SANSKRITI IAS EDITORIALS HIGHLIGHTS
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1. AI and cyber, the double helix of today's security threats(THE HINDU PAGE NO 8)

Syllabus Mapping

1. **GS Paper:** GS Paper 3
2. **Syllabus Topics:**
    1. Basics of Cyber Security and challenges to internal security through communication networks.
    2. Awareness in the fields of IT, Computers, and Artificial Intelligence.
    3. Security challenges and their management in border areas and global security architecture.

AI and cyber, the double helix of today's security threats

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The rapid proliferation of digital technologies is reshaping the global security landscape. What was once an interconnected, but relatively limited, digital world, has altered into a complex interconnected ecosystem where dangers and threats lurk at every step. The combination of Artificial Intelligence (AI) and cyber threats has emerged as one of the most critical concerns of the modern world.

While AI has changed from being merely an operational efficiency mechanism into an absolute infrastructure mandate, cyber threats are becoming more sophisticated, harder to detect and more difficult to mitigate. Today, AI-powered malware can adapt and evolve in response to changes in its environment, making it harder for traditional anti-virus software to detect. The global interconnectedness of digital systems has also raised the ante as far as cyber attacks are concerned. Malicious autonomous agents are today well positioned to undermine the legacy of "Zero Trust" protocols, aggravating insider threat vectors.

Meanwhile, as seen in the war in Ukraine, newer technologies are demonstrating the potential to undermine conventional military calculus through asymmetric impact. The rapid proliferation of digital technologies and systems across every discipline, cyber breaches and malicious activities are impacting every level of security. Many governments facing sophisticated cyber adversaries are drawing up a security architecture which involves a blend of innovation, policy coherence and strategic realism, but still lag behind.

A new disruptive era

AI, meanwhile, is reshaping every consequential domain of human activity. AI's Large Language Models (LLM) are intruding into many business enterprises, without either proper training or evolution of the human interface. As 'Agentic' AI – as distinct from Generative AI – becomes a force to reckon with, problems attached to AI implementation are set to become even more complex. The catalyst for such concerns is the arrival of the latest AI systems, notably Mythos, developed by United States firm Anthropic. According to experts it demonstrates an uncanny ability to detect 'Zero day' vulnerabilities across major operating systems. What is evident is that AI is beginning to test the limits of legacy systems.

AI's overarching influence makes it essential to understand the risks and threats it poses, especially when combined with cyber capabilities, where the danger grows exponentially. AI has already transformed modern warfare, as seen in the Russia-Ukraine conflict and the U.S./Israel-Iran war. AI-powered smart systems can detect, track, and predict missile trajectories with remarkable accuracy. AI can also provide different kinds of intelligence from photos, text, radio, and electromagnetic signals to deny adversaries a tactical advantage. Munitions, such as systems dubbed "Goalkeeper" and "Whiplash" can independently identify and strike targets. Yet, nations, particularly the U.S., have not yet demonstrated a level of sagacity on how best to wield this power and in a manner that does not endanger human civilisation.

These developments are fuelling concerns about AI's future as increasingly capable models and robots replace human roles. LLMs and autonomous agents are already performing complex tasks once reserved for people. The World Economic Forum warns that while AI will strengthen cyber defences, it will also enable more sophisticated automated attacks, potentially rendering current "Zero Trust" protocols ineffective. This raises concerns that hard power may increasingly be shaped by nations and organisations at the forefront of AI.

Companies in the West such as Anthropic and Palantir are behaving as if they own the world of tomorrow, since they hold the key to the world's mightiest technology. Anthropic has reached a stage today where with Mythos, it creates the spectre of all-encompassing power residing in a single instrument that is not subject to any rules. China, perhaps, has its own version of Anthropic or something resembling it, but this is of little comfort to the rest of the world. What is becoming clearly evident is that an attacker with the latest version poses a grave threat to not merely one country but an entire civilisation.

An AI 'power shift'

As AI technologies become more rampant and uncontrollable, existing rules concerning cyber security may require to be completely rewritten. Many experts warn that as "Agentic Autonomous Operations" become even more sophisticated, the world could reach an inflection point that has grave forebodings for the world. Whether Mythos is the harbinger of this is yet to be determined, but it is generally acknowledged that the newer generations of AI machines provide opportunities for 'rogue groups' to demonstrate capabilities that were once associated with only nation states. As Agentic AI begins to displace Generative AI, enabling it to act more autonomously, threat levels are certain to go up still further. AI has, hence, the potential to become the dominant source of military and economic power, even as the rules to govern AI are still in a fledgling state. The bugle call has already been sounded by the pontiff of Anthropic, the AI firm that makes models such as Mythos, that it has the potential to become the dominant source of military and economic power as civilisation advances.

