



The Hindu Important News Articles & Editorial For UPSC CSE

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Page 01: GS 3: Science and Technology/ Prelims

In a significant milestone for India's space sector, the Indian Space Research Organisation (ISRO) successfully launched the BlueBird Block-2 satellite using its heavy-lift Launch Vehicle Mark-3 (LVM3) from Satish Dhawan Space Centre. This mission marked India's first dedicated commercial LEO launch for a U.S. customer and placed the largest-ever commercial communications satellite into low Earth orbit, reinforcing India's growing stature in the global space economy.

ISRO's LVM3 rocket launches largest commercial communications satellite

Hemanth C.S.

The Indian Space Research Organisation (ISRO) placed the BlueBird Block-2 satellite in a low earth orbit (LEO) on Wednesday.

The Launch Vehicle Mark 3 (LVM3) lifted off from the second launch pad of the Satish Dhawan Space Centre in Sriharikon at 8.55 a.m., and 15 minutes later, placed the satellite in the intended orbit.

The ISRO accomplished two milestones with this mission as it was able to deploy the largest commercial communications satellite in a low earth orbit, and the BlueBird Block-2 satellite, weighing 6,100 kg, became the heaviest

payload to be launched by LVM3 from Indian soil.

"LVM3 Bahubali rocket M6 launch vehicle has successfully and precisely iniected the BlueBird Block-2 communication satellite in the intended orbit. This is the first dedicated commercial launch for a cus-tomer from the U.S.," ISRO Chairman V. Narayanan said. The BlueBird Block-2 communication satellite, developed by AST Space-Mobile in the U.S., is part of a next generation of the communication satellites. designed to provide space-based cellular broadband connectivity directly to standard mobile smartphones.

"I am extremely happy to announce the performance of the orbit that we have got is less than two kilometres. This is one of the best performances of any launch vehicle in the global arena," Dr. Narayanan said.

Display of reliability

Wednesday's success de-monstrated the reliability India's space programme, Prime Minister Narendra Modi said. "Powered by India's youth. our space programme is getting more advanced and impactful. With LVM3 demonstrating reliable heavy-lift performance, we are strengthening the foundations for future missions such as Gaganyaan, ex panding commercial launch services and dee-pening global partner-ships. This increased capability boost and

self-reliance are wonderful for the coming generations," Mr. Modi posted on X

"BlueBird block-2 mission is part of a global LEO constellation to provide direct-to-mobile connectivity through satellite. This constellation will enable 4G and 5G voice and video calls, texts, streaming, and data for everyone, everywhere, at all times. It features a 223m² phased array, making it the largest commercial communications satellite ever deployed into low Earth orbit," the ISRO said.

Dr. Narayanan said that the LVM3-M6 mission was the IO4th launch from Sriharikota and also the ninth successful mission of the LVM-3 launch vehicle.



New horizons: ISRO's LVM3 lifts off carrying the Bluebird Block-2 satellite from Sriharikota on

education

Key Facts from the Mission

Payload: BlueBird Block-2 satellite (6,100 kg), developed by AST SpaceMobile

Orbit: Low Earth Orbit (LEO)

Launch Vehicle: LVM3 (Bahubali) – Mission LVM3-M6

Special Achievements:

Largest commercial communications satellite deployed in LEO

Heaviest payload launched by LVM3 from Indian soil

104th launch from Sriharikota; 9th successful LVM3 mission

Satellite Capability: Direct-to-mobile broadband connectivity (4G/5G, voice, video, data)

Why This Launch Matters

1. Technological Significance

Demonstrates precision orbital injection (error < 2 km), placing LVM3 among globally reliable heavy-lift launch vehicles.



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Confirms ISRO's capability to handle very large, complex commercial payloads, beyond traditional government missions.

Validates India's readiness for next-generation satellite architectures such as phased-array, direct-to-device systems.

2. Commercial Space and NewSpace Ecosystem

Marks India's entry into high-value commercial LEO launch services, traditionally dominated by the U.S. and Europe.

Enhances ISRO's attractiveness as a cost-effective, reliable launch provider amid increasing global demand for LEO constellations.

Supports India's NewSpace policy objectives by complementing private players under IN-SPACe and NSIL frameworks.

3. Strategic and Geopolitical Dimensions

Strengthens India–U.S. technological collaboration in advanced space applications.

Expands India's footprint in the global space value chain, particularly in satellite broadband—an area with civil, commercial, and strategic relevance.

Improves India's soft power by showcasing indigenous heavy-lift and mission reliability.

4. Implications for Future Indian Missions

Operational confidence for human spaceflight missions like Gaganyaan, which also relies on LVM3.

Provides a strong foundation for future deep-space, space-station support, and interplanetary missions requiring heavy payload capacity.

5. Developmental and Governance Relevance

LEO-based direct-to-mobile connectivity can help bridge the digital divide, especially in remote and disaster-prone regions.

Aligns with Digital India and Atmanirbhar Bharat by demonstrating high-end indigenous technological capability with global market relevance.

Political and Policy Significance

Prime Minister Narendra Modi highlighted that the mission strengthens self-reliance, boosts commercial launch services, and deepens global partnerships. This aligns with India's broader policy push to treat space as a strategic economic sector, not merely a scientific endeavour.

Challenges and Way Forward

Sustaining launch cadence amid rising global competition from reusable launch systems.

Ensuring regulatory agility to support rapid commercialisation without compromising safety.







Quality education

Integrating private Indian launch and satellite firms into large global supply chains.

Conclusion

The successful LVM3 launch of BlueBird Block-2 is more than a technical achievement; it signals India's transition from a capable spacefaring nation to a competitive global space service provider. By combining technological reliability, commercial credibility, and strategic foresight, ISRO has strengthened India's position in the evolving LEO-driven space economy. For UPSC perspective, the event exemplifies the intersection of science & technology, economy, international relations, and governance, making it a high-value current affairs development.

