



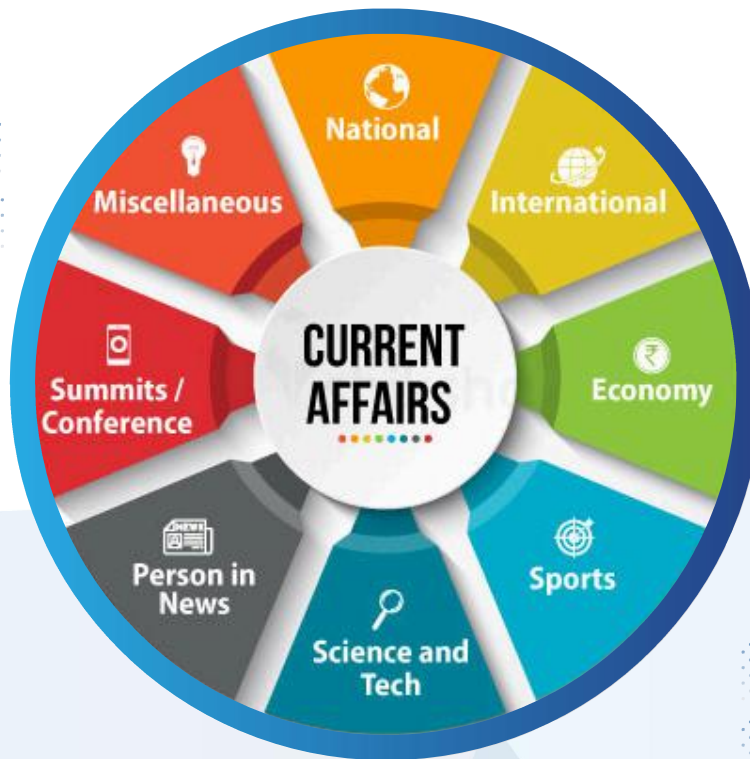
“ We help you reach for the star ”

VIDHVATH IAS KAS ACADEMY
&
STUDY CENTRE

DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

DATE: 27/05/2025 (TUESDAY)



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1. India's GDP Rank – Behind the Buzz

- **Current GDP Ranking Status (as per IMF):**

As per IMF's World Economic Outlook (April 2025), India's GDP is estimated at **\$3.91 trillion for FY25**, while **Japan's is \$4.03 trillion for CY24**, making India the **fifth-largest economy currently**. India is **projected to overtake Japan in FY26**, when its GDP is expected to reach **\$4.187 trillion**, just surpassing Japan's **\$4.186 trillion**.

- **Difference in Time Frame Interpretation (FY vs CY):**

The confusion arises due to the **difference in reporting years**—India uses a **fiscal year (April–March)**, while IMF tables label it as a **calendar year for consistency**. This misalignment **may lead to premature claims** about India overtaking Japan.

- **Per Capita GDP – A Reality Check:**

Despite high overall GDP, **India's per capita GDP remains low**. As per IMF's PPP-based estimates for FY25:

- India: **\$11,228**
- Japan: **\$52,712**
- China: **\$27,093**

India has **the lowest per capita GDP among G20 nations**, reflecting **persistent inequality and challenges in inclusive growth**.

- **India's Long-Term Economic Outlook:**

- **Projected growth in FY26:** 6.2% (revised down from 6.5%) due to global headwinds.
- Growth drivers: **rural consumption, infrastructure development, and reforms**.
- **India may surpass Germany by FY29 (2028)** to become the **world's third-largest economy**, depending on Germany's recovery trajectory.

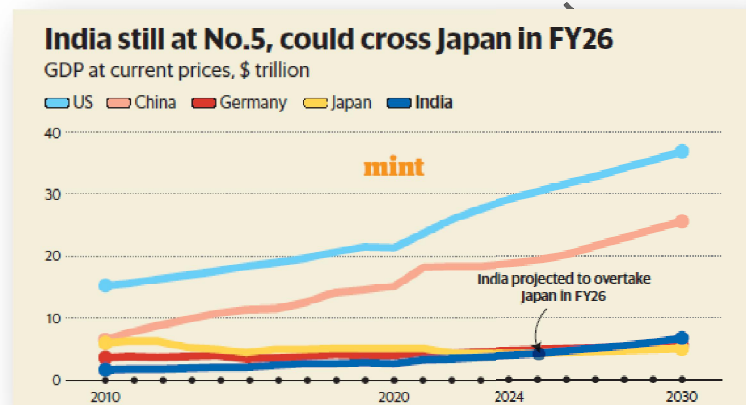
- **India's GDP Journey – From Margins to Top 5:**

In the **early 2000s**, India was not in the top 10 global economies. Over two decades:

- Surpassed Brazil, Italy, Canada (by 2015)
- Overtook UK and France (by 2022)
- **Currently stands at 5th position**, with a strong upward trajectory.