Notwithstanding the god-like properties of existing modern AI models, experts warn that they are often subject to "hallucinations", thus giving scope for distortions, producing misleading reactions. Judgments in such cases tend, quite often, to be subjective. Even otherwise, biases are known to creep into decisions dictated by AI, enhancing the danger posed by unrestricted reliance on AI. Furthermore, experts warn that it is vitally important to guard against such 'algorithmic radicalisation', and ensure that AI platforms do not push opinion makers towards extreme views.

A future that needs oversight, wisdom

The world, thus, appears to have reached a tipping point in AI progress and development. Already, some companies that are leading the AI charge are accusing others of stealing their technologies and expanding on them to their advantage. The latest is a charge made by the U.S. against China, *viz.*, that China's 'Moonshot' AI stole from Anthropic's most sophisticated AI Large Language Model 'Fable', to help create its latest AI version. Predictably, China has rejected this charge, but it reflects the intensity of the competition between the U.S. and China in this area. If Anthropic's claim is true – that its latest model has surpassed "all but the most skilled humans" in finding and exploiting security vulnerabilities in everything from popular operating systems to cryptographic software – the world could face a new kind of apocalypse.

The world has steadily progressed from abiding concerns of stagnant economic growth to doomsday technologies, and this merits a great deal of introspection. Altruism is not enough to decide on how to handle a technology that is about to eat up the world. There are several aspects of advanced AI that clearly demand more introspection, but this is not evident. As AI increasingly enters into the arena of defence sensing and warning, there is a need not only to keep machines under human control but also to ensure that AI-dictated warnings do not outrun proper understanding and reality.

Those steeped in defence aspects already know the gap that exists between warning and understanding of what might happen, and how critical this is in strategic terms. High-powered AI systems may often prove unreliable as they may demonstrate a bias towards national security given that algorithms often display such biases. The world, hence, needs to reach an understanding on how best to deal with this new technology which can, and could, end or make the future of the world. What we have seen in Ukraine and West Asia is not even the tip of this iceberg. Better to "cross the river by feeling the stones" is a better maxim than 'blind prejudice or unadulterated endorsement of a new technology'.

Artificial intelligence and cyber threats pose unprecedented challenges to global security and economic stability

2. Critical minerals, the foundation of strategic power(THE HINDU PAGE NO 8)

Syllabus Mapping

1. **GS Paper:** GS Paper 2 & GS Paper 3
2. **Syllabus Topics:**
    1. Effect of policies and politics of developed and developing countries on India's interests.
    2. Infrastructure: Energy, renewable power, and advanced manufacturing.
    3. Changes in industrial policy and their effects on industrial growth.

Critical minerals, the foundation of strategic power

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Critical mineral security will define India's industrial and strategic trajectory

Critical minerals have moved from the margins of resource policy to the centre of industrial strategy and security. Lithium, cobalt, nickel, graphite, copper and rare earth elements are foundational to electric vehicles, storage, renewable power, semiconductors, defence and advanced manufacturing. As decarbonisation and digitalisation accelerate, mineral security is becoming as important as oil once was. The global supply picture is concentrated. For copper, lithium, nickel, cobalt, graphite and rare earth elements, the average market share of the top three refining countries rose to 86% in 2024, from around 82% in 2020. Incremental supply is tied to a few nodes: Indonesia for nickel, and China for cobalt, graphite and rare earths. China is the leading refiner in 19 out of 20 strategic minerals with an average market share of about 70%, making minerals geopolitical, not merely commercial.

Geopolitical risk as a factor

Clean energy transitions will require minerals far beyond today's production systems. The current copper project pipeline points to a potential 30% supply shortfall by 2035. Lithium appears better supplied in the near term but rising demand is expected to drive the market into deficit by the 2030s. Rare earth demand will rise sharply as wind power, electronics and magnets expand.

Geopolitical risk is compounding these pressures. China's rare earth export controls announced in 2025 created concerns across energy, automotive, defence, aerospace, Artificial Intelligence (AI) and semiconductors. Major economies are responding quickly. The European Union (EU) Critical Raw Materials Act sets 2030 benchmarks of 10% domestic extraction, 40% processing and 25% recycling, and no more than 65% from a single country. The United States is diversifying supply chains through partnerships.

India's clean energy and manufacturing ambitions are mineral intensive. Under a net zero scenario, cumulative demand for critical energy transition minerals could reach roughly 169 million tonnes by 2070, about 51% higher than under a current policy pathway. Copper demand will rise with power systems; rare earth demand will grow with wind energy and advanced manufacturing.

India has domestic potential, including reserves of cobalt (44.9 million tonnes), copper (163.9 million tonnes), graphite (211.6 million tonnes) and nickel (189 million tonnes), along with monazite deposits containing rare earth oxides. Recycling could eventually meet up to a quarter of copper and graphite demand by mid-century. Yet, reserves have not ensured supply security. India remains import dependent for lithium, cobalt and nickel, while graphite and China-dominated processing expose it to disruption as demand scales. The critical gap is processing and refining. India's position differs from the EU, the U.S. and Australia, which are building integrated supply chains through mandates, partnerships and processing investments. India is still developing foundational capability. While several minerals are processed domestically, capacity and high-purity production remain constrained. It has bulk-mineral experience but still relies on imports for high-purity critical mineral products.