UPSC Prelims Practice Question

Ques: Which of the following best explains the strategic importance of LVM3 for India?

- (a) It is primarily designed for small satellite launches
- (b) It enables reusable launch capability
- (c) It supports heavy payload missions including human spaceflight
- (d) It replaces PSLV for polar missions

Ans: c)

UPSC Mains Practice Question

Ques: Low Earth Orbit (LEO) satellite constellations are reshaping global communication infrastructure. Discuss the advantages of LEO satellites and examine how India's LVM3 strengthens its role in this domain. **(150 Words)**







Page 06: GS 1: Indian Society

A caste panchayat belonging to the Jat community in Rajasthan's Jalore district has issued a diktat banning smartphone use by married women and young women across 15 villages from January 26, 2026. While the decision has been justified on grounds such as mobile addiction and children's eye health, it has triggered widespread criticism for reinforcing patriarchal control,

violating constitutional freedoms, and deepening the digital gender divide. The episode highlights the continuing tension between traditional social institutions and constitutional morality in contemporary India.

Background and Context

The decision was taken by the Sundhamata Patti caste panchayat of the Chaudhary clan in Ghazipur village.

Married women and daughters-in-law are prohibited from carrying camera-enabled smartphones to weddings, public gatherings, or even neighbourhood visits.

Only basic keypad phones for voice calls are permitted.

Girls pursuing education are allowed limited smartphone use at home strictly for academic purposes.

The resolution has no statutory backing but relies on social coercion and community enforcement.

Such caste panchayats (often referred to as extra-constitutional bodies) have historically issued social diktats related to marriage, mobility, dress codes, and behaviour, particularly targeting women.

Key Issues Involved

1. Constitutional and Legal Concerns

Violation of Fundamental Rights:

Article 14: Discriminatory treatment based on gender and marital status.

Article 19(1)(a): Restriction on freedom of expression and access to information.

Article 21: Infringement of personal liberty, dignity, and autonomy (as interpreted expansively by the Supreme Court).

Lack of Legal Authority: Caste panchayats have no constitutional or statutory legitimacy. Their resolutions are not enforceable in law but often operate through social pressure, ostracism, or informal sanctions.

Jat panchayat bans smartphone use by married women

The Hindu Bureau

When the world is racing on the highway of connectivity, smartphones will be prohibited for married women belonging to a sect of the Jat community in Rajasthan's Jalore district from Republic Day in 2026. The diktat was issued at a caste panchayat held in Ghazipur village on December 21.

The panchayat ordered that no daughter-in-law or young woman from 15 villages in the Bhinmal-Khanpur area carry camera-enabled mobile phones to weddings, public gatherings, and even while visiting neighbours, from January 26. They can use only basic keypad phones for voice calls.

The Sundhamata Patti panchayat of the Chaudhary clan took the decision "with consensus", citing concerns of mobile addiction and the impact of screentime on children's eyesight. Panch Himmataram read out the proposal, which was passed as a resolution after discussions among all panchayat members and elders, who agreed to implement the rule.

Community head Sujanaram Chaudhary presided over the panchayat meeting. The resolution stated that girls pursuing education would be allowed to use smartphones at home "strictly for academic purposes", but would be barred from carrying the devices to social events, weddings or neighbourhood visits.

A video footage of the proclamation being read out at the panchayat meeting was circulated online, drawing sharp criticism from social activists and women's rights groups.







2. Gender Justice and Patriarchy

The ban reflects deeply entrenched patriarchal norms, where women's mobility, communication, and visibility are controlled in the name of social order and morality.

The selective restriction on women, while men's smartphone usage remains unregulated, reinforces gender stereotypes of "honour", surveillance, and obedience.

Such measures undermine decades of progress made through women-centric policies, legal reforms, and judicial activism.

3. Digital Gender Divide

India already faces a significant gender gap in digital access, particularly in rural areas.

Smartphones today are not merely communication tools but gateways to:

Education and online learning

Financial inclusion (UPI, DBT, banking apps)

Health services (telemedicine, awareness)

Government schemes and grievance redressal

Restricting women's access to smartphones risks further marginalising them from the digital economy and governance ecosystem.

4. Social Arguments vs Rights-Based Approach

Stated Justifications:

Mobile addiction

Children's eye health

Social discipline

Critical Assessment:

These concerns are not gender-specific and can be addressed through awareness, digital literacy, and parental guidance rather than blanket bans.

Singling out women indicates that the underlying issue is social control, not public health.

5. Implications for Governance and Rule of Law

Such diktats challenge the authority of the constitutional state by creating parallel norms of governance.







Failure to respond decisively may embolden similar extra-legal social orders elsewhere.

The episode raises questions about the role of district administration, police, and state women's commissions in preventing rights violations.

Way Forward

Administrative Action:

District authorities should publicly clarify that such resolutions have no legal validity.

Prevent coercion, intimidation, or social boycott arising from the diktat.

Legal Safeguards:

Strengthen implementation of laws protecting women's autonomy and dignity.

Use existing legal provisions against unlawful assemblies and coercive social practices if required.

Social and Digital Awareness:

Promote digital literacy programmes focusing on safe and responsible smartphone usage for all genders.

Engage community leaders to counter regressive norms through dialogue and sensitisation.

Empowering Women:

Support women's collectives, SHGs, and local institutions to assert constitutional rights at the grassroots level.

Conclusion

The Jat panchayat's ban on smartphone use by married women is not merely a local social decision but a symptom of a larger struggle between tradition and constitutionalism in India. While concerns around digital addiction and child health are legitimate, addressing them through gender-discriminatory, extra-constitutional diktats undermines fundamental rights, women's empowerment, and inclusive development. A constitutional democracy cannot allow social consensus to override individual liberty and dignity. Upholding constitutional morality, strengthening state accountability, and promoting social reform remain essential to ensure that technological progress translates into genuine social empowerment rather than deeper exclusion.







