

The Hindu Important News Articles & Editorial For UPSC CSE

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Edition: International Table of Contents

Page 01 Syllabus : GS 2 : Social Justice	Another Nipah death in Palakkad leads to alert in six Kerala districts
Page 05 Syllabus : GS 1 : Art and Culture	No urgent safety concern in AI crash report: FAA
Page 04 Syllabus : GS 2 : International Relations	Tibet-linked issues 'thorn' in ties with India: China
Page 07 Syllabus : GS 2 : Environment	Climate change is deciding where and how rural Indians are living
Page 09 Syllabus : GS 3 : Indian Economy	The changing landscape of employment
Page 08 : Editorial Analysis: Syllabus :GS 3 : Environment	Assessing India's carbon credit trading scheme targets

A fresh death due to Nipah virus in Palakkad district, Kerala, has triggered a health alert in six districts—Palakkad, Malappuram, Kozhikode, Thrissur, Kannur, and Wayanad. The deceased, a 58-year-old man, tested positive posthumously, prompting urgent containment and surveillance efforts by the state government.

Another Nipah death in Palakkad leads to alert in six Kerala districts

Abdul Latheef Naha
PALAKKAD

A fresh Nipah case in Palakkad district of Kerala has sparked fears that the deadly virus is still lurking despite efforts by the health authorities to contain its spread.

Palakkad reported the second Nipah case on Saturday night as a 58-year-old man from Kumaramputhur near Mannarkkad tested positive for the virus after his death in a private hospital at Perinthalmanna. He had been under treatment at the hospital with fever.

Even before the official confirmation from the Na-

tional Institute of Virology (NIV), Pune, came, health authorities in Palakkad and Malappuram districts swiftly initiated contact tracing for individuals who interacted with him over the past three weeks. As many as 46 people who were in contact with the infected person have been traced.

Apart from the two districts, Kozhikode, Thrissur, Kannur, and Wayanad districts have also been put on alert.

Health Minister Veena George said on Sunday that a detailed contact list and route map had been prepared and was awaiting release pending confirma-

Close watch

As many as **543 persons** across Kerala, including **46 contacts** of the latest victim, are currently under observation

Malappuram	208
Palakkad	219
Kozhikode	114

2 in Ernakulam

The latest incident is the sixth Nipah case in Kerala within a year



tion from the NIV.

Surveillance camera footage was examined to trace the contacts and to

prepare the route map. A family tree of the deceased person too has been mapped out.

The Minister said that fieldwork in and around Kumaramputhur was ramped up on Sunday. Fever surveillance is going on and multiple health worker teams will conduct door-to-door visits to allay fears and provide guidance on precautions.

"We will bolster our fight against Nipah by strengthening the health teams involved in it and intensifying preventive measures as soon as we get the final confirmation from NIV, Pune," Ms. George said.

Significance of the Issue:

1. Recurring Health Threats:

- Nipah virus outbreaks have been episodic in Kerala since 2018, underlining persistent zoonotic spillover risks.

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- Unlike seasonal outbreaks, Nipah has high mortality and no specific treatment or vaccine, making it a public health emergency of concern.

2. Preparedness and Response:

- Swift contact tracing (46 traced contacts), route mapping, and district-wide alerts reflect Kerala's proactive disease surveillance system.
- Use of CCTV surveillance, family tree mapping, and door-to-door health checks showcases technology and community health integration.

Governance and Administrative Response:

• Multi-tier Coordination:

- District-level health authorities acted promptly even before formal confirmation from the National Institute of Virology (NIV), Pune.
- Health Minister's leadership in field visits and communication indicates a top-down coordinated response.

• Precautionary Measures:

- Fever surveillance, contact isolation, and public awareness efforts have been ramped up.
- Ensuring public trust is critical—officials are working to allay panic while maintaining vigilance.

Broader Implications:

1. One Health Approach:

- Nipah virus is a classic case of zoonosis, possibly transmitted via fruit bats.
- Highlights the need for convergence between veterinary science, environmental monitoring, and human health systems.

2. Health Infrastructure Gaps:

- Despite progress, the dependence on external labs (like NIV Pune) indicates a need to decentralize virology testing capabilities.
- Reinforces calls to strengthen state-level epidemic intelligence units.

Way Forward:

• Institutional Strengthening:

- Establish regional virology labs and pandemic preparedness cells.
- Build capacity in real-time disease surveillance and community-level epidemiology.

• Preventive Education:

- Regular awareness campaigns on safe food practices, especially in high-risk zones.
- Public health education in schools and local governance bodies.

Daily News Analysis

- **National and Global Coordination:**

- Share surveillance data with WHO and integrate with national digital health missions.

Conclusion:

The Nipah virus alert in Kerala is not merely a regional health issue but a wake-up call for national epidemic preparedness. It underscores the importance of proactive governance, interdepartmental coordination, and the urgent need to institutionalize the One Health framework. Learning from such episodes is essential to strengthen India's resilience against future pandemics.

UPSC Mains Practice Question

Ques: Examine the role of local administration and community health workers in managing public health emergencies, with reference to Kerala's response to the recent Nipah virus outbreak. **(150 Words)**



The U.S. Federal Aviation Administration (FAA) has stated that the Air India Boeing 787-8 crash in Ahmedabad on June 12 posed no urgent safety concerns. This follows preliminary findings by India's Aircraft Accident Investigation Bureau (AAIB), which revealed that fuel switches had transitioned to 'CUTOFF' mid-air, causing engine failure.