This is where much value and vulnerability sit. In 2024, China accounted for over 90% of rare earths and graphite processing, nearly 75% of cobalt and 70% of lithium chemicals. India must build midstream capacity to participate meaningfully in supply chain realignment.

Structural constraints

Several constraints slow progress. Exploration remains relatively shallow, regulatory clearances can be time-consuming, private participation is limited and remote-region project economics are challenging. Processing is a larger bottleneck: India lacks some high-purity input facilities, while copper and graphite face smelting, purification and scale constraints. Recycling will play a role but cannot substitute for primary supply in the near term because feedstock, collection and technology remain limited.

India's policy response since 2023 marks a shift. The government has identified 30 critical minerals, strengthened regulatory frameworks, and launched the National Critical Mineral Mission to support the value chain. The mission targets 1,200 domestic exploration projects by 2030-31, production of at least 15 critical minerals, and acquisition of 50 overseas mining assets by Indian companies. The Khanij Bidesh India Limited (KABIL) has secured 15,703 hectares in Argentina's Catamarca province for lithium exploration, while the 2026-27 Budget proposed rare earth corridors in Odisha, Kerala, Andhra Pradesh, and Tamil Nadu. The India-U.S. critical minerals and rare earths framework signed in May 2026 provides an additional diplomatic lever.

Mission to execution

The next phase is execution. Processing and refining must become a national industrial priority, backed by infrastructure and targeted incentives. Private capital needs better geological data, predictable approvals and risk sharing. India should also operationalise strategic stockpiles for critical minerals, accelerate applied research and development through industry partnerships, scale domestic capabilities and diversify overseas supply through trusted partners and platforms.

India energy transition, electronics, semiconductor, defence manufacturing, and advanced industrialisation all depend on secure mineral supplies. While individual policy measures are necessary, they are insufficient. A comprehensive strategy should establish mineral-specific risk thresholds, integrate recycling into supply planning, set measurable milestones, and create a coordinated institutional framework. The priority now is to convert potential into capability and reduce strategic vulnerability through sustained execution.

3. The undermining of institutional opposition(THE HINDU PAGE NO 9)

Syllabus Mapping

1. **GS Paper:** GS Paper 2
2. **Syllabus Topics:**
    1. Important aspects of governance, transparency and accountability.
    2. Parliament and State Legislatures—structure, functioning, conduct of business, powers & privileges.
    3. Role of civil society, formal/informal associations, and political opposition in a democracy.

The undermining of institutional opposition

Now that the Gen Z revolutionaries have exited Jantar Mantar, the analysts and strategists at the Prime Minister's Office must be taking stock. For starters, Prime Minister Narendra Modi's team got at least one decision right – the decision to get former Union Minister Dharmendra Pradhan to resign just in time. Any further delay would most likely have become a point of no return for the National Democratic Alliance (NDA) government. Demonstrations were occurring at the district level and a critical momentum was building across the nation with Bihar, the ground zero of unemployment, fast turning violent.

But apart from Mr. Pradhan's timely resignation, all the other interventions of the Government of India as a response to the Cockroach Janta Party's (CJP) movement was a mix between the ridiculous and the laughable. It is clear as daylight that the Prime Minister's team singularly failed to grasp who and what they were actually dealing with.

Brewing anger

The starting assumption of the government was that it was confronting a rag-tag collection of middle-class youth whose sense of politics was immature and lacking in stamina for any mass movement to emerge. The overwhelming official common sense was to let the CJP movement simply fizzle out in the monsoon heat and humidity. Part of the misreading involved keeping the CJP leaders waiting at Union Health Minister J.P Nadda's residence for over two hours, while the government simultaneously set up plans to cut a deal with Sonam Wangchuk alongside operationalising a brutal lathi charge on the Gen Z campaigners on July 20.

To the government's evident surprise, however, by July 20 evening, there was a massive turnaround in both the quality and quantity of the resistance. Not

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The extreme centralisation of power has been steadily undermining the resilience within Indian political institutions

only did the CJP survive the brutal lathi charge and tear gas shelling, the campaign now took on the flavour of an all-India level 'revolt' of the people at large. An anti-Modi mood had become plainly discernible, with Instagram fired up with creative messaging and demonstrations by the Bharatiya Janata Party (BJP)'s own taken-for-granted upper class and upper caste social base.

However, even at such a high-pressure moment, the best the Prime Minister's team could manage was a late night badly sketched Instagram video by Mr. Modi himself. Poorly executed and full of misplaced messaging, it, unsurprisingly, only added fuel to the fire. And after the Prime Minister released another hapless reel the following day, the Government of India finally threw in the towel with Mr. Pradhan's resignation.