- **Constitutional & Legal Provisions Related to Economic Development:**

- **Article 38:** Directive Principles urging the State to secure a **social order promoting welfare and reducing inequalities**.





- **Article 39(b)**: Emphasizes **equitable distribution of resources**.
- **Finance Commission (Article 280)**: Critical for **fiscal transfers** and ensuring balanced development.
- **NITI Aayog** (executive body): Facilitates economic planning and reforms necessary for sustaining growth momentum.

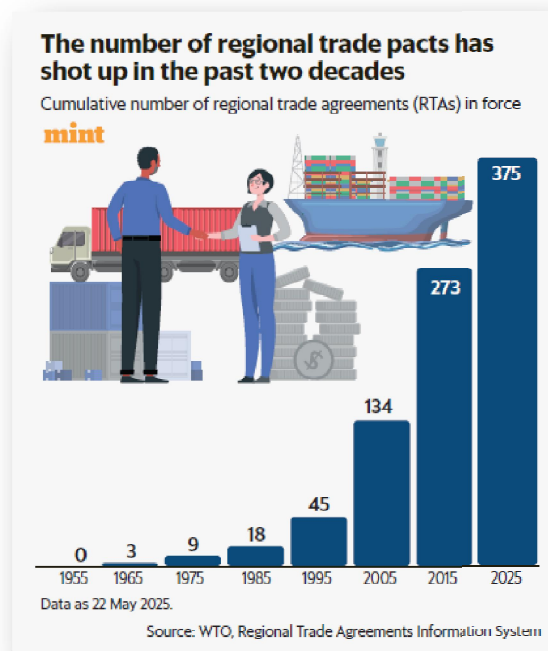
Conclusion:

India's rise in global GDP rankings highlights its robust macroeconomic fundamentals and potential. However, **celebrations must be tempered** with clarity on data interpretation and the reality of low per capita income. True economic progress will lie not only in overtaking nations in nominal terms, but in **inclusive growth, poverty reduction, and improved living standards**. The coming years demand sustained reforms, infrastructure investment, and human capital development to ensure **India's economic rise is both rapid and equitable**.

2. How Country Pacts Are Redefining Global Trade

- **Rise of Regional Trade Agreements (RTAs):**

There are **375 RTAs currently in force**, with **241 signed in the last 20 years**. Developed economies lead with **3x more agreements than developing countries**. India is part of **19 RTAs**, ranking **11th globally**, and such agreements increasingly cut **across regions** (e.g., India–UAE) rather than being region-specific (e.g., India–ASEAN).



- **Shift from Tariffs to Deep Trade Agreements:**

The new trend is toward **‘deep trade agreements’**, which include **non-tariff issues** like competition policy, investment, environmental laws, IP rights, labour regulations, and procurement rules. These agreements **enhance resilience**, as seen during COVID-19: export contraction was **only 8.5% for nations with deep RTAs**, versus **14.1% for those without**.

- **India's Conservative Approach to Deep Trade:**

India's trade pacts **cover fewer non-tariff domains** compared to the US or China. As per WTO's database, **India ranks 152nd in depth**, covering only **7.2 policy areas** on average, compared to **14.6 for China** and **15.7 for Vietnam**. India's cautiousness stems from **protecting domestic**

stakeholders (e.g., farmers, generic medicine access), but this limits integration into **high-standard global value chains**.

- **Global Trade Architecture & India's Position:**

The share of global imports from RTA partners rose from **37% in 2010 to 52% in 2022**, showing the growing dominance of such agreements. India's recent FTAs (e.g., with UAE) contributed significantly to exports—**\$37 billion in FY25** from the UAE alone. However, **India is not part of major blocs like RCEP**, which includes 15 Asia-Pacific economies covering **30.5% of global GDP**.