No urgent safety concern in AI crash report: FAA

The U.S. regulator makes no new recommendation of safety measures for Boeing 787-8; it reminds counterparts of 2018 advisory on potential disengagement of lock on fuel switches on the aircraft

Jagriti Chandra
NEW DELHI

The U.S. aviation safety regulator Federal Aviation Administration (FAA) has written to its counterparts around the world acknowledging the preliminary findings in the Air India Boeing 787-8 crash of June 12 and informing them that the report has "found no urgent safety concerns" related either to the engines or airplane systems of the aircraft type, according to a senior official of the Ministry of Civil Aviation.

The interim report of the Aircraft Accident Investigation Bureau (AAIB), the Indian agency investigating the crash, stated that the switches that supplied fuel to the two engines on the aircraft shifted or "transitioned" to the 'CUTOFF' position three seconds after the aircraft became airborne. Later, there was a loss of engine thrust and both engines shut down, resulting in the crash.

In its July 11 notification, the FAA also acknowledged the reference in the



Under scanner: A file photo of the wreckage from the Boeing 787-8 crash in Ahmedabad on June 12. PTI

report to its advisory in December 2018 about the potential of the lock on the switch that supplies fuel to the engine getting disengaged. But the U.S. regulator made no new recommendations on safety measures needed by airlines. "The FAA has said that it will continue to share relevant information," the official quoted above said.

Two-step action

The switches are guarded by brackets and feature a spring-loaded locking mechanism in order to prevent accidental activation.

To move a switch from RUN to CUTOFF, a pilot has to perform a two-step action – lift the switch over a metal stop before pulling it down. While the FAA has not provided any new guidance, it has reminded the civil aviation authorities about its previous advisory, i.e., Special Airworthiness Information Bulletin (SAIB) dated December 17, 2018. There are 77 airlines across the world that have the Boeing 787 aircraft in their fleet. There are 171 Boeing 787 aircraft in the U.S., and 1,189 across the world.

The AAIB report said

that Air India did not carry out the recommendations made in the FAA's 2018 advisory on the potential disengagement of the lock on the fuel switches that required inspection of aircraft, as well as replacement of the switches carrying specific serial numbers with "an improved locking feature". It added that Air India explained that this was so because the FAA bulletin "was an advisory and not mandatory". The report also found that no defects in the fuel control switch of this aircraft had been reported after 2023, when the throttle control module of the cockpit control panel was last replaced on this aircraft.

The FAA's Special Airworthiness Information Bulletin dated December 16, 2018, said the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action. While an advisory provides a non-mandatory guidance, an AD provides mandatory guidance and recommendations to ensure airworthy aircraft.

Key Findings and Stakeholder Positions:

• AAIB Report Observations:

- Fuel supply switches moved to 'CUTOFF' position seconds after takeoff.
- Both engines lost thrust and shut down due to fuel cutoff.
- Previous FAA advisory (2018) warned of potential disengagement of fuel switch locks.
- Air India did not act on this advisory, citing its non-mandatory nature.

• FAA's Response:

- No new safety recommendations issued.
- Reiterated the 2018 Special Airworthiness Information Bulletin (SAIB).
- Emphasized continued global coordination and data sharing.

Regulatory and Governance Issues:

1. Voluntary vs Mandatory Compliance:

- FAA's 2018 bulletin was advisory, not an Airworthiness Directive (AD), which would have made compliance mandatory.
- Raises questions about airline accountability in addressing known technical concerns.

2. Safety Oversight in India:

- India's Civil Aviation Ministry must ensure that non-mandatory global advisories are evaluated and acted upon based on local operational risk.
- There appears to be a gap in proactive safety compliance within Air India.

3. Pilot and Procedural Factors:

- The aircraft required a two-step action to move the fuel switch, indicating the possibility of manual error or systemic malfunction.
- Points to the need for crew training and cockpit design review.

Broader Implications:

1. Global Aviation Risk Management:

- Over 1,100 Boeing 787 aircraft operate worldwide. A shared defect can pose global systemic risk if not promptly addressed.

2. Need for Stronger Advisory Compliance:

- National regulators (like DGCA in India) must upgrade advisories to mandatory status where appropriate.
- Establishing thresholds for converting advisories into mandates is critical.

3. Public Sector Reform:

- As a government-owned carrier, Air India's inaction raises concerns about state capacity in service delivery and risk management.
- Need for transparency and institutional accountability in public sector undertakings.

Way Forward:

- **Policy Reform:** Introduce a framework to domestically evaluate international advisories, even if non-binding, and act based on risk assessments.
- **Safety Culture:** Foster a culture of preventive compliance in aviation operations, especially among public carriers.

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- **Capacity Building:** Upgrade DGCA and AAIB capabilities to ensure real-time risk flagging, especially for advisory-level notices.
- **Global Coordination:** India must continue collaborating with FAA, EASA, and ICAO to ensure harmonization of air safety protocols.

Conclusion:

The Air India Boeing 787 crash reflects a classic case of regulatory complacency and blurred accountability. While no urgent safety flaw was found, the failure to act on an advisory raises alarms about reactive governance and the limits of non-mandatory compliance regimes. As India's aviation sector expands, institutional readiness, cross-border cooperation, and public trust in aviation safety must be strengthened.

UPSC Mains Practice Question

Ques: The Air India Boeing crash incident reveals gaps in regulatory compliance despite global advisories. Discuss the role of national regulators in ensuring aviation safety in coordination with international agencies like the FAA and ICAO.