There is no doubt that the CJP is every bit a rag-tag outfit that is organisationally inchoate. But what it nonetheless managed to effectively achieve was to quickly tap into and electrify a vast reservoir of resentment, anger, grievance and unhappiness amongst India's economically much beleaguered middle class and aspirational poorer classes. By doing so, it managed to reveal the considerable fragility within the Indian political landscape. The extreme centralisation of power has, over the years, been steadily undermining the resilience within Indian political institutions. Consequently, the CJP by pitching its campaign as a resistance rather than within the rules of institutional Opposition politics was able to rattle the highest level of political authority.

Undermining democracy

At the heart of this crisis lies the Modi-Shah political playbook. For years, democratic politics with institutional safeguards have been systematically undermined in India. There is, in fact, the standard fix now for eliminating any opposition. The Modi-Shah political playbook has mainstreamed the use of the Enforcement Directorate and the Central Bureau of Investigation; the wanton buying and selling of MPs and MLAs; and have been making courts pliable at the highest level. Additionally, the questionable manner in which the highly controversial Special Intensive Revision (SIR) is being implemented can also be added to this list. There is great fear that the election process will increasingly become a selection exercise for the government in power.

In such conditions, a single trigger event, such as the CJP movement, could spark an immediate existential threat to an existing political order. However, while credit should be given to the CJP for showing resolve, and for the ability to organise and direct a grievance peacefully, their strategy is located entirely outside the political terrain of institutional politics. Thus, although Mr. Pradhan's resignation may appear to be a signature victory for them, it more ominously reveals the turbulence and fragility within India's political institutions. There could be less control over the street in the days to come, unless the Modi-Shah playbook ends.

The CJP has revealed that India is perilously close to losing its ability to manage a peaceful democratic transition. Though Rahul Gandhi, the Congress party, and several other Opposition parties did manage to register a strong presence throughout the Jantar Mantar movement, their hold was still less than enough and far too tenuous.

Mr. Pradhan's resignation should perhaps be more correctly seen as the first tremor within a Republic that is buckling from its weakening democratic foundations. If anything, the most important lesson to be taken from the CJP campaign is that the constant undermining of any legitimate opposition space by the Modi-Shah play book can, unless checked, result in social instability and political chaos.

4. Why has PoK erupted in protests?(THE HINDU PAGE NO10)

Syllabus Mapping

1. **GS Paper:** GS Paper 2
2. **Syllabus Topics:**
    1. India and its neighborhood—relations.
    2. Effect of policies and politics of developed and developing countries on India's interests.
    3. Important aspects of governance, citizen participation, and democratic dissent.

Why has PoK erupted in protests?

How did demands over prices evolve into a movement for greater political representation in PoK? How has Islamabad responded to the protests? What has India said about the unrest? How have international rights groups and overseas Kashmiris reacted to the crackdown?

EXPLAINER

Kallol Bhattacherjee

The story so far:

Simmering discontent over inflation, lack of accountability and opaque governance in Pakistan-occupied Kashmir (PoK) has escalated into a violent crackdown by Pakistani security forces over the past week, leaving dozens dead and many more injured. Security forces have reportedly used assault weapons and sniper fire against protesters gathered in the main squares of cities such as Rawalakot and Muzaffarabad to oppose the three-phase election currently under way in PoK. The Jammu Kashmir Joint Awami Action Committee (JKJAAC), which has been leading the protests, claims that more than 50 people have been killed over the past week as demonstrations continue against what it alleges is a rigged election process.

Why are protests taking place in PoK?

PoK is caught between an establishment-backed election and a popular political movement opposing the political basis of that election. The JKJAAC has been protesting peacefully in Rawalakot, Muzaffarabad, and other locations in the region seeking to build a more representative political system in PoK. The three-phase elections started on July 27 and will conclude on August 11.

The movement, which emerged after the COVID-19 pandemic to curb the prices of essential items, has evolved over the years into a protest against the lack of political representation for the local population in the PoK legislature. The legislature of PoK has a total of 53 seats, out of which 45 are elected, and eight are nominated. But because of historical reasons, 12 seats out of the 45 are reserved for refugees of Indian Jammu and Kashmir who migrated after 1947. In elections for these 12 seats, refugee voters located outside PoK cast their ballots. Locals claim that the reserved seats reduce representation of communities from the region and allow Islamabad to override local concerns.

Supporters of the banned Joint Awami Action Committee, an alliance of civil society groups, start a fire to block a road during a protest in Muzaffarabad. REUTERS

As the authorities proceeded with the election process without addressing the demand for removing the reserved seats, the JKJAAC called for a "long march". Though the authorities have responded with a harsh crackdown, the protesters have shown that they are not going away anytime soon as they have managed to sustain the protests for months. The protest received new momentum after a PhD scholar, Osama Jaleel, of Quaid-e-Azam University in Islamabad, was reportedly killed in police firing in Rawalakot. Before his death, Osama Jaleel had been noted on the Internet for his fiery speeches in the protest meetings in Rawalakot. The JKJAAC claims that a total of 86 persons have died in the security crackdown till July 31.

