ States

→ Deployment of practitioners.

↳ Incentive programme.

→ Digital infra.

→ Start ups → Affordable healthcare.

→ Affordable drugs.

# India's next challenge — from invention to global scale

India has never lacked technological vision. Time and again, it has anticipated transformative technologies long before they became mainstream. It has built impressive scientific capabilities, developed indigenous innovations, and demonstrated remarkable ingenuity. Yet, in several critical sectors, it has struggled to convert early technological leadership into globally dominant industries.

As India embarks on ambitious missions in semiconductors, artificial intelligence (AI), quantum computing and space technologies, it is worth reflecting on an important lesson from its past: invention alone is not enough. The true measure of technological success lies in scaling innovation into globally competitive enterprises.

## Ahead of its time

Consider semiconductors. India established the Semiconductor Complex Limited (SCL) in the 1970s – when semiconductors were still an emerging industry – recognising early that integrated circuits would become the foundation of the digital age. Yet, while Taiwan built TSMC and South Korea developed Samsung's semiconductor empire, India failed to translate its early lead into a globally competitive manufacturing ecosystem. The problem was not vision or scientific capability, but limited capital, inadequate scale, inconsistent policy support and an inward-looking public sector approach.

A similar story can be told about ECIL. Established in 1967, it developed indigenous computers, control systems and strategic electronics when India faced severe technology embargoes. ECIL played a vital role in building technological self-reliance. However, its focus remained on strategic requirements rather than globally competitive commercial products. As a result, scientific excellence stayed within institutions instead of creating large industrial ecosystems. The Simputer followed a similar trajectory. Conceived in 1998 by Indian technologists, it anticipated many features that would later define smartphones and tablets. Yet,



**Kiran Mazumdar-Shaw**

Executive  
Chairperson,  
Biocon Limited

The country must transform innovation into globally dominant technology enterprises

despite its innovation, the supporting ecosystem was absent. Venture capital, software platforms, component supply chains and consumer markets were not mature enough to help it achieve global scale. A few years later, Apple transformed personal computing through the iPhone and built one of the world's most valuable technology ecosystems. The lesson is clear: being first matters little if you cannot scale.

India has seen similar patterns elsewhere. It developed early expertise in computing, telecommunications and electronics. Yet, many pioneering initiatives remained prototypes, pilots or public-sector achievements rather than globally dominant businesses.

## Models of success

Fortunately, history also offers examples of success. India's pharmaceutical industry evolved into a globally competitive manufacturing powerhouse, making the country the pharmacy of the world and a leading vaccine producer. India also developed indigenous supercomputing capabilities through the PARAM programme. More recently, Aadhaar and UPI have shown how technology platforms designed for scale can transform a nation. Scale creates ecosystems, ecosystems create industries, and industries create global leadership.

Today, India stands at another technological inflection point. AI, quantum computing and space technologies are likely to shape the next half-century, just as semiconductors and software shaped the last. India already possesses significant strengths in software engineering and digital infrastructure. The challenge now is to build globally scalable AI products and platforms. The emergence of DeepSeek showed that technological leadership is not only about building the largest models. It is also about making intelligence cheaper and more accessible. The AI race may ultimately be won by those who make intelligence affordable, ubiquitous and widely available.

India is uniquely positioned to lead this

movement. Just as UPI democratised financial inclusion, India should aspire to democratise intelligence through low-cost, energy-efficient AI models that can serve billions of people.

Quantum computing presents another opportunity. Rather than merely replicating existing approaches, India should focus on reducing the cost of quantum infrastructure and developing practical applications in health care, materials science, climate modelling and drug discovery.

The same should extend to space. The successes of Chandrayaan and Mangalyaan proved that frugal innovation can coexist with world-class ambition. As computing demands escalate globally, concepts such as space-based data centres powered by continuous solar energy are attracting serious attention. India should not merely participate in these conversations; it should lead them. We should ask bold questions about orbital computing infrastructure, space-based AI platforms or even data centres and quantum communication networks.

These ideas may seem futuristic today. But so did semiconductors, smartphones and AI when they first emerged.

## Stopping too soon

The deeper lesson from SCL, ECIL and Simputer is not that India failed, but that it often stopped too soon. We celebrated technological capability before building the ecosystems needed for global scale. The next phase of India's technological journey must combine self-reliance with global ambition. The challenge is no longer merely to invent; it is to build, scale, commercialise and create enterprises that can compete globally.

India has already demonstrated world-class scientific and engineering capabilities. The opportunity now is to translate that ingenuity into globally competitive industries that shape the technologies of the future.

The countries that lead tomorrow may not be those that invent first, but those that scale best. This time, India must do both.

# Lost Opportunity

- India established the Semiconductor Complex Limited (SCL) in the 1970s
- Electronics Corporation of India Limited (ECIL), 1967
- **Simputer** ; Developed in 1998, it anticipated several features later seen in smartphones and tablets.

# Issues

- Risk taking capital is low → VCs
- Manufacturing is ignored.
- Inward looking programmes.
- Global issues are ignored.
- Lack of prt. participation
- Low investment in R&D.