Ahead of External Affairs Minister S. Jaishankar's visit to China for the SCO summit, the Chinese Embassy in New Delhi asserted that Tibet-related issues, including the Dalai Lama's reincarnation, have become a "thorn" and a burden in bilateral ties with India. The statement reflects growing unease in Beijing over India's perceived indirect support for the Tibetan cause.

Tibet-linked issues 'thorn' in ties with India: China

Press Trust of India
NEW DELHI

Tibet-related issues, including reincarnation of the Dalai Lama, are a "thorn" in India-China bilateral relations and they have become a "burden" for New Delhi, the Chinese embassy said on Sunday. The remarks came ahead of External Affairs Minister S Jaishankar's visit to China to attend a conclave of the Shanghai Cooperation Organisation (SCO) on Monday and Tuesday.

It would be Mr. Jaishankar's first visit to China after the ties between the two countries came under severe strain following the 2020 military stand-off along the Line of Actual



Chinese embassy also said that the issues, including reincarnation of Dalai Lama, have become a 'burden' for New Delhi. REUTERS

Control (LAC) in eastern Ladakh.

In the last few months, India and China have initiated a number of measures to repair the bilateral ties after completing the disengagement of troops from the last of the two

face-off sites in October last year.

Earlier this month, the Dalai Lama asserted that a trust of Tibetan Buddhists will have the sole authority to recognise his future reincarnation. China reacted angrily to his remarks

and said his reincarnation should be approved by the Chinese government.

In a social media post on Sunday, Chinese embassy spokesperson Yu Jing said that members of the strategic and academic communities, including former officials, had made "improper remarks" regarding the reincarnation of the Dalai Lama "contrary" to Indian government's public stance.

"They should be fully cognizant of the sensitivity of issues related to Xizang, and that the reincarnation and succession of the Dalai Lama is inherently an internal affair of China, brooking no interference of any external forces," the spokesperson said.

China refers to Tibet as 'Xizang'. "In reality, Xizang-related issue is a thorn in China-India relations and has become a burden for India. Playing the 'Xizang card' will definitely end up shooting oneself in the foot," the Chinese embassy spokesperson said.

In China, Mr. Jaishankar is expected to hold bilateral talks with his Chinese counterpart Wang Yi on the sidelines of the SCO conclave.

Mr. Jaishankar's visit is taking place less than three weeks after Defence Minister Rajnath Singh travelled to the Chinese port city of Qingdao to participate in the SCO Defence Ministers' conference.

Why It Matters:

- **Geopolitical Sensitivity of Tibet/Xizang:** China views Tibet (Xizang) as an internal matter linked to its territorial sovereignty. The reincarnation of the 14th Dalai Lama, now 89, is not just a religious issue but one of legitimacy and political control over Tibetan identity.
- **India's Involvement:** India has hosted the Dalai Lama and the Tibetan government-in-exile since 1959. While India officially recognizes the "One China" policy and considers Tibet an autonomous region of China, it provides refuge and limited political space to the Tibetan diaspora, which China views with suspicion.

China's Strategic Messaging:

1. Pre-empting India's Role in the Reincarnation Debate:

- China is wary of any religious or geopolitical legitimacy India may grant to a Dalai Lama reincarnated outside China's control, particularly from India-based Tibetan authorities.

2. Diplomatic Warning:

- By calling the Tibet issue a "burden" and invoking phrases like "shooting oneself in the foot," China is issuing a veiled warning against India's engagement with the Tibetan leadership.

3. Domestic and International Signaling:

- The statement is as much about domestic control over Tibetan affairs as it is about sending a message to other nations considering support for the Tibetan cause.

Implications for India-China Relations:**• Bilateral Talks Amid Strategic Distrust:**

- Jaishankar's visit comes after partial troop disengagement post-2020 Galwan standoff, signaling a cautious thaw in relations.
- However, issues like Tibet, border disputes, and regional competition continue to strain ties.

• SCO as a Multilateral Platform:

- India may use the SCO to engage in structured diplomacy, but bilateral issues like Tibet and LAC tensions lie outside SCO's mandate, necessitating separate high-level dialogues.

• Soft Power and Asymmetric Leverage:

- India's soft power influence over the Tibetan community remains a subtle but potent leverage—one that India often uses cautiously to avoid escalation but could assert more openly under pressure.

Way Forward for India:**1. Maintaining Strategic Ambiguity:**

- India should continue its balanced approach: uphold commitments to Tibetan refugees without explicitly challenging China's claims on reincarnation.

2. Issue-Based Engagement:

- India can de-escalate tensions by delinking religious-cultural matters from border talks, while still asserting autonomy in domestic refugee policy.

3. Leveraging Multilateral Forums:

- Use platforms like SCO, BRICS, and Quad to highlight broader concerns like sovereignty, human rights, and religious freedom without direct provocation.

Conclusion:

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Tibet remains a long-standing pressure point in India-China relations, resurfacing especially during high-level visits or religious pronouncements by the Dalai Lama. While India has historically managed the issue with strategic caution, China's aggressive tone shows it remains deeply sensitive to non-military expressions of autonomy and dissent. As geopolitical alignments shift, India's careful calibration between principled stand and pragmatic diplomacy will shape the trajectory of future engagement with China.

UPSC Mains Practice Question

Ques: The Tibet issue continues to cast a long shadow over India-China relations. Critically examine the geopolitical and diplomatic challenges posed by the Tibetan issue, especially in the context of the Dalai Lama's reincarnation.