UPSC Mains GS 4: Case Study Practice Question

Ques: In a rural area of Rajasthan, a caste panchayat belonging to a dominant agrarian community recently passed a resolution prohibiting married women and young women from carrying smartphones in public spaces such as weddings, community gatherings, and neighbourhood visits. The decision was justified by the panchayat elders on grounds of increasing mobile addiction, adverse impact of screen time on children, and the need to preserve "social harmony" and traditional values.

Although the resolution has no legal backing, it is being enforced through strong social pressure. Women who violate the diktat face the threat of social boycott, public shaming, and family pressure. Many families, fearing loss of social standing, have complied with the order despite privately disagreeing with it.

You are posted as the Sub-Divisional Magistrate (SDM) of the area. Women's rights organisations and civil society groups have approached the district administration, demanding immediate intervention, arguing that the diktat violates constitutional rights, reinforces patriarchy, and deepens the digital gender divide. At the same time, some community leaders warn that any direct administrative action may disturb social peace and provoke resistance against the state machinery.

You personally believe in constitutional values, gender equality, and individual freedom, but you are also aware of the fragile social fabric of the region and the importance of maintaining public order.

Questions

Identify the ethical issues involved in the above case.

Examine the conflicting values and interests of the stakeholders involved.

As an administrator, what options are available to you in dealing with this situation?

Which course of action would you adopt and why? Justify your decision on ethical grounds.

What long-term measures can be taken to prevent the recurrence of such extra-constitutional social diktats while ensuring social harmony?







Page 08: GS 3: Environment / Prelims

India's clean energy transition is entering a critical phase where climate ambition intersects with industrial policy and geopolitics. Rare Earth Elements (REEs), though modest in volume, have become strategically indispensable due to their role in high-performance permanent magnets used in electric vehicles (EVs), wind turbines, and advanced electronics. India's recent policy

focus on domestic magnet manufacturing reflects an effort to reduce strategic vulnerabilities. However, the challenge lies in building resilient supply chains without compromising environmental standards and governance principles.

Background and Context

Rare earth supply chains are highly concentrated, with China dominating not only mining but, more critically, chemical refining and magnet manufacturing.

The real bottleneck is Neodymium-Iron-Boron (NdFeB) permanent magnets, not rare earth mining per se.

India has announced a ₹7,280 crore scheme (late 2025) to establish an integrated ecosystem for producing 6,000 tonnes of sintered rare earth magnets annually.

India's domestic rare earth resources are largely tied to monazite-bearing beach sands, which also contain thorium, linking the sector to nuclear regulatory frameworks.

Significance for **India's Clean Energy** Transition

1. Strategic and Economic Importance

Permanent magnets are essential for:

EV traction motors

Offshore and onshore wind turbines

Advanced electronics and defence systems

Import dependence in this segment exposes India to **geopolitical shocks and price** volatility.

Domestic magnet manufacturing can catalyse **downstream industries** such as EVs, wind components, and electronics manufacturing.

2. Supply Chain Realities

Mining alone does not ensure self-reliance.

Chemical separation and refining are the true choke points in the REE value chain.



Magnetic moment

India must not undermine green compliance in its clean energy transition

t the end of 2025, rare earth elements sit in an awkward intersection between climate ambitions, industrial policy and geopolitics. They are not the most important minerals by volume in the clean energy economy but that has not stopped a small subset of them from becoming a gatekeeper for many of its important machines. The question today is not whether the world needs rare earths for its green transition but whether countries can build resilient and affordable supply chains without recreating the same environmental and governance problems in new places. The principal bottleneck is highperformance permanent magnets, especially ne odymium-iron-boron magnets for EV motors and wind turbines. When supply falters, these elements, not all rare earths, pass the shock into economies. Likewise, countries can also announce new mines and still depend on others for chemical refining, which is to rare-earth elements what extraction is to crude oil, rather than mining itself. This structure is why China remains central to the supply chain even when deposits are found elsewhere

This explains India's late-2025 focus on magnets rather than just mining. The ₹7,280-crore scheme to establish an integrated manufacturing ecosystem for 6,000 tonnes of sintered rare earth permanent magnets a year signals that if India can make magnets domestically, it will reduce a high-impact import exposure and create a platform for downstream manufacturing in EVs, wind components and advanced electronics. However, significant challenges lie upstream of this chain. A major domestic source for rare earths is monazite-bearing beach sands, which in India lie alongside thorium and other minerals relevant to the nuclear programme. The sector is thus pushed closer to a punctilious governance regime requiring close coordination across regulators and public sector entities, and which has to treat waste management and community engagement as core industrial inputs. Second, while the National Critical Mineral Mission has assigned a large number of exploration projects through 2031 to the Geological Survey, it needs the state to also translate knowledge of deposits into separating and manufacturing capacity, which demands regulatory clarity, reliable public financing, and credible enforcement. Third, India needs to augment midstream capacity, including by making magnet production bankable through long-term offtake from EV and electronics firms, and investing in process innovation that reduces dependence on the most constrained elements. The next phase of the green transition will reward countries that can scale supply chains, avoid undermining green compliance and distribute rather than concentrate risk. For India, that means turning policy and intent into industrial capacity, with environmental credibility baked in.





Without midstream and downstream capacity, India risks remaining dependent even after discovering domestic deposits.

Key Challenges

1. Environmental and Governance Constraints

Monazite extraction involves radioactive elements, necessitating:

Strict waste management protocols

Community engagement

Inter-agency coordination

Any dilution of environmental norms could undermine the credibility of India's green transition.

2. Regulatory and Institutional Bottlenecks

The National Critical Mineral Mission has allocated multiple exploration projects till 2031.