# Success story

- **Pharmaceutical Industry**

→ **Supercomputing** - The **PARAM** programme demonstrated India's ability to develop indigenous high-performance computing capabilities.

- Digital Public Infrastructure

India stack

UPI

Aadhaar

Jan dhan accounts

# Emerging areas

- AI

- Quantum Computing

- Space Tech

Implementation & deployment.

# Way forward

- Building innovation ecosystems.
- Strengthening venture capital availability. ✓✓
- Supporting start-ups and manufacturing. ✓✓
- Integrating research institutions with industry.
- Encouraging global market access.
- Developing robust supply chains.

Pvt. participation



## Practice Question (15 marks)

- Innovation needs the helping hand of 'scale' to bring mass revolution.  
Elaborate in the context of India's technological challenges.

Intro →

Body →

Examples -

Need for scale:-

# Evident distress

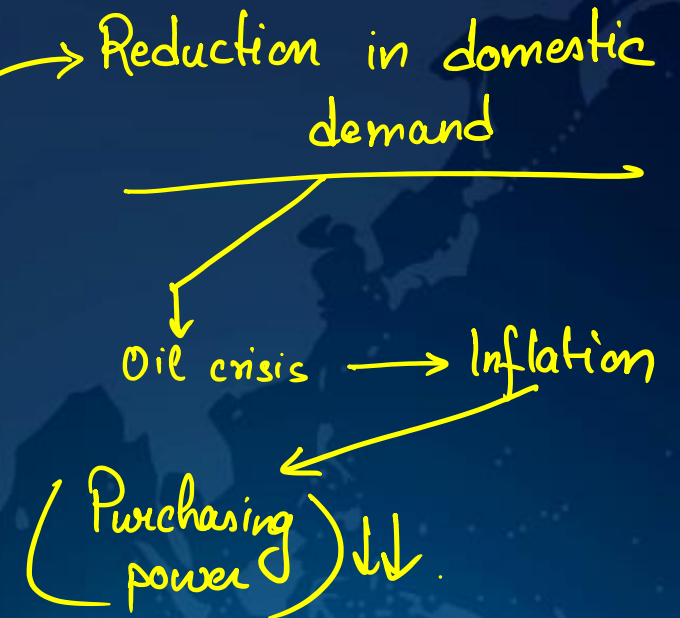
## Stress from the West Asia crisis has revealed economic pain

**A**s the resolution process of the West Asia crisis drags on, an increasing number of economic metrics are exposing key weaknesses in the Indian economy. Many of these existed before the crisis broke out in late February and are now becoming apparent as the economy faces stress. The latest data on the Index of Eight Core Industries show that these sectors cumulatively grew just 0.5% in May 2026, the second-lowest in 21 months. It would have been easy to pass this off as a war-related impact, but the data also show that the index grew by an almost equally anaemic 1.1% over the course of the entire financial year 2025-26. What remains a concern is that the domestic crude oil and natural gas sectors continued their multi-year streaks of contractions in May as well. By this time, the third month of the conflict, oil prices had settled somewhat lower than their April peaks. As a result, oil imports by oil marketing companies began rising once again to meet domestic demand. A strategic goal continues to be missed here. While imported oil can be used to meet demand, domestic production should nevertheless be ramped up to fill strategic reserves. This reserve oil, even of inferior quality, can be released in times of shortage. The same holds true for natural gas. With natural gas imports and domestic production contracting, it followed that the fertilizer sector would also contract. The good news, however, is that the contraction – of 0.9% in May 2026 – was much lower than it was even two months earlier. In any case, what impact the ‘super El Niño’ will have on fertilizer demand is still uncertain.

Coal production, too, contracted by the most in nearly a year. As the summer continues to heat up, electricity generation will increasingly have to rely on variable renewable sources or costly imported coal. Notably, the core sectors are not the only ones revealing economic distress. The latest Goods and Services Tax (GST) revenue data too show that domestic economic activity seems to be slowing. Revenues from domestic transactions contracted 2.6% in May 2026. The government argues that this is because of a one-time windfall transfer it received in May last year. Even so, the average growth of domestic GST revenue over the last six months was just 3.1%, lower than in 2025-26 and the year before that. This is not a supply issue, since merchandise exports hit a record high in May 2026. It is a demand problem, as low real wage growth meets rising inflation to squeeze wallets. These are all distressing signals even as India enters a deficient monsoon. Trade deals are no substitute for hard-hitting reforms.

# Weak Indicators

- The **Index of Eight Core Industries** grew only **0.5% in May 2026**, the second-lowest growth rate in 21 months.
- Core sectors such as coal, crude oil, natural gas, electricity, steel, cement, fertilizers, and refinery products are key indicators of economic activity.
- Domestic GST revenues **declined 2.6% in May 2026**, while average growth over the past six months has been only **3.1%**, lower than previous years.



# Energy security



Coal - Coal production (weight: 10.33 per cent) decreased by 9.3 per cent in May 2026 over May 2025. Its cumulative index declined by 9.1 per cent during April to May 2026-27 over corresponding period of the previous year.

Crude Oil - Crude Oil production (weight: 8.98 per cent) declined by 4.6 per cent in May 2026 over May 2025. Its cumulative index declined by 4.2 per cent during April to May 2026-27 over corresponding period of the previous year.