The worsening impacts of climate change — through droughts, floods, rising temperatures, and erratic rainfall — are driving a new wave of internal migration in rural India. This is visible in regions like Bundelkhand (UP-MP), Vidarbha and Marathwada (Maharashtra), and along Bangladesh's Jamuna River, where climatic stress is dismantling social structures and livelihoods.

Climate change is deciding where and how rural Indians are living

Climate migration, which is the movement of people forced to leave their homes due to climate-related disasters, has led to widespread and often involuntary migration to urban areas and other regions, eroding social structures and worsening living and working conditions for migrants

Seyantam Dutta

Two features mark the geography of Bundelkhand, the region in Central India spread over 13 districts of Uttar Pradesh and Madhya Pradesh: the steep hills of the Vindhya and progressively scanty rainfall and increasingly frequent droughts.

Consider Panna district in Madhya Pradesh. According to data from the India Meteorological Department, Panna has been receiving progressively less rainfall even as temperatures have been rising. According to one estimate, the average temperature in Bundelkhand is expected to rise by 2.5-5°C by 2050.

The region has thus become a hotbed of droughts. Data in Madhya Pradesh, for instance, listed nine droughts between 1988 and 2008. In the same period, Laffur and Mahoba districts in Uttar Pradesh suffered eight.

The region's farmers have been the worst affected. As their crops have failed more often, they have struggled to make ends meet and slipped deeper into debt. Agricultural workers have taken up other jobs, such as working in the region's diamond mines. When that too hasn't sufficed, the men have left their families behind and migrated. Surendra Singh Jais, assistant professor of economics at the Babasaheb Bhimrao Ambedkar University (BBAU), Lucknow, said, "Their destinations are 'Surat, Ahmedabad, Delhi, Bangalore, and Chennai'."

Jais has studied the impact of climate change on farmers' lives in Bundelkhand since 2012. The most significant change, he said, is in the social fabric of Bundelkhand's villages.

Climate migration

A little more than 1,500 km away from Bundelkhand is Chhapra village in Bangladesh. Located along the banks of the Jamuna river, Chhapra has a starkly different problem. Every year during the monsoons, the Jamuna swells and drowns the land on its banks. Large chunks of the land break off and are washed away, taking the homes of people with them.

According to some media reports in Bangladesh, in one week in May 2022, riverbank erosion in Jamuna destroyed around 500 houses in Chhapra, leaving thousands homeless. In a 2022 study, researchers at the Dhaka University of Engineering and Technology used satellite images to find that between 1990 and 2020, the river's left bank had dwindled by roughly 12 m every year and the right bank by about 52 m every year.

Scientists have suggested that climate change leads to a greater volume of water flowing through a particular river channel at a particular time, in turn increasing the risk of flooding and erosion.

The parched banks of Bundelkhand and the flooded banks of the Jamuna share one similarity. As their houses are consumed by the ever-swelling river, people first try to move away from the bank, at times building fresh houses on arable land. Then, when it is no longer possible to survive in the village, according to ETH Zurich researcher Jan Frehndt, entire households migrate to nearby cities like Dhaka as a last resort.

Frehndt, a postdoctoral researcher, has studied climate migration in Chhapra and other villages.

Climate migration refers to the movement of people resulting from climate change-related disasters, which may be sudden (floods, cyclones, etc.) or gradual (increasing temperature, sea level rise, etc.). According to a 2022 report by the International Refugee Assistance Project, climate and weather-related incidents force about 20 million people to migrate every year to other areas in their own countries. This is called internal migration.

While migration away from the Jamuna's banks is permanent, climate change can also exacerbate seasonal migration in many areas. One such case is that of migration from Vidarbha and Marathwada, two infamous drought-prone regions of Maharashtra.

Sugar cane and bitter endings

The Vidarbha and Marathwada regions lie in the rain shadow of the Western Ghats. A rain shadow forms when a region is located on the side of mountains facing away from the sea. As water evaporates from the sea, the warm, moist air rises up. When it reaches the top of the mountains, it condenses to form clouds, which eventually rain down on the side facing the sea. At the time the air crosses over the mountains to the other side, almost all the moisture has been



A woman draws water from a well at Mahoba in the Bundelkhand region of Uttar Pradesh. (AP Photo/Ankur Kishor)

exhausted, thus the side facing away from the sea receives little to no rainfall, aridifying over time. This has happened with Vidarbha and Marathwada.

Climate change is worsening this situation. Both regions have been recording erratic rainfall of late.

"The number of rainy days are coming down and rain on a particular day is increasing, but the gap between two rainy days is long," Ramamanyulu G.V., executive director of the Centre for Sustainable Agriculture, said in September 2024. Satellite data has also revealed that temperatures in the two regions already surpass the 50°C mark in May.

Those who live here pack their belongings on bullock carts and travel for hundreds of kilometres to sugar cane plantations in Western Maharashtra and Karnataka. There, they stay for four to six months, working as "cane cutters". In these fields, Anika Bhaskar, head of communications at a social-impact consultancy named Asur, said,

"Bhaskar has been involved in research projects that study the extent and impact of droughts in Maharashtra. India is the world's largest producer and consumer of sugar cane. The Ministry of Consumer Affairs, Food and Public Distribution reported that in 2023, the country produced 50 crore tonnes of sugar cane, earning a revenue of more than 120,000 crore.