- **RTAs as Tools of Economic Diplomacy and Strategic Influence:**

Trade pacts are increasingly used as tools of **strategic alliances**, economic diplomacy, and influence-building. For India, participation in **high-standard FTAs** with developed partners can serve both **economic goals and geopolitical positioning**, especially in the Indo-Pacific and Global South contexts.

- **Constitutional and Legal Context:**

- **Article 301:** Guarantees freedom of trade, commerce, and intercourse within India—relevant to discussions on extending such principles globally.
- **Article 246 & 253:** Empower Parliament to legislate on foreign trade matters and treaties.
- **Foreign Trade (Development and Regulation) Act, 1992:** Provides legal basis for India's foreign trade policy.
- **National Trade Facilitation Action Plan (NTFAP):** Aims to simplify trade processes and improve competitiveness.

Conclusion:

The global trade paradigm is shifting from **multilateralism to plurilateral and bilateral pacts** with deeper commitments. While India's increasing participation in RTAs signals growing global integration, its **cautious stance on deep trade issues limits its ability** to fully leverage such agreements. Moving forward, India must **balance protection of domestic interests** with the need to **enter deeper trade arrangements** that promote competitiveness, attract investment, and boost exports. Strategic engagement in comprehensive trade pacts will be **vital for India's long-term economic and geopolitical ascent**.

3. RBI Seeks Approval for Rupee Lending to Overseas Borrowers

- **Step Towards Rupee Internationalization:**

The **Reserve Bank of India (RBI)** has proposed allowing **Indian banks and their foreign branches to lend in Indian Rupees (INR) to overseas borrowers**. This marks a significant move in the direction of **making the rupee a global currency**, aimed at **reducing dependence on the US dollar** and boosting the rupee's role in **cross-border trade and investment**.

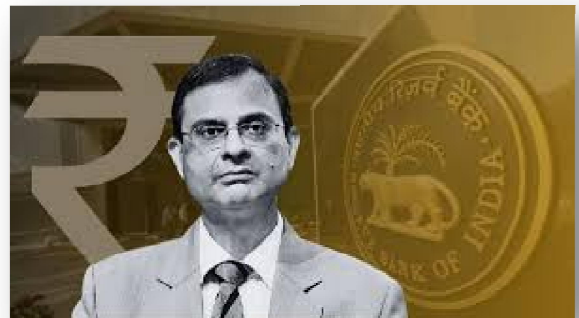
- **Current Status of Rupee Usage in Global Trade:**

While the RBI has previously allowed **INR trade settlement arrangements** with select countries (like Russia, Sri Lanka, and Mauritius), the **lending of rupees internationally is not yet permitted**.

This restriction has limited the **depth and global adoption** of the rupee in international markets, despite increasing interest from countries facing dollar shortages.

- **Benefits of Overseas Rupee Lending:**

- Enhances **trade facilitation** with countries facing forex challenges.
- Reduces **transaction costs and exchange rate risks** for Indian exporters.
- Boosts **financial diplomacy** and strengthens India's economic influence in the **Global South**.





- Could eventually support the rupee's inclusion in **global currency baskets**, like IMF's **Special Drawing Rights (SDR)**.
- **Risks and Regulatory Considerations:**
Key concerns include **currency volatility**, **capital flight**, and **monetary control**. The government and RBI will need to ensure **robust monitoring mechanisms**, possibly with **limited and country-specific permissions** initially, to avoid **macroeconomic instability**.
- **Legal and Constitutional Framework:**
 - **Foreign Exchange Management Act (FEMA), 1999** governs cross-border capital and current account transactions and would require **amendments or regulatory guidelines** to permit rupee lending abroad.
 - **Article 246 & 253** of the Constitution empower Parliament to legislate on foreign trade, banking, and international treaties.
 - RBI acts under **Section 45W of the RBI Act, 1934**, for currency management and regulatory frameworks.

Conclusion:

The RBI's proposal to permit **rupee-denominated overseas lending** is a crucial strategic step towards **rupee internationalization**. While it can enhance India's **global trade footprint** and financial clout, careful **phased implementation and regulatory oversight** will be essential. For India to emerge as a **major economic power**, integrating its currency more deeply into **global trade and financial systems** is both a **monetary imperative and a geopolitical necessity**.