Natural Gas - Natural Gas production (weight: 6.88 per cent) declined by 4.9 per cent in May 2026 over May 2025. Its cumulative index declined by 4.5 per cent during April to May 2026-27 over corresponding period of the previous year.

Petroleum Refinery Products - Petroleum Refinery production (weight: 28.04 per cent) declined by 8.7 per cent in May 2026 over May 2025. Its cumulative index declined by 4.7 per cent during April to May 2026-27 over corresponding period of the previous year.

Fertilizers - Fertilizer production (weight: 2.63 per cent) declined by 0.9 per cent in May 2026 over May 2025. Its cumulative index declined by 4.5 per cent during April to May 2026-27 over corresponding period of the previous year.

Steel - Steel production (weight: 17.92 per cent) increased by 5 per cent in May 2026 over May 2025. Its cumulative index increased by 5.2 per cent during April to May 2026-27 over corresponding period of the previous year.

Cement - Cement production (weight: 5.37 per cent) increased by 8.4 per cent in May 2026 over May 2025. Its cumulative index increased by 8.3 per cent during April to May 2026-27 over corresponding period of the previous year.

Electricity - Electricity generation (weight: 19.85 per cent) increased by 8.7 per cent in May 2026 over May 2025. Its cumulative index increased by 7.1 per cent during April to May 2026-27 over corresponding period of the previous year.

# Centre tightens norms for foreign contributions

Amended FCRA Rules stipulate that NGOs must stick to specified activities in their category and geographical areas; disclosure of social media accounts and other publications made mandatory




Vijaita Singh  
NEW DELHI

Non-governmental organisations (NGOs) wanting to access foreign funds must now stick to a list of activities specified by the Centre, according to the latest amendment to the Rules of the Foreign Contribution Regulation Act (FCRA), 2010, notified on Monday.

While NGOs seeking foreign funds are required to register under one of the five permitted categories, namely social, economic, educational, cultural, and religious, this is the first time separate activity lists have been laid out for those in each category.

NGOs must now disclose their activities, the geographical scope of their programmes, their websites, social media accounts, and publications. They must pay separate fees for each category and State or Union Territory they operate in, as opposed to the previous single fee for FCRA registrants.

Any new registration must follow the new norms and existing registrations must comply with the

| Funding check   |   |  |
|---|---|--|
|  <b>EDUCATIONAL</b> <ul style="list-style-type: none"><li>Schools, colleges, and libraries</li><li>Scholarships</li><li>Research institutions and think tanks</li><li>Civic-awareness and constitutional-rights programmes</li></ul> |  <b>ECONOMIC</b> <ul style="list-style-type: none"><li>Livelihood generation</li><li>Skill development</li><li>Agricultural sectors</li><li>Entrepreneurship and micro-enterprises</li><li>Financial and digital inclusion</li></ul> |  <b>RELIGIOUS</b> <ul style="list-style-type: none"><li>Places of worship</li><li>Religious education</li><li>Pilgrim services</li><li>Meditation programmes</li><li>Preservation of religious traditions</li></ul> |
|  <b>SOCIAL</b> <ul style="list-style-type: none"><li>Public health</li><li>Rehabilitation</li><li>Sanitation and nutrition</li><li>Disaster relief</li></ul>   |  <b>CULTURAL</b> <ul style="list-style-type: none"><li>Preservation of Indian arts and languages</li><li>Museums, archives, and cultural festivals</li><li>Heritage conservation</li></ul>  |  |

changes within the next year. Any violations will be penalised with a minimum fine of ₹1 lakh, according to another order from the Union Home Ministry.

The Ministry regulates all foreign donations through the FCRA. Earlier amendments of the Rules only required NGOs to give an undertaking that their acceptance of foreign funds is not likely to affect the sovereignty and integrity of India or impact friendly relations with foreign states or disrupt communal harmony.

The amended Rules also broaden the definition of an NGO's "key functionary" beyond office-bearers and directors to include trustees, partners, the *Karta* or head of a Hindu Undivided Family, governing body members, and anyone else controlling or managing the organisation. Associations having foreign nationals (other than persons of Indian origin) as key functionaries will ordinarily not be considered eligible for registration or prior permission, unless specifically permit-

ted by the Centre, according to the new Rules. NGOs must also declare whether their association or any of their key functionaries brought out any publication during the year, including books, magazines, and newspaper articles.

A senior government official said that the amendments were effected to bring uniformity in Foreign Contribution forms (F-C) and to avoid duplication.

CONTINUED ON  
» PAGE 16

## Govt. tightens norms for foreign contributions

Some categories specifically exclude political activities. For instance, the "educational" purpose lists 22 activities but adds the caveat that "awareness programmes on constitutional rights, fundamental duties, and civic responsibilities" must be "strictly non-political in nature."

There are 16 permitted categories of religious activities, including "conduct of religious education, moral instruction, satsangs, discourses, and meditation retreats (excluding proselytisation)", and "burial/cremation ground development and maintenance." There are 19 activities listed under "economic" purpose, and 30 items under the "social" category.