However, gaps remain in:

Translating geological knowledge into commercial capacity

Regulatory clarity for private participation

Timely approvals and enforcement mechanisms

3. Midstream and Manufacturing Gaps

Magnet manufacturing remains capital-intensive and technologically complex.

Lack of bankable demand deters private investment.

Dependence on constrained elements like neodymium increases vulnerability.

Way Forward

Integrated Value Chain Development: Move beyond mining to build refining, alloying, and magnet manufacturing capacity.

Environmental Credibility as a Core Input: Treat environmental compliance, waste management, and social license as non-negotiable industrial inputs.

Assured Offtake and Market Creation: Enable long-term procurement commitments from EV, renewable energy, and electronics manufacturers.

Process Innovation and R&D: Invest in technologies that:





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Reduce reliance on scarce REEs

Improve recycling and material efficiency

Institutional Coordination: Align regulators, public sector enterprises, and state governments under a predictable governance framework.

Conclusion

The next phase of the global green transition will not merely reward ambition but **institutional capacity, environmental credibility, and supply chain resilience**. India's focus on rare earth magnets is strategically sound, but success will depend on whether policy intent translates into sustainable industrial capability. By embedding strong governance and environmental compliance into its clean energy supply chains, India can avoid replicating past extractive models and emerge as a reliable, responsible player in the global green economy.

UPSC Prelims Practice Question

Ques: Which of the following best explains why China continues to dominate the rare earth supply chain globally?

- A. Exclusive ownership of rare earth deposits
- B. Monopoly over renewable energy technologies
- C. Dominance in chemical refining and magnet manufacturing
- D. Lowest labour costs in the mining sector

Ans : c)

UPSC Mains Practice Question

Ques: How can India balance strategic autonomy, environmental compliance, and economic viability while developing domestic rare earth value chains? Suggest a way forward.









Page 10: GS 3: Indian Economy / Prelims

Despite starting the 20th century at development levels comparable to China and South Korea, India has failed to achieve sustained manufacturing-led industrialisation. While East Asian economies transformed their economic structures through rapid expansion of manufacturing, India's manufacturing share in GDP has remained stagnant and, in recent years, has ceded ground to services. This underperformance has significant implications for employment generation, technological upgrading, and income distribution.

Why manufacturing has lagged in India

India's manufacturing sector underperforms compared to China and South Korea, partly due to public sector wages that raise costs and reduce competitiveness; despite growth in private industries like software and services, India sees limited technological upgrading, uneven wage growth, and increasing inequality

ECONOMIC NOTES

Rahul Menon

reason why India has lagged behind certain non-We economies - such as China and South Korea – despite starting from roughly equivalent positions early in the 20th century is the relative underperformance of its manufacturing sector. While China and South Korea have seen significant increases in manufacturing, the share of manufacturing in India's GDP has remained relatively constant over time and has recently lost ground to services In a recent discussion of his book A

Sixth of Humanity, economist Arvind Subramanian explained why India has been unable to industrialise to the extent of China or South Korea. In his view, high government salaries drew workers away from manufacturing, raising prices and making it difficult for the sector to remain competitive, thus hindering its expansion. Mr. Subramanian used a theoretical framework known as the 'Dutch disease to examine this outcome.

What is the Dutch disease?

The Dutch disease refers to a phenomenon where an economic windfall can often translate into negative outcomes in other sectors, such as manufacturing. It was initially coined to explain how the discovery of the Groningen gas fields in 1959 affected Dutch manufacturing.

The theory goes as follows: imagine an economy where a substantial holding of some natural resource - such as oil or another important mineral – is discovered. This would lead to a rise in wages as the sector bids away labour from other sectors, raising the economy-wide wage rate. Moreover, exports of the resource would lead to an appreciation of the currency, increasing imports and ecreasing other price-sensitive exports These effects would hurt domestic



manufacturing, which would be outcompeted by cheap imports from abroad and, at the same time, become relatively expensive in foreign markets. But how would the Dutch disease apply

to non-tradeable goods, such as government services? Suppose an economy expands its government sector and sets high wages for its workers. Manufacturing would then find it hard to meet these wages at its given level of productivity. Increased demand from government employees – due to higher incomes – would raise prices of domestic goods. Under a regime of free trade, this would boost demand for cheaper imports, reducing demand for domestically manufactured goods even if the nominal exchange rate does not change. The real exchange rate would appreciate due to higher domestic prices.

The Dutch disease model can be used to outline such a process in which the expansion of one sector leads to reduced outcomes for other sectors through price movements. In this model, the Indian State's policy choices to raise salaries in the public sector negatively affected manufacturing and can be seen as one of the reasons why the process of structural transformation in India has stagnated.

Ouestion of technology

One problem is that the framework was initially used to analyse the effects of a windfall discovery, not the effects of policy. The relatively higher salaries cannot easily be compared to the discovery of an oil field, because one is a conscious political decision undertaken by a democratically elected government, while the other is a natural endowment.

One could argue that while the nature of the economies – one with a strong public sector and one with a natural resource endowment – is drastically different, the effects are the same and operate through the same channel of a real exchange rate appreciation. But turning the question around offers another way to view the problem. If high government salaries were initially a problem, why did technological growth not occur over the long run to make manufacturing more productive to sustain higher wages?

The theory of 'induced innovation' holds that labour scarcity and high wages can induce technological and capital-biased growth. The economist Sir John Habakkuk hypothesised that 19th-century Britain grew faster than the U.S. because of its relative scarcity of land and labour. Economic historian Robert C. Allen states that Britain's high wage ensured the need for technological innovation, which led to the Industrial Revolution occurring there rather than on the continent. In more contemporary times, Nobel laureate Daron Acemoglu used this to explain why automation led to faster productivity and wage growth in economies like Germany, Japan and South Korea – with an ageing labour force while automation restricts wages in countries like the U.S., with a larger

Limits of wages An analysis of India's development story must focus on the nature of technological change and on why the private sector growth has not translated into rising wages. The question is stark in India's fast-growing services and software industries. Entry-level salaries at major Indian software giants have shown little growth since the 2000s, despite the retreat of the State, the proliferation of markets and the rise of private sector billionaires.