This staggering number does not reflect the reality of the migrant labourers who harvest the country's sugar cane fields. According to Bhaskar, cane cutters are hired typically as a couple. The husband cuts the sugar cane and the wife stacks them. Together, the couple is called a *hote* — a Marathi word for the sickle used to cut the sugar cane. These



Farmers load harvested sugar cane to be transported to a sugar mill, at a village in Karad. (P)

Migration may be the most effective way to allow people to diversify income and build resilience where environmental change threatens livelihoods.

labourers are hired by a contractor known as the *moladani*, who pays the couple an advance — a sum that can range anywhere between 10,000 to 15,000 depending on the couple's financial requirements, the size of the sugar cane plantations, and the quantity of sugar cane expected to be harvested that year.

"The precarity and conditions of this migration and the wages that they get have worsened year on year," Bhaskar added.

Because they are paid an advance, the labourers are required to work until they have cut enough sugar cane to match the payment. For example, if a couple has been paid ₹50,000 at the rate of ₹300 per tonne of sugar cane harvested, they must cut 166 tonnes of sugar cane in the harvesting season. However, erratic rainfall and dry spells have brought down the production of sugar cane, which is a water-intensive crop. This means the labourers have to return the next season with an extra payment to make up for the deficit, creating a cycle of debt bondage.

The worsening precarity also reflects on who is migrating. "Earlier, people in their 30s and 20s were the ones who were migrating. Now, people who are nearing their 70s and 80s are also migrating for work," Bhaskar said.

The younger people cut the sugar cane and load stacks of it onto tractors while the elders are hired to remove weeds

from the farm and sort and stack the cane before it is loaded.

When the migrants reach the sugar cane fields, they are given "an extremely dirty and shabby patch of land where they can set up their homes", she added.

These, according to her, typically take the shape of plastic sheet tents with no electricity, toilets, or water.

Adaptation vs. displacement

The conditions are no better for migrants from Bundelkhand. Jais, the BBAU economist, said that in the metropolitan cities to which they migrate, they work as daily wage construction workers, security guards, and at dhabas (roadside restaurants). Only those who are highly skilled get jobs that pay them enough money to rent a room. Others, accommodate themselves in shams, where poor sanitation leads to a deterioration of their health, Jais added.

Back home, the struggle is different. As the migrant's family waits for its remittances to arrive — which can take around six months after a person has migrated and set up shop in the city, per Jais's estimate — they struggle to make ends meet. The worst hit are the women and the children. With the women left to manage "everything on their own," they are unable to effectively monitor even whether their children are going to school, according to Jais. He added that women also become increasingly vulnerable to sexual assault.

For the migrants from Chhapra and other villages on the banks of Jamuna, what they do after migration depends on where they migrate to. Some villages migrate to other villages, Frehndt said. There, they insert themselves into jobs that are reminiscent of their life in their previous homes, which now lie under water: "agricultural work for other people's lands". Those who migrate to cities take up more informal jobs, such as rickshaw pulling, construction work, and daily wage work in brick kilns.

In a 2011 commentary in *Nature*, researchers from the University of Sussex and the UK government, argued that migration "may be the most effective way to allow people to diversify income and build resilience where environmental change threatens livelihoods." That is, they suggested, migration could be a form of adaptation against climate change-induced loss of livelihoods.

Jais disagreed, however. At least in the context of Bundelkhand, he explained, migration is a form of "forced displacement" that lowers the "social security of the migrants and their family."

"Migration is not an adaptation. It is a crisis."

(Seyantam Dutta is an independent journalist and a faculty member at BBAU University. They tweet @seeyantam. The author thanks Anika Jais, Ching Debra, and Anindya Hazra for their inputs. dattaseyantan@gmail.com)

Key Themes:

1. Geography of Vulnerability:

- Bundelkhand faces frequent droughts and rising temperatures (2–3.5°C by 2100).
- Vidarbha and Marathwada are in the rain shadow of the Western Ghats, making them prone to erratic monsoons.
- Charpauli (Bangladesh) faces seasonal riverbank erosion due to intensified monsoonal flooding.

These regions reflect a dual nature of climate distress:

- Slow-onset disasters like drought and temperature rise
- Sudden-onset disasters like floods and erosion

2. Climate-Induced Migration:

- Migration in these areas is not voluntary but a last resort.
- Workers from Bundelkhand migrate to urban centres (Delhi, Surat, Bangalore).
- From Vidarbha and Marathwada, seasonal migration occurs to sugarcane fields in Western Maharashtra and Karnataka.
- Migrants from Bangladesh's Charpauli move to Dhaka or nearby villages.

This is a classic case of "distress migration," often leading to:

- Debt bondage (e.g., cane-cutters under advance payment system)
- Exploitation in informal sectors
- Erosion of family structures and increased burden on women and elderly

3. Socio-Economic Fallout:

- Migrants live in poor housing conditions (plastic tents, no toilets or water).
- Women left behind face heightened burdens and risks of exploitation.
- Children's education suffers; health risks rise due to poor sanitation.
- Elderly and even septuagenarians are being forced to migrate for survival — a grim marker of desperation.

Expert Opinions and Debate:

Perspective	View
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Daily News Analysis

Perspective	View
Jan Freihardt (ETH Zürich)	Migration is a last step of adaptation in flood-prone zones.
2011 Nature Commentary	Migration can be an effective resilience strategy to diversify income.
Surendra Singh Jatav (BBAU, Lucknow)	Migration is forced displacement, not adaptation; it erodes social security.

Conclusion from Indian context: Migration is not adaptive, but a symptom of systemic failure to build rural resilience against climate stress.