The Ministry notified another order which specifies fines for FCRA violations such as excess administrative spending, speculative investments, misuse of funds, unauthorised receipt/use of foreign contributions, and using funds for unapproved purposes or in unapproved States or Union Territories. Any use of funds for purposes other than those for which they were received can attract a penalty of up to 30% of the amount misused or ₹1 lakh, whichever is higher. Similarly, using foreign funds for purposes or in areas not covered under the NGO's approval or registration also invites a fine of 30% of the amount or ₹1 lakh, whichever is higher.



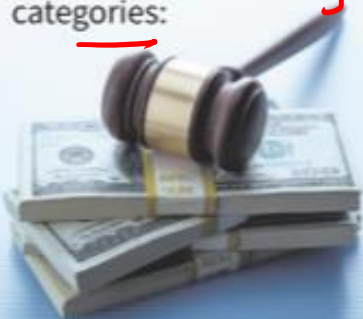
# Context

- The Union Government has amended the **Foreign Contribution (Regulation) Rules (FCRA), 2010** to strengthen oversight of foreign funds received by NGOs and other associations.

# Mandatory Categorisation of Activities

## Funding check

Under the fresh changes to Rules of the Foreign Contribution Regulation Act, all NGOs are required to disclose specific activities and geographical scope of their programmes to receive contributions under 5 permitted categories:



### EDUCATIONAL

- Schools, colleges, and libraries ✓
- Scholarships ✓
- Research institutions and think tanks ✓
- Civic-awareness and constitutional-rights programmes ✓



### ECONOMIC

- Livelihood generation ✓
- Skill development ✓
- Agricultural sectors ✓
- Entrepreneurship and micro-enterprises ✓
- Financial and digital inclusion ✓



### RELIGIOUS

- Places of worship
- Religious education
- Pilgrim services
- Meditation programmes
- Preservation of religious traditions



### SOCIAL

- Public health
- Rehabilitation
- Sanitation and nutrition
- Disaster relief



### CULTURAL

- Preservation of Indian arts and languages
- Museums, archives, and cultural festivals
- Heritage conservation

Prelims



# Mandatory disclosure

- NGOs must disclose:
  - Nature of activities undertaken.
  - Geographical areas of operation.
  - Websites and social media accounts.
  - Publications and communication materials.
- The aim is to ensure greater public scrutiny and traceability of foreign-funded activities.

# Expanded Definition of “Key Functionary”

- The amended rules broaden the definition of a key functionary beyond office-bearers and directors.
- It now includes:
  - ✓ Trustees.
  - ✓ Partners.
  - ✓ Governing body members.
  - ✓ Heads of Hindu Undivided Families (HUFs).
  - Individuals exercising managerial control over the organisation.

→ Greater accountability

'Kartas'

# Stricter Penalties

- The government has separately notified penalties for FCRA violations.
- Violations include:
  - Excess administrative expenditure. ✓
  - Speculative investments. ✓
  - Misuse of foreign funds. ✓
  - Unauthorised receipt or utilisation of foreign contributions.
  - Use of funds for unapproved purposes or in unapproved States/UTs. ✓
- Penalty:
  - **Up to 30% of the amount misused or ₹1 lakh, whichever is higher.**
  - Similar penalties apply when funds are used outside the approved purpose or geographical jurisdiction.

# India's patchy industrial climate strategy

The inevitable conclusion emerging from the ambitious targets set up by the government's Make-in-India, Viksit Bharat (2047) and net-zero emissions (2070) commitments is that industrial decarbonisation is central to India's long-term climate goals.

As the economy grows, both existing and emerging manufacturing segments expand, fuelling a steep rise in energy demand. Balancing this industrial growth on the one hand and population-driven consumption demand on the other with national emission reduction objectives requires highly targeted policies. The recently submitted First Biennial Transparency Report (BTR1) by India to the United Nations Framework Convention on Climate Change provides a detailed account of national emissions. The report discloses that in 2022, over 20% of India's total emissions stemmed directly from the industrial sector. Specifically, it shows that the fuel consumption in manufacturing industries and construction accounts for 13% of total emissions, while industrial processes and product use accounts for another 9%. This clearly demonstrates how much manufacturing activities contribute to the overall carbon footprint, a trend that has remained consistent over time.

## Mitigation planning

To mitigate industrial emissions and energy consumption, the government has relied on two major market-based mechanisms. The BTR1 acknowledges the Perform, Achieve and Trade (PAT) scheme as a primary initiative, which aims to reduce specific energy consumption across 13 energy-intensive industries. PAT is now transitioning to the Carbon Credit Trading Scheme (CCTS), which focuses on reducing the emission intensity of nine industrial sectors, including aluminium, cement, fertilizers, iron and steel, petrochemicals,



**Shifali Goyal**

Research Associate, Centre for Social and Economic Progress and PhD Scholar, Indian Institute of Foreign Trade (IIFT)



**Debashis Chakraborty**

Professor, IIFT Kolkata. Views are personal

Balancing industrial growth on the one hand and population-driven consumption demand on the other with national emission reduction objectives requires highly targeted policies

petroleum refining, pulp and paper, textiles, and chlor-alkali. The other four industries, which include thermal power plants, railways, DISCOMs and commercial buildings, will continue under the PAT scheme.