How is the political relation between Islamabad and PoK?

The federal government of Pakistan has had a complicated relationship with the region for years, as mainstream political parties such as the Pakistan Peoples Party and Pakistan Muslim League-Nawaz have not been able to fulfil the developmental aspirations of the people of PoK. In recent days, however, the situation has worsened following comments by leading figures within the establishment about the protesters. Pakistan Defence Minister Khwaja Asif incensed public sentiments by referring to the protesters as "enemies just like Indians". The main complaint is that the mainstream political parties in Islamabad have not met the region's developmental needs. Locals allege that they have been neglected by Islamabad, echoing many of the same complaints long voiced by residents of Khyber Pakhtunkhwa and Balochistan, where protests and insurgencies have continued for decades. The second phase of polling on August 2 drew allegations of irregularities and rigging.

What has India said about the Rawalakot protests?

Over the past few months, the Ministry of External Affairs has repeatedly condemned the use of harsh methods against protesters in Rawalakot and in other parts of PoK. On July 31, the Ministry of External Affairs blamed the 'Pakistani Establishment ' and said: "This crackdown has resulted in the tragic death of over 40 civilians and serious injuries to many. Its absolute disdain for the innocent people of PoJK was laid bare when their Defence Minister branded the protesting civilians as enemies." Adding to this, the Special Assistant to Prime Minister on Political Affairs openly admitted that the very 'mujahideen' that the Pak establishment trained, armed and sent to bleed India have now turned their guns inward, weaponising themselves against the state.

Mirwaiz Dr. Umar Farooq has expressed "deep concern" over the unrest across the LoC and called for dialogue. "We are deeply anguished by the continuing unrest and tragic loss of precious lives during the past month and a half," said Umar Farooq. The JKJAAC has opposed India's remarks, and in a statement on June 24, the group said it "firmly rejects any attempt by India to interpret, appropriate, or project the current situation in Azad Jammu and Kashmir in support of its own claims or geopolitical positions. The present civil rights movement is neither a proxy nor an extension of interstate rivalries. Any such characterisation is both inaccurate and misleading."

Is there a strategic dimension?

The protests have been concentrated in Rawalakot, which lies along the Line of Control, and Pakistan's response so far shows it will not tolerate instability in a region of primary importance to its security.

The strategic dimension of the disturbances can be assessed by the fact that Kotli, Muzaffarabad and Rawalakot – the areas where protests have taken place hosted terror-related targets that India had claimed to have hit in the May 2025 Operation Sindoor.

Apart from India, Amnesty International and influential leaders in the U.K. have also called for restraint from the Pakistani establishment. Responding to the existing communication blackout in PoK, Amnesty has said: "We urge the Pakistani authorities to restore all communications access and allow media and independent observers into the area." Non-resident Mirpuri Kashmiris, who have a strong community-level presence in the U.K., have started an online campaign to restrain Pakistan's security establishment from continuing with the repressive measures.

THE GIST

- A movement that began over rising prices has evolved into a campaign against the PoK election process, with the JKJAAC demanding the removal of 12 reserved seats that it says undermine local representation.
- Protests have intensified amid allegations of election rigging and a deadly security crackdown; Pakistan's response has drawn criticism from India, Amnesty International and U.K.-based Kashmiri groups.

5. Why has West Bengal cleared land for the BSF now?(THE HINDU PAGE NO10)

Syllabus Mapping

1. **GS Paper:** GS Paper 2 & GS Paper 3
2. **Syllabus Topics:**
    1. Security challenges and their management in border areas.
    2. Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure.
    3. Various Security forces and agencies and their mandate.

Why has West Bengal cleared land for the BSF now?

Why is West Bengal central to India's border fencing project? What are the policy challenges?

Saee Pande

The story so far:

The West Bengal Cabinet has approved the permanent transfer of 31.905 acres at nine locations to the Border Security Force (BSF) for border fencing and related security infrastructure, along with 1.53 acres for three new Border Outposts in Malda, Nadia and Cooch Behar. The decision removes a major State-level bottleneck in a long-delayed border infrastructure project affected by land acquisition disputes, difficult terrain, and legal and political complications. The move also follows the Calcutta High Court's order of January 2026, directing the State government to hand over acquired land in nine border districts to the BSF by March 31, 2026.

Why is Bengal central to the project?