4. India Seeks Easier Phytosanitary Norms for Fruit and Vegetable Exports to US

- **India Pushes for Relaxation in Sanitary and Phytosanitary (SPS) Measures:**
India is urging the United States to ease **stringent SPS regulations** that hinder the export of Indian fruits and vegetables. These **health and pest-risk standards** have led to frequent rejections by US customs, including the recent destruction of a **25-tonne mango shipment**, resulting in a **\$500,000 loss**.
- **Target Products and Market Trends:**
India is seeking greater access for products such as **mango, pomegranate, litchi, guava, pineapple, jackfruit, green chilli, carrots, and gourds**. Though demand is high among the **Indian diaspora**, exports face restrictions due to **mandatory irradiation and inspections**, which are often slow and cost-intensive.
- **Proposed Bilateral Trade Agreement (BTA):**
The issue is being discussed as part of a **long-awaited India-US BTA**, led by Commerce Minister **Piyush Goyal**. India has proposed that **pre-clearance agencies and irradiation facilities** be established within India to **expedite certification and reduce spoilage**, enhancing competitiveness in the US market.
- **Export Statistics and Trends:**
 - India's **fruit and vegetable exports to the US** rose from **\$259.82 million in FY23** to **\$331.47 million in FY25**, showing **27.5% growth**.





- India's **overall horticultural exports** also grew by **over 20%** during the same period.
- The **US share** in India's fruit and vegetable exports increased from **8.12% to 8.59%** over FY23–FY25.
- **Tariff Disparity and Trade Barriers:**
Indian agricultural and processed food exports face an average **5.29% tariff** in the US, while similar US goods face a much higher **37.66% tariff** in India. The **GTRI report** suggests India could benefit significantly in sectors like **fish, meat, and processed seafood**, if tariff differentials are addressed under the BTA.
- **Constitutional & Legal Framework:**
 - **Foreign Trade (Development & Regulation) Act, 1992** governs India's export-import policy.
 - **Article 246 & 253** of the Constitution allow Parliament to legislate on foreign trade and international agreements.
 - India's participation in **WTO's SPS Agreement** mandates scientific justification for trade restrictions and the promotion of harmonization with international standards.

Conclusion:

India's push for **simplified SPS procedures** and faster certifications under the proposed **Bilateral Trade Agreement** with the US is vital to improving **market access** and reducing losses for perishable exports. If successful, it could significantly enhance India's **agri-export potential**, diversify its **export basket**, and boost rural incomes, contributing to **Doubling Farmers' Income**—a key national goal.

5. Rising COVID-19 Cases in India: Current Status and Public Health Implications

- **Current Situation of COVID-19 in India:**
India has reported **over 1,000 active COVID-19 cases**, according to the Union Health Ministry's COVID-19 dashboard. **752 cases** have been confirmed recently, indicating a **gradual resurgence** of infections in certain regions.
- **State-wise Distribution of Active Cases:**
 - **Kerala** leads with **430 cases**, followed by **Maharashtra (209)** and **Delhi (104)**.
 - Other states showing smaller but notable numbers include **Gujarat (83)**, **Tamil Nadu (69)**, **Karnataka (47)**, and others.
 - This data reflects the **localized resurgence**, requiring state-specific containment strategies.
- **Health Governance and Preparedness Mechanisms:**
 - COVID-19 response is managed under the **Epidemic Diseases Act, 1897** and the **Disaster Management Act, 2005**, enabling central coordination and state-level enforcement.
 - The **Integrated Disease Surveillance Programme (IDSP)** and the **National Centre for Disease Control (NCDC)** play key roles in real-time surveillance and outbreak management.
- **Constitutional Provisions Related to Health:**
 - **Article 21** (Right to Life) includes the right to health as interpreted by the judiciary.



- **Public health and sanitation** are placed under the **State List (Entry 6)**, though the central government coordinates during emergencies.
- **Article 47** (Directive Principles) directs the state to improve public health and nutrition.
- **Public Health Implications:**
 - Even though the numbers are relatively low, the presence of over 1,000 active cases suggests the need for **continued surveillance, vaccination, and preparedness for future variants**.
 - States like Kerala and Maharashtra, having previously experienced high caseloads, must maintain **testing, contact tracing, and health infrastructure** readiness.
- **Global Context and Lessons Learned:**
 - The recent uptick underscores the **endemic potential** of COVID-19 and aligns with global trends of **periodic surges**.
 - WHO emphasizes **sustained health communication, vaccine equity, and investment in public health infrastructure**.