While these schemes set benchmarks, encourage energy efficiency, and reduce emission intensity, there is a clear gap in how mitigation planning is envisioned across Indian industries. These policies are designed almost entirely for well-defined, traditional heavy-emitting sectors such as cement, steel, fertilizers, refineries, and textiles. However, they de facto overlook a massive proportion of industrial emissions, specifically those generated by fuel consumption in, what India's emission inventory classifies as, "non-specific industries".

A careful analysis of emissions data for India's manufacturing industries and construction sector for the latest reported year, 2020, reveals a crucial puzzle that needs to be solved urgently. The explicitly specified major industrial sectors accounted for slightly more than 55% of the total emissions generated from manufacturing industries and construction. Conversely, more than 40% of those sectoral emissions were caused by the "non-specific industries" category alone. A similar pattern has been seen in 2014, 2016, and 2019 as well, as per the detailed emission inventory available on NITI Aayog's India Climate and Energy Dashboard. To sum up, the classification of sectors in India's emission inventory reflects that a surprisingly large volume of emissions falls under a single, vague heading of "non-specific industries".

The point of concern is that the scope of mitigation policies in India has relied on an enforcement and incentive-based structure around specific, identifiable sectors. For instance, some of the explicitly identified sectors in the emission inventory,

such as power, cement, non-ferrous metals, chemicals, and textiles, are covered by mitigation measures such as PAT and CCTS. Yet, a major part of industrial emissions remains in an administrative grey area, with serious implications for India's broader industrial climate strategy. As this 40% block lacks specific sub-sectoral definitions, the various industries clustered therein effectively fall outside the primary scope of both PAT and CCTS. They are not subject to the same energy efficiency mandates or emission-reduction targets as industries such as steel or cement, despite their contributions to the emissions load. This policy gap keeps a significant portion of the country's industrial base out of the green transition.

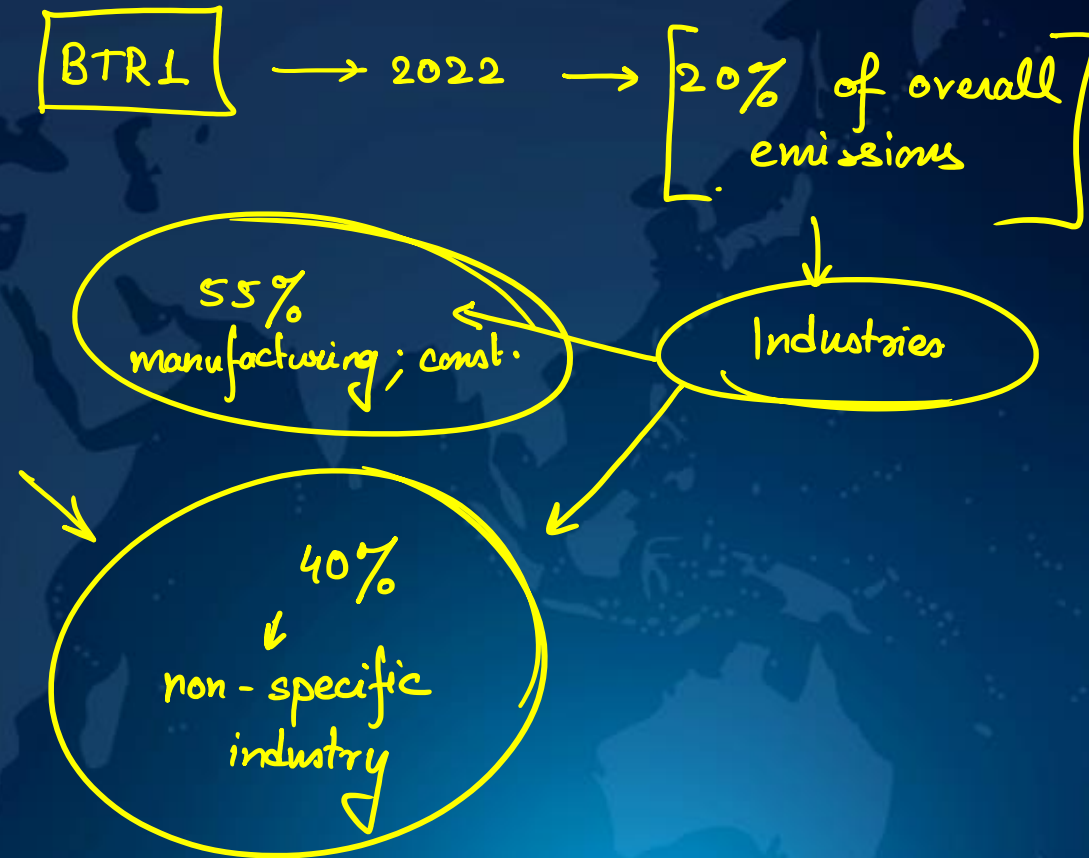
## Need to identify industries

For India to successfully decouple its industrial growth from greenhouse gas emissions, the next phase of its national climate strategy needs more transparent, disaggregated data. This must begin with breaking down the existing "non-specific industries" in the emission inventory. For timely realisation of the net-zero emissions target, policymakers need to urgently focus on identifying exactly which sub-sectors contribute to these 40% emissions, how their specific energy consumption patterns are evolving, and the part in the process chain where emissions are primarily concentrated.