West Bengal shares the longest international border with Bangladesh among Indian States. According to the Ministry of Home Affairs, India's 4,096.70-km border with Bangladesh includes 2,216.7 km in West Bengal, which is approximately 54% of the entire frontier. As of August 2025, 1,647.696 km had been fenced, while 569.004 km remained to be covered by fencing or other border infrastructure. Of this, 112.780 km was classified as non-feasible for conventional fencing, while 456.224 km remained technically feasible but pending completion.

Why has the project been delayed?

The delays reflect a combination of geographical, administrative and legal constraints. Nationally, the MHA reported that 3,232.218 km of the India-Bangladesh border had been fenced by August 2025, leaving 864.482 km unfenced across West Bengal (2,216.7 km), Tripura (856 km), Meghalaya (443 km), Mizoram (318 km) and Assam (263 km).

Of the remaining unfenced stretch, 174.514 km has been categorised as non-feasible for conventional fencing because of riverine channels, marshlands, floodplains, shifting river courses, densely inhabited settlements and the ecologically sensitive Sundarbans, where fencing is technically difficult and seasonally constrained. Other pending stretches require land acquisition, compensation, environmental clearances and completion of bilateral border management procedures.

What governs India-Bangladesh border fencing?

According to the Ministry of External Affairs, India undertakes border fencing and related security measures in accordance with bilateral agreements and operational protocols between the BSF and the Border Guard Bangladesh (BGB). The border is governed by the 1975 Joint India-Bangladesh Guidelines for Border Authorities, the Coordinated Border Management Plan (CBMP), 2011, and the 2015 Land Boundary Agreement (LBA), which implemented the 1974 Land Boundary Agreement and its 2011 Protocol, resolved enclave and adverse-possession disputes, and enabled the exchange of 162 enclaves, 111 Indian enclaves in Bangladesh and 51 Bangladeshi enclaves in India. India has also reiterated its expectation that these understandings will continue to support cooperation against cross-border crimes, including smuggling, human trafficking, illegal migration, arms trafficking and counterfeit currency networks.

What are the policy challenges?

This is a challenge of balancing national security with the livelihoods of communities living along the border. In districts such as Malda and Nadia, agriculture, informal trade and long-standing social ties extend across the frontier, meaning that fencing can improve surveillance while also affecting access to farmland, mobility and local commerce. As the largest unfinished segment of the India-Bangladesh border lies in West Bengal, progress and development in the State remain central to the completion of the national fencing programme. In many sectors, particularly riverine terrain, the future of border management is likely to depend on an integrated combination of physical barriers, Border Outposts, surveillance technology and coordinated action between the Union and State governments.

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THE GIST

The West Bengal Cabinet has approved the transfer of over 33 acres of land to the BSF for border fencing and Border Outposts, removing a long-pending bottleneck in completing security infrastructure along the India-Bangladesh border.

Although more than three-fourths of the border has been fenced, progress continues to be delayed by land acquisition disputes, difficult riverine terrain, environmental constraints and legal issues, requiring a mix of fencing, surveillance technology and coordinated Union-State action.

6. Why Iran war didn't cause fertiliser crisis(INDIAN EXPRESS PAGE NO 9)

Syllabus Mapping

1. **GS Paper:** GS Paper 2 & GS Paper 3
2. **Syllabus Topics:**
    1. Effect of policies and politics of developed and developing countries on India's interests (global energy supply shocks).
    2. Issues related to direct and indirect farm subsidies, and agriculture inputs (fertilizers).
    3. Indian Economy and issues relating to planning, mobilization of resources, growth, and development.

Why Iran war didn't cause fertiliser crisis

Better supply-side management from the government, especially in urea, and subdued demand due to deficient monsoon cushioned war's impact

HARISH DAMODARAN

• Production, import, sale of fertilisers

	Urea	DAP	MOP	Complexes	SSP
PRODUCTION					
Apr-Jun 2025	67.88	10.35	0	26.64	13.93
Apr-Jun 2026	71.53	9.84	0	19.2	13.5
IMPORT					
Apr-Jun 2025	8.38	9.74	2.65	9.54	0
Apr-Jun 2026	25.08	7.11	6.09	4.91	0
SALE					
Apr-Jun 2025	69.9	15.54	4.57	29.32	12.19
Apr-Jun 2026	69.33	15.26	4.23	30.15	13.55

SOURCE: THE FERTILISER ASSOCIATION OF INDIA — ALL FIGURES IN LAKH TONNES

Commercial vessels anchored in the Strait of Hormuz off Bandar Abbas, Iran. AP

THE UNITED States-Israel versus Iran war and the effective closure of the Strait of Hormuz since February 28 has triggered arguably the greatest global energy supply shock in history, eclipsing even the ones of 1973 and 1979.

However, its impact hasn't been felt as much in India with regard to fertilisers, especially urea.

Data from the Fertiliser Association of India shows the country's urea production fell to 17.5 lakh tonnes (lt) in March 2026, from 24.7 lt in March 2025.