Policy Gaps and Challenges:

1. Lack of recognition of internal climate migrants — no formal classification or data tracking.
2. Weak adaptation infrastructure in rural areas (e.g., rainwater harvesting, resilient crops).
3. Absence of social safety nets in host cities and for migrants in informal sectors.
4. Debt bondage system in agriculture supply chains — unregulated and exploitative.

Way Forward:

Area	Action
Data & Governance	Develop national database on climate migration and include it in State Action Plans on Climate Change (SAPCCs).
Social Protection	Expand PDS, MGNREGA, health schemes to cover seasonal migrants.
Infrastructure	Invest in climate-resilient rural infrastructure, such as water harvesting, drought-resistant seeds.
Urban Support	Provide temporary shelters, basic amenities, health care to incoming migrants.
Skill Development	Train migrants for non-agricultural jobs to reduce vulnerability.

Conclusion:

Climate migration is no longer a theoretical future risk, but a current humanitarian crisis affecting millions across South Asia. In India, the failure to recognize it as such has led to the institutional invisibility of migrants, especially those displaced by environmental degradation. As climate change intensifies, India must rethink its migration, rural development, and disaster resilience policies to safeguard the dignity and rights of its most vulnerable citizens.

Daily News Analysis

UPSC Mains Practice Question

Ques: Climate migration is a symptom of adaptation failure rather than a form of adaptation. Critically examine this statement in the Indian context. **(150 Words)**



Despite India's demographic dividend and expanding economy, it faces a critical paradox: millions of educated youth are unemployed or underemployed. The recent data from EPFO, the India Employment Report 2024, and the Future of Jobs Report 2025 collectively highlight a structural crisis of skills, job quality, and formalisation in the Indian labour market.

The changing landscape of employment

Each year, lakhs of students graduate from universities, colleges, Industrial Training Institutes, and skill programmes in India. Yet the system continues to face challenges not only in accommodating them, but also effectively integrating them into meaningful employment.

The Employees' Provident Fund Organisation (EPFO) plays a central role in India's social security system by managing retirement savings for workers in the organised sector. With over 7 crore members, it remains one of the world's largest social security organisations. EPFO data serves as a valuable indicator of formal employment trends. The share decline in net new EPFO enrolments post-2019 reflected the pandemic effect on formal employment. However, the March 2025 data shows a steady increase in formal workforce participation. Young professionals, particularly fresh graduates, constitute a significant portion of new enrolments. The 18-25 age group consistently represents a large share with the 18-21 subgroup alone accounting for around 18%-22% of the total new subscribers in the recent months. The trend signals a push towards formalisation but demands a deeper analysis of job stability, wages and long-term financial security.

Youth unemployment

According to the India Employment Report 2024, published by the International Labour Organization and the Institute for Human Development, the youth account for 83% of India's unemployed population. Alarming, the share of unemployed individuals with secondary or higher education has nearly doubled over two decades.

The issue goes beyond unemployment; this is a crisis of unemployability. The Economic Survey 2023-24 states that only about half of India's youth are deemed job-ready after graduation. One in two lacks the



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Urgent structural reforms are needed to address the growing disconnect between education and employment in India

digital and professional skills employers' demand, particularly in an economy undergoing rapid technological transformation. Moreover, the looming influence of AI threatens India's tech sector, putting several traditional job roles at the risk of displacement. Without adequate reskilling and upskilling efforts, the gap between graduate output and available opportunities will only widen.

Despite economic progress, India's workforce remains predominantly informal. The India Employment Report 2024 notes nearly 90% of employment is informal with the proportion of salaried, regular jobs declining since 2018. While contractual employment has grown, concerns about job security and social welfare remain unresolved.

Many young Indians struggle with technical skills. The report states that 75% of young people struggle with basic digital tasks such as sending an email with an attachment. Over 60% cannot perform simple file operations such as copy-pasting and 90% lack fundamental spreadsheet skills such as working with formulas.

These statistics are worrying given that the Future of Jobs Report 2025 by the World Economic Forum forecasts major shifts in employment dynamics.

The report states that by 2030, an estimated 170 million new jobs will be created representing 14% of total employment. However, 92 million existing jobs (8% of total employment) will be displaced. This means there will be a new growth of 78 million jobs, or a 7% increase in total employment. While these projections offer optimism, they also highlight the urgency of bridging the skill gap to ensure that India's workforce is adequately prepared for the evolving job landscape.

What India must do

India stands at a critical crossroads. Without targeted policy interventions and expansive reskilling initiatives, millions of graduates will continue struggling to secure meaningful

employment. Investing in education, vocational training, and digital literacy is essential for aligning the workforce with future job demands.

Urgent structural reforms are needed. First, there should be stronger collaboration between industry and academia, if necessary, by law. Each higher education institution must ideally have at least one formal partnership with industry partners. Second, educational institutions need to be held accountable for placements and not just educational degrees. We need to create accreditation systems for educational institutions aligned with job placements for the outgoing students. Idea Labs and Tinker Labs should be made mandatory components of every high school and higher education institution. The integration of the humanities, foreign language learning, and soft skills should be made mandatory across all levels of education.

Third, India needs to extend its focus beyond national borders. Skilling and training programmes should be designed to meet the needs of ageing societies in many Western nations, where the demand for young professionals is expected to increase. This approach aligns with the Indian government's strategy for enhancing the international mobility of skilled workers. The International Institute of Migration and Development is currently working as the Indian partner in the European Union's Link4Skills project that utilises the migration corridor framework to evaluate the skill demands and labour shortages in various European countries and beyond. Fourth, to drive these transformations, an Indian Education Services, similar in stature to the Indian Administrative Services, should be established; it would attract the best minds into the education sector. Finally, the education system should open its doors to professionals from the industry. This would help bridge the gap between theory and application.