Transparency in climate reporting is often framed as an international obligation, a way to prove to the world that a nation is effectively traversing the path for honouring its pledges. But the real value of transparency is deeply domestic. It provides policymakers with an appropriate level of clarity to monitor exactly where the interventions are heading and where there is scope for course correction. Therefore, to build a low-carbon economy, exact knowledge on these passive outliers is non-negotiable.

→ GSTII

Net Zero Emission → 2070



# Context

Requirement → Paris Agreement

India's **First Biennial Transparency Report (BTR-I)** submitted to the UNFCCC shows:

- More than **20% of India's total greenhouse gas emissions** originate from the industrial sector.
- Manufacturing fuel consumption contributes around 13% of total emissions.
- Industrial processes and product use contribute another 9%.

# Existing Industrial Decarbonisation Framework

## ↳ Perform, Achieve and Trade (PAT)

- Focuses on improving energy efficiency in energy-intensive industries. Targets sectors such as:
  - Cement,
  - Steel,
  - Fertilizers,
  - Aluminium,
  - Petrochemicals,
  - Textiles,
  - Pulp and paper.

## ↳ Carbon Credit Trading Scheme (CCTS)

- India's emerging carbon market mechanism.
- Aims to reduce emission intensity by creating tradable carbon credits.

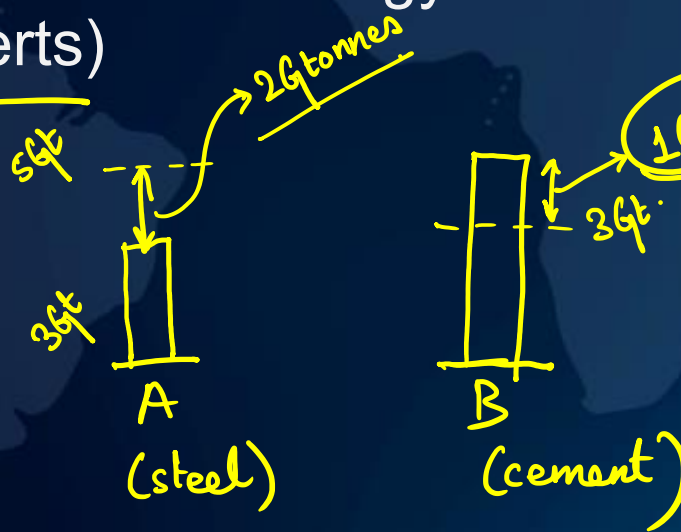
# PAT

- **Launched:** 2012
- **Nodal Agency:** Bureau of Energy Efficiency (BEE)
- **Parent Mission:** NMEEE under NAPCC
- **Tradable Instrument:** Energy Saving Certificates (ESCerts)

National Mission on Enhanced Energy Efficiency.

National Action Plan on Climate Change

Buy ESCerts



# Issues

- About **55% of industrial emissions** come from explicitly identified sectors.
- More than **40% of industrial emissions** arise from the “non-specific industries” category.
- These industries:
  - Lack clear sub-sector classification.
  - Fall outside the direct scope of PAT and CCTS.
  - Are not subject to sector-specific energy efficiency targets.
  - Escape focused regulatory attention despite their significant emissions.





# Prelims

# El Nino: 111 districts in 12 States of 'primary concern'

While 315 districts have been identified as potentially affected by weak monsoon, 111 among them, with irrigation coverage below 25%, have been categorised as high priority, says Chouhan

**The Hindu Bureau**  
NEW DELHI

Union Agriculture Minister Shivraj Singh Chouhan has held a high level meeting with State Agriculture Ministers and officials on the El Nino situation, that has led to a delay of the south-west monsoon. Talking to reporters after the meeting, Mr. Chouhan said the rainfall so far has been around 43% below normal.

The Centre has assessed that 315 districts are vulnerable and 111 districts in 12 States are of primary concern due to poor irrigation facilities. "We are preparing in advance. Not waiting for a crisis," the Minister said, adding that each of the 315 districts would have a contingency plan to face the challenge.

Agriculture Ministers of States, senior officials, District Collectors of vulnerable regions, experts from the Indian Council of Agricultural Research and offi-



**Parched pastures:** Rainfall is likely to remain weak even during the week ending July 2 and this could directly affect Kharif crops. PTI

cials of the Union Agriculture Ministry and the Indian Meteorological Department attended the meeting. Citing IMD forecasts, he said rainfall was likely to remain weak even during the week ending July 2. "This could directly affect Kharif crops, particularly in rain-fed regions where agriculture is heavily dependent on monsoon rains," he said.

"Around 315 districts have been identified as potentially affected by weak monsoon conditions. Of

these, 111 districts [20 of these districts are in Maharashtra] have been categorised as high priority, where irrigation coverage is below 25%. Another 76 districts fall under the medium-priority category with irrigation coverage between 25 and 50%, while 128 districts have been classified as low priority owing to relatively better irrigation facilities through dams and other sources," the Minister told reporters.