The main reason was the supply disruptions in the primary feedstock, liquefied natural gas (LNG). Before the war, 53-54% of India's LNG imports came from Qatar and the United Arab Emirates (UAE), mostly against long-term supply contract agreements. These couldn't be honoured due to shipping blockades as well as damage to key liquefaction infrastructure from Iranian missile and drone strikes.

Domestic urea output recovered to 21 lt in April. The following two months saw it further rise to 25.2 lt and 25.4 lt, so much so that cumulative production in April-June 2026, at 71.5 lt, was 5.4% higher than the 67.9 lt for the same quarter of last year.

Proactive government action

"The credit goes to the government, which pushed GAIL (India) Ltd and Indian Oil Corporation to diversify their LNG sourcing, even if it meant pivoting heavily to spot market purchases at higher prices. So, even as the share of Qatar and UAE dwindled to near-zero, more LNG was imported from the US, Oman, Nigeria, Angola, People's Republic of the Congo and even Indonesia, Trinidad and Norway," a fertiliser industry official said.

The same proactiveness was also seen in the imports of urea. The state-owned Indian Potash Ltd (IPL) and National Fertilizers Ltd floated tenders on April 4 and May 27, against which 25 lt and 17 lt of imported urea were secured at landed prices of \$935-959 and \$444.9-449.3 per tonne respectively.

A third tender for the import of 17 lt — 10 lt to be delivered in western Indian and 7 lt in eastern coast ports — was issued by Rashtriya Chemicals and Fertilizers on July 29. The bids for this tender will open on August 11.

On the whole, India imported 25.1 lt of urea during April-June 2026, up from a mere 8.4 lt in April-June 2025. "Through this crisis, the government has made sure there is adequate supply of both imported urea and LNG for domestic production. It has also not allowed the higher import costs to be passed on to farmers, which would reflect in the fertiliser subsidy bill overshooting budget estimates," the official noted.

Not so comfortable

While the urea supply situation is comfortable, it's not so with di-ammonium phosphate (DAP) and complex fertilisers.

Urea meets the nitrogen (N) requirement of crops, just as DAP and muriate of potash (MOP) provide P and potassium (K) respectively. Complex fertilisers contain these plant nutrients — N, P, K and sulphur (S) — in different blends.

It can be seen from the accompanying table that the production of DAP, complex fertilisers and also single super phosphate (SSP, a low P-content substitute for DAP) have registered declines in April-June 2026 over April-June 2025. Moreover, unlike in urea, their reduced domestic output has been combined with lower imports.

Some worries

While the urea supply situation is comfortable, it's not so with di-ammonium phosphate (DAP) and complex fertilisers.

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The conflict in West Asia has tightened sulphur supplies too.

The success achieved in widening the import sources of urea and LNG has not been replicated either in phosphatic and complex fertilisers or key intermediates/raw materials such as phosphoric acid and sulphur.

Prices of phosphoric acid (cost plus freight) imported into India have increased from \$1,055 per tonne in January-March 2025 to \$1,153 in April-June 2025, \$1,258 in July-December 2025, \$1,290 in January-March 2026, \$1,360 in April-June 2026 and \$1,700 for the current July-September 2026 quarter.

It's worse for sulphur, where landed prices were elevated at \$500-550 per tonne (as against the normal \$150-250 range) even before the Iran war. That spike was on account of Ukrainian drone attacks on oil refineries in Russia, which led to production losses and a ban on exports by a major global supplier.

The conflict in West Asia has tightened sulphur supplies from other big sources too: QatarEnergy, Saudi Aramco, Abu Dhabi National Oil Company and Iran itself. The result is that import prices are ruling at around \$1,100 per tonne now.

The conflict has also squeezed the supply of ammonia — the source of N for complex fertilisers — from QatarEnergy, Saudi Arabia's Maaden and SABIC, and Iran. These were, again, previously being shipped through the Strait of Hormuz. Import prices of ammonia have eased to \$650-700 per tonne though, after skyrocketing to \$850-900 levels in May.

"The real problem today is sulphur. It is necessary for making sulphuric acid that is, in turn, used to break down rock phosphate (the P-bearing ore) and convert into phosphoric acid. And without phosphoric acid and sulphuric acid, there can be no DAP, SSP and complex fertilisers," the earlier-quoted official explained.

In DAP, no imports have been contracted after the purchase of 13.5 lt through IPL's mega-tender on April 28 at \$930-935 per tonne (cost plus freight). That price was higher than the \$725-750 levels of a year ago.

"Prices are unlikely to fall. In anything, they may go up if India were to float a fresh large import tender. The government must focus on augmenting supply of sulphur and make it viable for domestic DAP and NPKS manufacturers to import. It would entail making additional subsidy provision, similar to that on urea," the official added.

El Niño factor

Demand for fertilisers has been subdued because of the El Niño-induced monsoon deficiency.