Key Issues and Trends:

1. Rise in Formal Employment – but with Caveats:

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- EPFO data shows increased formal workforce participation post-pandemic, especially in the 18–25 age group.
- However, enrolment does not guarantee job quality, stability, or long-term security.
- Growth in contractual jobs and a decline in regular salaried roles suggest fragile employment conditions.

2. Youth Unemployment vs. Unemployability:

- 83% of unemployed Indians are youth.
- Alarming, unemployment is highest among those with higher secondary and above qualifications.
- The real crisis lies in unemployability, with 50% of graduates not job-ready.

3. Digital Illiteracy in a Digital Economy:

- 75% youth can't send emails with attachments.
- 90% can't use spreadsheets, indicating glaring skill deficits in a tech-driven economy.
- India's education system is not aligned with the skills demanded by Industry 4.0.

4. Informalisation of Workforce:

- 90% of employment remains informal.
- With falling access to social security and secure employment, job growth remains precarious and unequal.

5. Future of Work:

- By 2030, 170 million new jobs may emerge, but 92 million will be displaced.
- Net gain: 78 million jobs – only if the workforce is equipped with future-ready skills.

Policy Recommendations

1. Industry-Academia Integration:

- Mandate formal partnerships between higher education institutions and industry.
- Make placement accountability part of educational accreditation.

2. Curriculum Modernisation:

- Mandatory integration of:
 - Soft skills

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- Digital literacy
- Foreign languages
- Humanities in STEM education
- Establish Idea Labs and Tinker Labs in schools and colleges to encourage innovation and hands-on learning.

3. Global Workforce Alignment:

- Design skill programmes tailored for international labour markets, particularly ageing societies in Europe and East Asia.
- Expand on projects like EU's Link4Skills to boost skilled migration corridors.

4. Institutional Reforms:

- Establish Indian Education Services to professionalise education governance.
- Open education sector to industry professionals, fostering practice-oriented learning.

Way Forward:

Area	Suggested Reform
Education	Outcome-based accreditation; integration of vocational and digital skills
Employment	Expand formal sector; incentivise job creation in high-growth areas
Skilling	District-level skill gap mapping; targeted re-skilling for displaced workers
Migration	Create bilateral labour agreements and boost international placement cells
Governance	Launch Indian Education Services to attract talent into the education ecosystem

Conclusion:

India stands at a crossroads. The demographic dividend can be a growth driver or a ticking time bomb, depending on how effectively the country aligns education with employment. It is no longer enough to create jobs—the focus must shift to creating job-ready individuals. Structural reforms in education, skilling, and employment policy are the need of the hour to ensure inclusive, sustainable, and future-ready growth.

UPSC Mains Practice Question

Ques: India is witnessing a paradox of high graduate output and rising youth unemployment. Discuss the underlying factors and suggest policy interventions for inclusive and meaningful employment generation. (250 words)

Assessing India's carbon credit trading scheme targets

The Indian government recently announced greenhouse gas emissions intensity of production targets for entities (such as a steel plant) operating within eight of the nine heavy industrial sectors covered in India's Carbon Credit Trading Scheme's (CCTS) compliance mechanism. The eight sectors are aluminium, cement, paper and pulp, chlor-alkali, iron and steel, textile, petrochemicals and petro refineries. So, is there a way to understand whether these are ambitious targets or not?

The first question one needs to ask is this: should we measure ambition at the entity level, or at the sector level or the level of the economy? Our analysis shows that the ambition of India's carbon market targets should be assessed at the aggregate economy-wide level, and not at the level of individual entities or sectors.

An economy-wide lens is more important

We can look at the Perform, Achieve and Trade (PAT) scheme, which is India's flagship energy efficiency programme for large industries. Under PAT, energy-intensive industries are given targets to reduce their energy use; those which exceed their targets can trade the excess savings with others. We analysed performance data from four sectors under the PAT Cycle I (2012-14) and found a mixed but interesting picture. In some entities, the energy used per unit of production (energy intensity) increased but decreased in others. At the sector level, energy intensity rose in two sectors (paper and chlor alkali) and fell in the other two (aluminium and cement). However, when we combined emissions, output and price data from all four sectors and adjusted for inflation, less energy was used, overall, to produce the same amount of economic output.

This shows that even if energy efficiency rises or falls in some entities or sectors, India's overall energy use can still become more efficient. We



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The ambition of carbon market targets should be assessed at the aggregate economy-wide level, and not at the level of individual entities or sectors

found similar behaviour across other PAT cycles and sectors. These observations give us a useful insight – India's PAT scheme was able to effectively use market mechanisms to achieve energy intensity reduction at an aggregate level. The decrease in overall energy intensity, even as it rose for some entities, shows that the market mechanism worked; those companies were able to buy energy efficiency certificates instead of undertaking costly in-house changes.

But, this in itself does not tell us if the aggregate energy intensity reduction was aggressive or business-as-usual. This does, however, tell us that one should only analyse the aggregate target to infer whether it was aggressive or not. That is, for an externality-driven market, achieving reduction at an aggregate level is far more important than achieving the same at the entity level for 'all' entities. An emissions trading scheme does not bother about individual entities or sectors. It bothers about the economy-level aggregate effect, which is where, ideally, the ambition should be evaluated.