The districts are located across M.P., Maharashtra,

Gujarat, Uttar Pradesh, Rajasthan, Karnataka, Bihar, Jharkhand, Telangana, A.P. and Odisha. "Detailed discussions were held with Agriculture Ministers and District Collectors of these states," he said, adding that the District Agriculture Contingency Plans, prepared by the ICAR, incorporated district-specific climatic conditions, cropping patterns, and water resources and prescribed measures such as suitable alternative crops under low rainfall conditions, crop diversification strategies, optimum use of available water resources and additional income opportunities to mitigate risks.

"Water conservation and harvesting works under MGNREGA and forthcoming rural development programmes such as VB-GRAMG should receive priority so that employment generation and enhancement of water storage capacity can go hand in hand," he said.

Kharif

43%

# President presents second set of Padma awards

**The Hindu Bureau**  
NEW DELHI

Tennis legend Vijay Amritraj, actors Mammootty and Satish Shah, cricketer Rohit Sharma, and playback singer Alka Yagnik were among the eminent personalities who received the Padma awards from President Droupadi Murmu on Tuesday.

The Padma awards, one of the highest civilian awards of the country, are conferred in three categories: the Padma Vibhushan, Padma Bhushan, and the Padma Shri.

In the second civil investiture ceremony at the Gnanantra Mandap of the Rashtrapati Bhavan, the President presented the Padma Vibhushan to former Supreme Court judge K. T. Thomas for public affairs and to eminent Malayalam



President Droupadi Murmu confers the Padma Vibhushan on former Supreme Court judge K.T. Thomas during the second civil investiture ceremony in New Delhi on Tuesday. Tennis legend Vijay Amritraj and playback singer Alka Yagnik received the Padma Bhushan. PTI, ANI



journalist P. Narayanan for contribution to literature and education.

Alka Yagnik, Mammootty, American oncologist Dattatreya Neri, Vijay Amritraj, industrialist S.K.M. Maeilanandhan, and social worker and educationist Vellappally Natesan received the Padma Bhushan from the Presi-

dent during the ceremony. Rupi Soren, wife of Jharkhand Mukti Morcha founder Shibu Soren, received the Padma Bhushan on behalf of the late leader.

## Padma Shri

The President conferred the Padma Shri on cricketer Rohit Sharma, who led India to victory in the last

T-20 World Cup, and on hockey player Savita Punia. Actor R. Madhavan, aerospace scientist Chandramouli Gaddamanugu, who led the Akash missile system from development to deployment during Operation Sindoor, and noted writer Asok Kumar Haldar were among those who received the Padma Shri.

Vladimir Mestvirishvili, the Georgian coach who mentored Indian Olympic medallists such as Sushil Kumar, Yogeshwar Dutt, and Ravi Dahiya, was awarded the Padma Shri posthumously.

The President also conferred the Padma Shri on actor Satish Shah posthumously.



PIB

## India's Critical Mineral Mission Gains Momentum: 56 Critical Mineral Blocks and 11 Exploration Licence Blocks Successfully Auctioned

Posted On: 23 JUN 2026 4:31PM by PIB Delhi

Ministry of Mines has achieved significant milestones in strengthening India's critical mineral security and exploration ecosystem with the successful completion of recent auction tranches for critical and strategic mineral blocks. These successful auctions have taken the total number of critical and strategic mineral blocks successfully auctioned to 56, marking a significant step towards strengthening domestic mineral supply chains and advancing India's critical mineral mission.

The Ministry of Mines successfully auctioned 10 critical and strategic mineral blocks under the Seventh Tranche conducted by the Central Government, taking the total number of successfully auctioned critical and strategic mineral blocks to 56. This represents a successful auction rate of over 63%, with 56 blocks auctioned out of 88 unique mineral blocks taken up for auction by the Central Government.

The Seventh Tranche marked a significant expansion of India's critical mineral exploration landscape, with critical mineral blocks auctioned for the first time in Gujarat, Uttarakhand and Telangana by the Central Government. The tranche included minerals such as Graphite, Rare Earth Elements (REE), Vanadium, Titanium, Glauconite, Rock Phosphate and associated minerals, further widening the geographical reach of critical mineral exploration in the country.

The Seventh Tranche of auctions was launched through the Notice Inviting Tender (NIT) issued on March 23, 2026, offering 19 mineral blocks comprising critical and strategic minerals. The auction was conducted under the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 and the Mineral (Auction) Rules, 2015, as amended from time to time.

Alongside critical mineral auctions, the Ministry successfully completed the Second Tranche of Exploration Licence (EL) auctions, further strengthening India's exploration ecosystem. The second tranche marked the expansion of the Exploration Licence framework to Arunachal Pradesh, Uttar Pradesh and Odisha for the first time by the Central Government, opening new opportunities for exploration of critical and deep-seated minerals.

With the successful completion of the second tranche, the cumulative number of Exploration Licence blocks successfully auctioned by the Central Government has reached 11 since the introduction of the EL auction regime. The Exploration Licence framework enables systematic exploration of critical and deep-seated minerals by facilitating participation from private and public sector entities.