A case can be made that India's modern software unicorns – such as Swiggy, Zomato, Blinkit and Ola – rely on India's abundant labour reserves rather than representing genuine technological

upgradation.
The Indian private sector has undoubtedly shown significant levels of dynamism and growth. But this growth has been lop-sided, as the rapid increase in inequality has shown us. If public sector salaries kept wages higher earlier, it is legitimate to ask why manufacturing has not responded with an adequate level of technological change to ensure productivity growth. Did governmen intervention prevent the ability to adopt new technology? Or did manufacturing become addicted to the reserves of cheap labour and not invest in technological upgradation, leading to a relative stagnation over time? Rahul Menon is associate professor at O.P. Jindal Global University

THE GIST

India has lagged behind China and South Korea because the share of manufacturing in India's GDP has rema relatively constant and has recently lost ground to

services, limiting productivity and income growth. High government salaries drew

workers away from manufacturing, raised economy-wide wages and prices, and led to a real exchange rate appreciation making manufacturing less competitive.

Despite private sector dynamism, manufacturing failed to respond with adequate technological upgradation; instead, growth relied on abundant labour reserves, leading to lop-sided growth, rising inequality, and stagnation in wages and productivity.

Background

Manufacturing has historically been the engine of structural transformation, enabling large-scale job creation and productivity growth.

In India, the share of manufacturing in GDP has hovered around 15-17%, unlike China and South Korea, where it crossed 25-30% during peak industrialisation.







Economist Arvind Subramanian, in his book A Sixth of Humanity, attributes this lag partly to public sector wage policies, analysing the phenomenon through the lens of the Dutch disease.

Understanding the Argument: Dutch Disease and India

1. Application of the Dutch Disease Framework

Traditionally, Dutch disease explains how a resource windfall raises wages and appreciates the real exchange rate, harming manufacturing competitiveness.

In India's case, the argument is that high public sector wages:

Drew labour away from manufacturing

Raised economy-wide wage expectations

Increased domestic prices of non-tradeable goods

This led to real exchange rate appreciation, reducing competitiveness of domestic manufacturing even without nominal currency appreciation.

2. Impact on Manufacturing Competitiveness

Manufacturing firms, operating at relatively low productivity levels, could not match public sector wages.

Rising domestic demand was increasingly met through imports, further weakening domestic manufacturing.

As a result, India's structural transformation stalled.

Limits of the Explanation

1. Policy Choice vs Natural Windfall

Unlike natural resource discoveries, public sector wages are deliberate political decisions.

This weakens the direct analogy with classical Dutch disease, which was not designed to explain policy-induced outcomes.

2. Failure of Induced Technological Innovation

Economic theory suggests that high wages should induce innovation, capital deepening, and productivity growth.

Historical and contemporary evidence:

Britain's Industrial Revolution

Automation-led productivity growth in Germany, Japan, and South Korea







In India, however, manufacturing did not respond with sufficient technological upgrading, indicating deeper structural constraints.

Technology, Wages, and Inequality in India

India's private sector growth has been sectorally skewed:

Services and software expanded rapidly

Manufacturing lagged in productivity growth

Even fast-growing IT and platform-based firms have:

Stagnant entry-level wages

Relied heavily on abundant cheap labour

Many digital "unicorns" represent labour-intensive aggregation models rather than frontier technological innovation.

This has resulted in:

Weak wage growth

Limited job creation

Rising income and wealth inequality

Core Structural Issues

Dependence on cheap labour reduced incentives for mechanisation and automation

Weak industrial policy coordination compared to East Asia

Limited state support for technology adoption in manufacturing

Absence of strong manufacturing ecosystems and supplier networks

Way Forward

Shift Focus to Productivity-Led Manufacturing

Encourage automation and capital deepening

Support adoption of advanced manufacturing technologies

Rebalance Industrial Policy

Move beyond services-led growth





Strengthen sector-specific manufacturing strategies

Skill and Technology Linkages

Align skilling initiatives with industrial upgrading

Promote R&D-led manufacturing clusters

Wage Growth with Productivity

Ensure wage increases are backed by productivity gains

Prevent excessive reliance on informal and low-wage labour

Conclusion

India's manufacturing stagnation cannot be explained solely by public sector wages or Dutch disease dynamics. The deeper issue lies in the failure to induce sustained technological change in manufacturing despite rising wages and private sector expansion. Without productivity-led industrialisation, India risks a growth trajectory marked by jobless growth, widening inequality, and premature deindustrialisation. A renewed focus on manufacturing-driven structural transformation is essential for achieving inclusive and sustainable economic development.

UPSC Prelims Practice Question

Ques: With reference to the 'Dutch Disease', consider the following statements:

- 1. It refers to a situation where expansion of one sector of the economy adversely affects other tradable sectors through price and wage mechanisms.
- 2. It necessarily involves appreciation of the nominal exchange rate.
- 3. It can operate even in the absence of a natural resource discovery.

Which of the statements given above are correct?

A. 1 and 2 only

B. 1 and 3 only

C. 2 and 3 only

D. 1, 2 and 3

Ans:b)

UPSC Mains Practice Question

Ques: Explain the concept of the Dutch Disease. To what extent can it be applied to explain India's underperformance in manufacturing compared to East Asian economies?







Page 10: GS 2: Governance

India's expanding maritime footprint, driven by rapid port-led development and rising coastal trade, has intensified the need for a robust and integrated port security architecture. In this context, the establishment of the Bureau of Port Security (BoPS) under the Merchant Shipping Act, 2025 marks a significant institutional reform aimed at strengthening coastal security, ensuring regulatory oversight, and aligning India's ports with global security standards.