But are not entity or sector-level targets important to reduce emissions as well? A research paper by the Council on Energy, Environment and Water (CEEW) shows that entity or sector-level targets only determine financial transfers across entities and sectors, and not the overall emission intensity decline.

Comparing the new CCTS targets with historical sector-level performance under the PAT scheme also is not the most meaningful approach to assess ambition. Just because the reduction in emissions in the past has been modest at the industry level, it cannot be the case for the future. Our mitigation actions have to progressively become more ambitious than in the past. Therefore, only a comparison with a future trajectory aligned with a pathway towards India's stated Nationally Determined Contributions

(NDC) and a 2070 net-zero future is relevant. While the industry sector-specific CCTS targets cannot be directly compared with the economy-wide NDC target, economy-wide modelling assessments can give useful information in this regard.

Emissions intensity to decline

According to our recent modelling of a 2030 NDC-aligned emissions reduction scenario for India, the carbon dioxide emissions intensity of India's energy sector (per unit of GDP) is expected to decline at an average annual rate of 3.44% between 2025 and 2030. In comparison, the emissions intensity of value added (EIVA) in India's manufacturing sector is projected to decline by at least 2.53% annually over the same period. This suggests that in the near-term, industry may decarbonise at a slower pace than other sectors – particularly the power sector, which has more low-cost mitigation opportunities.

Against this backdrop, the combined average annual EIVA reduction for the eight sectors based on current CCTS targets – indicative of sector-specific commodity price data (a rough proxy for value added), and projected production growth rates – is estimated at 1.68% between 2023-24 and 2026-27. Early signs suggest that the industrial targets under CCTS may not be ambitious enough.

While this is not directly comparable since entities covered under the carbon trading scheme represent only a portion of India's overall manufacturing base, it is still the most relevant benchmark available until detailed modelling is done for all sectors. Ultimately, it is the aggregate decline that will determine whether India's effort is truly ambitious.

The views expressed are personal

Paper 03 Environment

UPSC Mains Practice Question: Market-based instruments such as the Carbon Credit Trading Scheme (CCTS) are essential for India's climate action strategy, but their effectiveness depends on the ambition of aggregate targets. Examine in light of India's emission intensity goals. (250 words)

Context :

India recently announced **emission intensity targets** for eight major industrial sectors under its **Carbon Credit Trading Scheme (CCTS)**. This marks a step forward in India's attempt to **decarbonise industry** using **market-based mechanisms**. However, questions arise over whether these targets are **ambitious enough** to align with India's **Nationally Determined Contributions (NDCs)** and **net-zero 2070 vision**.

What Is the Carbon Credit Trading Scheme (CCTS)?

- A **market-based mechanism** under which entities with emissions lower than their assigned targets can **sell carbon credits** to those that exceed theirs.
- Currently covers eight heavy industrial sectors:
 - Aluminium, Cement, Paper & Pulp, Chlor-Alkali, Iron & Steel, Textile, Petrochemicals, and Petroleum Refineries.

Key Takeaways from the Article:

1. Assessing Ambition: Economy-Wide vs. Entity-Level

- **Insight:** The effectiveness of carbon trading should be judged **at the economy-wide level**, not at the **individual entity or sector level**.
- **Why?** In a trading system, entities that cannot reduce emissions cost-effectively can **purchase credits** from others, allowing the system to function efficiently even if some emitters don't meet their individual targets.

"Entity-level targets merely redistribute financial flows; only aggregate performance matters."

2. Lessons from the PAT Scheme (Perform, Achieve, and Trade):

- **Under PAT Cycle I (2012–14):**
 - Energy intensity **rose in some sectors** (e.g., paper, chlor-alkali) but **fell overall**.
 - PAT succeeded in reducing **economy-wide energy use per unit of output**.
- This proves that **market mechanisms can deliver results**, even with uneven sectoral performance.

3. Comparing with NDC-Aligned Pathways:

- **CCTS Targets (2023–2027):** Projected **1.68% annual reduction** in emissions intensity (EIVA).
- **NDC-Aligned Path (2025–2030):**
 - **Energy sector CO₂ intensity:** 3.44% annual reduction.

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- **Manufacturing sector (EIVA):** $\geq 2.53\%$ annual reduction.

Conclusion: CCTS targets are **lower than the required decarbonisation pace**, suggesting they are **not ambitious enough** in their current form.

Critical Analysis:

Strengths of India's Approach:

- Builds on experience from PAT.
- Pushes **market-based climate action**, incentivising cost-effective emissions reduction.
- Emphasises **gradual decarbonisation** aligned with industrial competitiveness.

Challenges Identified:

- Current targets lag behind **net-zero aligned benchmarks**.
- Lack of detailed **economy-wide modelling** to verify true alignment with NDCs.
- Risk of **"business-as-usual" outcomes** if targets are not periodically reviewed and tightened.

Way Forward:

Area	Actionable Suggestions
Ambition Calibration	Benchmark sectoral targets against NDC-aligned economy-wide modelling
Regulatory Oversight	Strengthen MRV (Monitoring, Reporting & Verification) systems
Sectoral Modelling	Develop sector-specific decarbonisation pathways
Dynamic Target Setting	Set up a mechanism for periodic review and tightening of targets
Incentivisation	Reward early movers and promote innovation in green technologies

Conclusion:

India's Carbon Credit Trading Scheme is a **critical tool** in its decarbonisation journey. However, **target setting** must reflect the **urgency of climate action**. As India marches towards its **2070 net-zero goal**, **periodic reassessment and realignment** of emission intensity targets will be key to transforming industrial growth into **climate-resilient, sustainable development**.