The continued success of critical mineral and Exploration Licence auctions reflects the growing confidence of industry stakeholders in India's mineral sector and highlights the impact of policy reforms undertaken by the Government to promote systematic exploration, attract investment and strengthen domestic mineral supply chains.

These initiatives will accelerate the exploration and development of critical minerals essential for clean energy technologies, electric mobility, renewable energy systems, advanced manufacturing, electronics, defence applications and other strategic sectors of the economy.

The successful completion of these auction tranches reinforces the Government's commitment towards achieving the objectives of the National Critical Mineral Mission, promoting private sector participation, reducing import dependence and creating a robust pipeline of critical and strategic mineral assets for the nation.

Ministry of Mines expresses its appreciation to all participating bidders, State Governments, technical agencies and other stakeholders for their support and cooperation in making the auction programme a success. The Ministry remains committed to expanding exploration opportunities and building a transparent, efficient and investor-friendly mineral ecosystem in the country.

# National Critical Minerals Mission

HCL in 'final stages' of taking over 4 Copper blocks in Chile: Mines Secretary



KABIL

## VOC Port Emerges as a Model for Green Maritime Growth With 45% Reduction in Carbon Emissions: Sarbananda Sonowal

Sonowal Dedicates Kendriya Vidyalaya at VOC Port to the Nation, Expand Access to Quality Education

Sustainability Report, Green Hydrogen Transition & Academic Collaboration Highlight VOC Port's Future-Ready Growth Model

Posted On: 23 JUN 2026 5:36PM by PIB Delhi

**Union Minister of Ports, Shipping and Waterways (MoPSW), Sarbananda Sonowal** said that V.O. Chidambaranar Port Authority (VOCPA) has emerged as a model for sustainable maritime development in India, citing the port's significant progress in decarbonisation, renewable energy adoption and green infrastructure development.

Dedicating a series of sustainability, education and innovation initiatives at VOCPA, Sonowal highlighted the findings of the port's first Sustainability Report, which revealed that renewable energy now offsets nearly 94% of the port's energy-consumption equivalent, while net carbon emissions have been reduced by around 45%. The report also noted that carbon intensity per tonne of cargo has been reduced by nearly half over the past four years, reinforcing VOC Port's position as a frontrunner in India's green maritime transition.

"VOC Port is demonstrating what can be achieved when infrastructure development is guided by sustainability, innovation and community welfare. The port's achievement in reducing net carbon emissions by 45% is a significant milestone in India's journey towards greener and more responsible maritime growth. These initiatives reflect the vision of Prime Minister Narendra Modi for building modern, sustainable and future-ready infrastructure while investing in people, technology and the environment," **Sarbananda Sonowal** said.

A major highlight of the event was the commencement of academic activities at Kendriya Vidyalaya, VOC Port, for the 2026-27 academic session. Established with the approval of Kendriya Vidyalaya Sangathan, the institution will initially function from the Port School campus and provide quality CBSE education to children of port employees, Central government personnel and the local community. The initiative is expected to strengthen educational infrastructure in Tuticorin while expanding access to affordable, high-quality education.

"Quality education is one of the most powerful instruments of social transformation. The establishment of Kendriya Vidyalaya at VOC Port will provide new opportunities for children and strengthen the social infrastructure required for long-term development," Sonowal said.

The Union Minister also released the IIM Calcutta case study, "The Hydrogen Pivot: Orchestrating the Green Transition at V.O. Chidambaranar Port Authority," which documents the port's transformation from a conventional cargo hub into a green energy and sustainable maritime centre. The study highlights the port's pioneering efforts in renewable energy, electrification and green hydrogen development, including India's first green hydrogen pilot project commissioned at a major port.

Further reinforcing its environmental credentials, VOC Port received recognition as a Scope-2 Emission Free Port, reflecting its successful transition toward clean energy and low-carbon operations. The certification validates the port's decarbonisation efforts and strengthens its standing as one of India's leading green ports.

## INDIAN NAVY'S EASTERN FLEET SHIPS UDAYGIRI AND KAVARATTI ARRIVE AT HO CHI MINH CITY, VIETNAM

Posted On: 23 JUN 2026 4:08PM by PIB Delhi

INS Udaygiri, a stealth frigate, and INS Kavaratti, an anti-submarine warfare corvette, both **indigenously** designed and constructed warships of the Indian Navy, arrived at Nha Rong Port, Ho Chi Minh City, Vietnam, **on 22 Jun 2026 during their operational deployment to the South East Asia region.**

The ships, led by RAdm Alok Ananda, Flag Officer Commanding Eastern Fleet, were accorded a warm ceremonial welcome by personnel from the Vietnam People's Navy, representatives of the HCMC People's Committee, and port authorities. The reception reflected the close, longstanding ties between the two navies and the growing maritime partnership between India and Vietnam.

During the port call, the Indian Navy and the Vietnam People's Navy will undertake a series of professional interactions, cross-deck exchanges, sporting fixtures and community outreach activities. Senior leadership interactions are also scheduled, offering an opportunity to exchange perspectives and further strengthen bilateral naval cooperation.

This deployment marks the Indian Navy's first major presence in Vietnam since the bilateral relationship was elevated to an **Enhanced Comprehensive Strategic Partnership** in May 2026.