What is the Bureau of Port Security and its role?

What challenges in coastal security does India face and how will BoPS address them?

Saee Pande

The story so far:

he Centre has constituted the Bureau of Port Security (BoPS) as a statutory body under Section 13 of the newly established Merchant Shipping Act 2025. Modelled on the Bureau of Civil Aviation Security, it will function under the Ministry of Ports, Shipping and Waterways and will be responsible for regulatory oversight functions relating to the security of ships and port facilities.

Why was BoPS created?

Currently, coastal security responsibilities are shared among multiple agencies such as the Coast Guard, Central Industrial Security Force (CISF), State maritime police, and the Navy. This leads to challenges in coordination and communication, and also leads to possible security gaps. The BoPS will be a ngle statutory body for regulatory oversight and coordination.

The BoPS will also address security

concerns such as maritime terrorism, smuggling of arms, drug trafficking, human trafficking and other illicit trafficking, poaching, illegal migration via waterways, piracy, and cybersecurity threats. It is expected to include a dedicated division to protect port IT infrastructure from digital threats, with a special focus on cybersecurity, and the collection and exchange of security-related information. The BoPS will monitor, counter, and deter such intrusions and coordinate with national

As a statutory body under the Merchant Shipping Act, the BoPS will have the legal authority to enforce compliance with international standards such as the International Ship and Port Facility Security (ISPS) Code. Under the BoPS, the CISF is designated as a recognised Security Organisation to prepare standardised plans, conduct security assessments, and train private agencies across all major and non-major ports. Security measures are to be implemented in a graded manner

cybersecurity agencies.

What is India's maritime growth so

According to the Ministry of Shipping, Ports and Waterways, the last decade has been transformative in terms of Maritime surge. Cargo growth increased from 974 million tonnes (MMT) in 2014 to 1,594 MMT in 2025. Port capacity has expanded by 57%, enhancing efficiency and volume. Ship turnaround time has reduced by half, to 48 hours, aligning with global standards. Coastal shipping volumes rose 118%, reflecting stronger domestic connectivity, while cargo movement through inland waterways surged eightfold from 18.1 MMT in 2014 to 145.5 MMT by 2025, unlocking new logistic corridors. Nine Indian ports featured in the World Bank's Container Port Performance Index, signalling rising international recognition.

In 2021, India launched its strategy for Maritime Índia Vision 2030 to ensure a safe, sustainable, and secure maritime future. At the top of the 2030 Maritime vision list is 'to develop best-in-class port infrastructure'. The BoPS has been

defined in line with this vision.

How have port laws been modernised?

These developments called for a revival and strengthening of Port security infrastructure, defined security measures and conservation of the coastal environment with an impetus for ease of business. This led to the replacement of the century-old Indian Ports Act of 1908 with the Indian Ports Act of 2025, along with additional legislation like the Coastal Shipping Act of 2025, the Modernised Merchant Shipping Legislation 2025, and the Bureau of Port Security 2025. These laws aim to modernise the framework for coastal trade, encourage Indian ownership and operation of vessels, simplify licensing and regulatory processes, and promote cost-efficient and eco-friendly sea transport.

What criticisms exist?

The new legislation has granted the Union government more authority over non-major (State-owned) ports. Some coastal States have criticised it as a "silent cost to maritime federalism." The Indian Ports Act has also been criticised for granting port officers, conservators, and health officers extensive powers for entry and inspection without clearly specifying judicial procedural safeguards. These criticisms are aimed at the legislation rather than BoPS itself. Saee Pande is a freelance writer with a focus on politics, current affairs, international relations, and geopolitics

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THE GIST

The Centre has set up the Bureau of Port Security under the Merchant Shipping Act 2025 to ensure regulatory oversight, coordination, and compliance with international security standards amid growing maritime and cybersecurity threats.

India's maritime sector has seen a sharp surge in cargo and port capacity, alongside new port laws that have also drawn criticism over increased Union control of non-major

Background: Why Was BoPS Created?

India has a 7,500+ km coastline, 12 major ports, and over 200 non-major ports.

Coastal and port security responsibilities were earlier fragmented across:

Indian Coast Guard

Indian Navy

Central Industrial Security Force (CISF)

State Maritime Police

This **multi-agency framework** often resulted in:

Overlapping mandates

Coordination gaps

Inconsistent security standards across ports



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The BoPS has been constituted as a **single statutory authority** to provide regulatory oversight, coordination, and standardisation of port and ship security across India.

India's Maritime Growth and Security Imperative

Cargo handling increased from 974 MMT (2014) to 1,594 MMT (2025)

Port capacity expanded by 57%

Ship turnaround time reduced to 48 hours

Coastal shipping grew by 118%

Inland waterway cargo rose eightfold

Nine Indian ports featured in the World Bank's Container Port Performance Index

This surge has elevated ports from logistics hubs to **critical national infrastructure**, making them attractive targets for both physical and digital threats.

Key Coastal Security Challenges Faced by India

1. Maritime Terrorism and Sabotage

Ports remain high-value targets for asymmetric warfare.

Past experiences (e.g., sea-borne terror infiltration) underline vulnerabilities.

2. Smuggling and **Illicit** Trafficking

Arms, narcotics, human trafficking, and wildlife poaching exploit porous coastal zones.

Increased coastal trade multiplies inspection and monitoring challenges.

3. Illegal Migration and Piracy

Unregulated waterways can be misused for cross-border infiltration and piracy.

4. Cybersecurity Threats

Digitisation of port operations exposes:

Cargo management systems

Vessel tracking

Customs and logistics networks







Cyber-attacks can disrupt national supply chains without physical intrusion.