With all-India rainfall during June-July being 12.6% below the normal average for the two months, the area sown under *kharif* crops, too, has been down 2.9% so far from last year.

This is in contrast to 2025 and 2024, which were surplus monsoon years. Ample soil moisture, well-filled reservoirs and recharged groundwater tables prompted farmers to plant with gusto and also queue up to buy fertilisers. With supply management failing to keep pace with demand, there was a scramble for fertilisers and the lines only got longer.

This time, there has been a slowdown in offtake of fertilisers, besides better supply preparedness on the government's part.

"With upcoming state elections in Uttar Pradesh, Punjab and Uttarakhand in February-March, you can expect the government to take no chances even for the *rabi* (winter-spring) cropping season," the official added.

7. US-Japan joint action: How a stronger yen affects Indian markets(INDIAN EXPRESS PAGE NO 9)

Syllabus Mapping

1. **GS Paper:** GS Paper 3
2. **Syllabus Topics:**
    1. Indian Economy and issues relating to planning, mobilization of resources, growth, development.
    2. Effects of liberalization on the economy.
    3. Foreign exchange reserves, exchange rate management, and monetary policy dynamics.

• ECONOMICS

US-Japan joint action: How a stronger yen affects Indian markets

Akash Mandal
Mumbai, August 3

THE US and Japan on Monday confirmed a joint coordinated intervention in the Japanese currency market aimed at smoothing out excessive volatility in the yen. The move, taken on Friday, strengthened the yen against the US dollar, ringing potential alarm bells for Indian markets.

The joint action — the first since 2011 — was under the US-Japan Finance Ministers' Joint Statement issued in September 2025, with both countries keeping the door open for further joint intervention efforts. This comes against the backdrop of the Japanese currency falling to 40-year lows in July.

"They have a weakening yen, and they wanted a little bit of help. And we're always there for Japan," Reuters quoted US President Donald Trump as saying in response to a reporter's query. The Japanese government may have sold as much as $59 billion in securities on Thursday to support its currency, Reuters reported citing central bank data.

Behind the intervention

The US has a vested interest in the yen's performance, with a weaker yen leading to US Treasury bond yields shooting up. With the Japanese government holding a large share of US Treasuries, a weak yen may force Japan to sell US bonds, further elevating US bond yields. With yields already under pressure owing to elevated inflation and expectations of interest rate hikes by the Federal Reserve, a joint intervention by both countries helps manage market expectations.

"Obviously Japan needs to increase interest rates (to curb inflation), but none of the central banks are keen to raise rates at this point because it could affect demand. That's why this sort of intervention is there," said Pankaj Pandey, head of research at ICICI Securities.

"The US debt has climbed to $40 trillion, so every 10-20 basis points of increase in bond yields will put a lot of pressure on the US balance sheet. Hence, the US might have stepped in to protect the dollar," said Sunny Agrawal, head of research at SBI-CAPS Securities. One basis point equals 0.01%, that is, 100 basis points equal 1%.

The Bank of Japan kept its short-term interest rates steady on Friday but signalled that there might be a need to raise rates soon as underlying inflation threatened to exceed its 2% target. While the US has also avoided hiking interest rates so far, the CME Fedwatch tool shows a nearly 65% probability of a 25-basis-point rate cut in the Fed's next meeting in September.

After the Monday announcement by the Japanese finance ministry, the yen rose by around 1% to 155.23 a dollar, which was the strongest level in three months, before paring some gains to trade around 156.75. This followed the currency gaining over 3% in the last two sessions of the previous week.

Impact on Indian markets

The Indian market has a significant exposure to the yen, especially through carry trades. This trade facilitates traders borrowing in a cheaper currency like the yen to buy securities in emerging markets like India to take advantage of the interest rate differential.

While analysts are unsure about current numbers, an August 2024 report by Elara Capital showed India's yen carry trade exposure stands at around $21 billion, or about 2.2% of the total foreign institutional investor (FII) holdings.

While unwinding of the yen carry trade may lead to an FII exodus in the shorter run, crude prices remain a bigger concern for the Indian market currently. "We haven't been a big beneficiary of FII inflows as of now, so most of the negatives are already there in terms of pressure. For us, the bigger macro issue is the stabilisation of crude price," said Pandey.

The Indian stock market saw a positive FII inflow of $2.1 billion (approximately Rs 20,200 crore) in July after four straight months of outflow. This inflow, however, was nothing compared to the foreign outflows of $27.2 billion (approximately Rs 2.54 lakh crore) the Indian stock market has seen so far in 2026.

The impact on the Indian market from the yen's trajectory would depend both on the current levels of exposure and the quantum of joint US-Japan intervention.

Ins and outs

- The Indian stock market saw a positive FII inflow of $2.1 billion (approximately Rs 20,200 crore) in July after four straight months of net outflow.
- The market has seen foreign outflows of $27.2 billion (approximately Rs 2.54 lakh crore) so far in 2026.