5. Lack of Uniform Security Standards

Variation in security preparedness between major and non-major ports.

Role and Functions of the Bureau of Port Security

1. Statutory Regulatory Authority

Established under Section 13 of the Merchant Shipping Act, 2025

Empowered to enforce compliance with the International Ship and Port Facility Security (ISPS) Code

2. Single-Point Coordination

Acts as a nodal body coordinating:

CISF

Port authorities

State agencies

National maritime and cybersecurity institutions

3. Standardisation of Security Measures

CISF designated as a Recognised Security Organisation

Preparation of uniform security plans

Periodic security assessments and audits

Training and certification of private security agencies

4. Cybersecurity and Information Sharing

Dedicated cybersecurity division for:

Protecting port IT infrastructure

Monitoring digital intrusions

Sharing intelligence with national cyber agencies

5. Graded Security Implementation

Risk-based deployment of security measures



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Avoids one-size-fits-all approach across ports

Legal and Institutional Reforms Supporting BoPS

Replacement of Indian Ports Act, 1908 with Indian Ports Act, 2025

Introduction of:

Coastal Shipping Act, 2025

Modernised Merchant Shipping Legislation, 2025

Objectives:

Ease of doing business

Environmental safeguards

Promotion of Indian shipping

Integrated port governance

Criticisms and Concerns

Federalism Issues:

Coastal States argue increased Union control over non-major ports undermines maritime federalism.

Civil Liberties Concerns:

Expanded inspection and entry powers for port officials without clearly defined judicial safeguards.

These concerns are directed primarily at the broader port legislation, not the BoPS's security mandate per se.

Way Forward

Cooperative Federalism:

Institutionalised consultation with coastal States in security planning.

Clear Procedural Safeguards:

Balance security enforcement with due process and transparency.

Technology-Driven Security:

Al-enabled surveillance, integrated coastal radar networks, and cyber resilience.

Capacity Building:







Continuous training of port security personnel.

Environmental-Security Balance:

Ensure security expansion does not compromise coastal ecology.

Conclusion

The Bureau of Port Security represents a critical step in aligning India's maritime security framework with its growing economic and strategic ambitions. By providing unified oversight, enforcing global security standards, and addressing emerging cyber and non-traditional threats, the BoPS strengthens India's coastal security architecture. Its long-term effectiveness, however, will depend on cooperative federalism, procedural clarity, and the seamless integration of security with port-led development under Maritime India Vision 2030.

UPSC Prelims Practice Question

Ques: With reference to the Bureau of Port Security (BoPS), consider the following statements:

- 1. It has been established as a statutory body under the Merchant Shipping Act, 2025.
- 2. It functions under the Ministry of Home Affairs.
- 3. It is responsible for enforcing the International Ship and Port Facility Security (ISPS) Code in India.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 and 3 only
- (c) 1 only
- (d) 1, 2 and 3

Ans: b)

UPSC Mains Practice Question

Ques: The establishment of the Bureau of Port Security (BoPS) marks a shift towards centralised maritime security governance in India. Discuss its significance while examining concerns related to maritime federalism. **(150 words)**







Page: 08: Editorial Analysis New labour codes, the threats to informal workers

nions and workers' organisations have been raising objections against the new labour codes of 2019 and 2020. The four codes – they concern industrial relations, wages, social security and occupational health and safety of workers – were passed without a tripartite consultation between workers, employers and government representatives at the Indian Labour Conference (ILC). As implementation of the codes begin, the hard-won labour rights of workers across sectors are either threatened or destroved.

While the impact on workers in the organised sector is rightfully being discussed, debated and documented, the codes also significantly endanger unorganised sector workers, who are estimated to constitute over 90% of India's workforce and producing 65% of its GDP. As Tamil Nadu deliberates on issuing rules for the Social Security Code, the serious dangers posed by the Codes to unorganised workers in particular must be highlighted.

On the Codes

The Union Government claims that the codes are an attempt to "consolidate" and codify existing labour laws and "universalise" social security for workers. However, the claims of universalisation and consolidation are myths. Unorganised workers have been mostly left out of consideration in all codes except the one concerning social security. Alongside, in the name of consolidation, existing protections for them under other laws such as the Building and Other Construction Workers (BOCW) Act, 1996, have been threatened or entirely repealed.

For instance, about 180 rules have been laid out under the BOCW Act to ensure worker safety at construction sites. These are now entirely missing in the central rules issued for the new Occupational Safety, Health and Working Conditions (OSHWC) Code. This is a dangerous sign given the hazardous nature of labour and the high number of deaths in the construction sector.



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Unorganised workers have been left out of consideration in all the codes except the one that concerns social security The OSHWC code has also replaced an existing system of inspection with a process that is web-based, which cannot be an effective means of ensuring the safety of the workplace or minimum wage implementation. This is in violation of ILO Convention 81 which is ratified by India.

Unorganised workers can also contract diseases from prolonged manual work and exposure across several sectors. Silicosis is very prevalent in the construction sector, while agricultural workers have a high incidence of cancer from pesticide use, while salt workers face chronic eye, skin and kidney problems. There is no concern for these realities of informal workers and their working conditions in the OSHWC. This negligence stands in violation of ILO Convention 161, which calls for a national policy on occupational health services for all workers and mandates identification, treatment and rehabilitation in the event of an occupational disease.

In threatening and repealing sector-specific laws for workers such as the BOCW Act, the codes foreclose a serious consideration of the occupational health of informal workers. Given that the Employees' State Insurance (ESI) is not available to them, informal workers will have no state recognition or measures to address their occupational health and safety concerns.

Threats to welfare boards and funds

In the Social Security (SS) Code, organised workers seem to be given some social security benefits, while informal workers are to receive vaguely defined "welfare schemes". Also notable is the abolition of various cesses as part of the Goods and Services Tax reforms, with no replacement of the cesses collected to provide for the welfare of workers in the beedi, salt, mining and other sectors.

This implies that there are no guaranteed funds, raised either from employers in particular

sectors or offered by the Union government, to provide for the welfare of informal sector workers.

In fact, the SS Code sets up one welfare board for all unorganised workers, with no imagination of the various sectors that informal workers can and do work in, except for construction and gig work. Even in the construction sector, the implementation of the now-centralised e-Shram registration system creates a possibility for the central government to take over accrued funds raised for workers' welfare — estimated to be of the order of ₹1 lakh crore.

As is, in Tamil Nadu, the SS Code stands to threaten the dissolution of all existing 39 sector-specific boards established in Tamil Nadu. There are no saving clauses for these State-level welfare boards and the protections they offer, including old age pensions, maternity assistance and educational assistance for workers' children. This reality, highlighted consistently by unions and worker movements, is perhaps the main reason why Tamil Nadu continues to deliberate on issuing rules for the SS Code.

What needs to be done

Some States including Andhra Pradesh have closed down their welfare boards in response to the Codes. Tamil Nadu has a strong architecture for workers welfare under the Tamil Nadu Manual Workers Act, 1982, painstakingly built through worker and union demands and advocacy. It is estimated that there are three crore informal workers in the State, and about two crore workers registered across the various welfare boards.

To ensure the welfare of these workers, the State government must protect its welfare boards and State-level labour legislation at all costs. Like Kerala, Tamil Nadu must refuse to implement the codes and notify rules, and, instead, push for saving clauses of existing State-level welfare infrastructure.

GS Paper 2: Governance

UPSC Mains Practice Question: "Labour law reforms in India aim to simplify regulation and improve ease of doing business, but risk excluding the informal workforce." Critically examine how the new labour codes affect informal workers in India. What safeguards are required to ensure inclusive and equitable labour reform? (150 words)







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Context:

India's new labour codes, enacted between 2019 and 2020, were projected as transformative reforms aimed at consolidating labour laws, improving ease of doing business, and universalising social security. However, as States begin the process of implementation, serious concerns have emerged regarding their impact on informal workers, who constitute over 90% of India's workforce and contribute nearly two-thirds of GDP. Far from extending protection, the labour codes risk diluting long-standing safeguards for unorganised workers.

Background: The New Labour Codes

Four labour codes were enacted:

Code on Wages

Industrial Relations Code

Social Security Code

Occupational Safety, Health and Working Conditions (OSHWC) Code

These codes replaced nearly 29 existing labour laws.

The codes were passed without tripartite consultation at the Indian Labour Conference, departing from established labour governance norms.

Key Issues Affecting Informal Workers

1. Erosion of Sector-Specific Legal Protections

Laws such as the Building and Other Construction Workers (BOCW) Act, 1996, which contained detailed safety and welfare provisions, have been diluted or repealed.

Nearly 180 safety-related rules under BOCW find no equivalent safeguards in the OSHWC Code.

This is particularly concerning given the high accident and fatality rates in construction and other hazardous sectors.

2. Weakening of Inspection and Enforcement Mechanisms

The OSHWC Code replaces physical labour inspections with web-based, risk-based inspections.

This undermines on-ground enforcement of:

Minimum wages

Workplace safety

Such dilution conflicts with International Labour Organization Convention 81, which mandates effective labour inspection systems.

3. Neglect of Occupational Health of Informal Workers

Informal workers face severe occupational health risks:

Silicosis among construction and mining workers

Cancer among agricultural workers due to pesticide exposure

Chronic ailments among salt workers

The OSHWC Code does not adequately recognise, monitor, or compensate occupational diseases.







This runs contrary to ILO Convention 161, which calls for a national occupational health policy for all workers.

Threats Under the Social Security Code

1. Vague Welfare Entitlements

While organised workers receive defined social security benefits, informal workers are promised loosely worded "welfare schemes".

There is no statutory guarantee of:

Coverage

Adequate funding

Timely delivery

2. Abolition of Welfare Cesses

Sector-specific cesses (beedi, mining, salt, etc.) have been abolished post-GST.

No alternative funding mechanism has been assured.

This leaves informal worker welfare dependent on discretionary budgetary support.

3. Centralisation and Weakening of Welfare Boards

The Social Security Code proposes a single welfare board for all unorganised workers.

This ignores sectoral diversity and specific risks.

State-level welfare boards, such as Tamil Nadu's 39 sector-specific boards, face possible dissolution.

Centralised platforms like e-Shram raise concerns about potential central control over large accumulated welfare funds.

Federalism and State-Level Concerns

Labour is a Concurrent List subject, requiring cooperative federalism.

States like Tamil Nadu and Kerala have built robust welfare architectures through State legislation.

The absence of saving clauses for existing State laws undermines:

State autonomy

Context-specific welfare models

Some States have already dismantled welfare boards, signalling a race to the bottom in labour protection.

Way Forward

Restore Tripartite Dialogue: Reinvigorate the Indian Labour Conference as a platform for consensus-building.

Insert Saving Clauses: Protect existing State-level welfare boards and sector-specific legislation.

Strengthen Inspection Mechanisms: Combine digital tools with mandatory physical inspections.

Guarantee Funding for Informal Workers: Reintroduce or replace sectoral cesses with statutory funding mechanisms.

Align with International Labour Standards: Ensure compliance with ratified ILO conventions on labour inspection and occupational health.

Conclusion

The new labour codes, in their present form, risk deepening the vulnerability of India's informal workforce by dismantling sectorspecific protections, weakening enforcement, and centralising welfare mechanisms without safeguards. For a country where







informal labour is the backbone of economic activity, labour reform must prioritise worker security alongside economic efficiency. Sustainable labour governance requires not dilution, but strengthening of rights through cooperative federalism, institutional accountability, and social justice.