Conclusion:

While India has made significant strides in **vaccination** and **pandemic response**, the current rise in COVID-19 cases highlights the need for **continuous vigilance, robust healthcare systems, and coordinated federal-state responses**. This development serves as a reminder for long-term **pandemic preparedness** and **resilient public health governance**, crucial for managing future health crises.

6. Strengthening Medium Enterprises: NITI Aayog's Fintech Push

- **Key Role of Medium Enterprises in Economic Growth:**

NITI Aayog's report emphasizes that **medium enterprises** (distinct from micro and small units) are **under-leveraged yet critical** to India's industrial and employment landscape. They are envisioned as **potential growth engines** of the future economy.



- **Policy Recommendations by NITI Aayog:**

The report suggests a **tailored policy approach**, including:

- **Customised financial tools** suited to the unique needs of medium enterprises.
- **Greater technology adoption**, especially digital financial platforms.
- A **centralized digital portal** for ease of access to credit, incentives, regulatory filings, and handholding support.

- **Challenges Faced by Medium Enterprises:**

Despite being more formalized than micro and small enterprises, medium units face:

- **Credit gaps,**
- **Lack of visibility in policy discourse,** and
- **Inadequate digital integration,** limiting their potential to scale and compete globally.



- **Legal and Institutional Provisions Supporting MSMEs:**
 - **Micro, Small and Medium Enterprises Development Act, 2006:** Defines the classification and promotes MSME development.
 - **Udyam Registration:** Mandatory digital registration process under MSME Act for policy benefits.
 - **RBI Framework:** Provides sector-specific lending norms and restructuring support.
 - **TReDS Platform:** Enables invoice discounting for MSMEs.
- **Constitutional Backing for MSME Promotion:**
 - **Article 43 (Directive Principles):** Promotes cottage industries through State support.
 - **Article 19(1)(g):** Right to practice any profession or carry on any occupation, trade, or business.

These articles provide an implicit framework to nurture small and medium business environments.

Conclusion:

NITI Aayog's renewed focus on **medium enterprises** signals a vital policy shift towards **bridging the missing middle** of India's industrial base. With **fintech tools**, **digital empowerment**, and **policy realignment**, these enterprises can catalyze **job creation**, **export growth**, and **technological competitiveness** — crucial for realizing **Atmanirbhar Bharat** and **\$5 trillion economy** goals.

7. India-Myanmar-Thailand Highway: A Strategic Gateway for Assam's Chipmaking Ambitions

- **Assam's \$3 Billion Semiconductor Pitch:**

Assam CM Himanta Biswa Sarma is positioning the state as a **future electronics and semiconductor hub** by offering ₹25,000 crore (approx. \$3 billion) in state subsidies. These are in addition to the **central government's production-linked incentive (PLI) scheme**.
- **India-Myanmar-Thailand (IMT) Trilateral Highway as Game Changer:**

The highway, expected to be operational within **3 years**, will give **Assam direct road access to Southeast Asia**. This is seen as a **strategic advantage** to boost trade, **attract foreign investment**, and **facilitate exports** of India-made semiconductor chips to markets like Thailand, Vietnam, and beyond.
- **Electronics Manufacturing Push in Northeast:**

Unlike established tech hubs like Karnataka, Tamil Nadu, and Gujarat, **Assam is using subsidies and strategic connectivity** to attract semiconductor companies. This move aligns with **India's broader semiconductor mission** and aims to **decentralize industrial development**.
- **Key Government Initiatives and Legal Backing:**





- **National Policy on Electronics (NPE), 2019 and India Semiconductor Mission (ISM):** Provide the policy and financial framework for chip manufacturing.
- **PLI Scheme for Semiconductor and Display Fabs (2021):** Offers up to 50% financial support on project cost.
- **Act East Policy:** Encourages infrastructure and trade ties with Southeast Asian countries—IMT Highway is a key component.
- **Article 301** of the Constitution: Ensures freedom of trade and commerce throughout the territory of India, promoting inter-state and international trade corridors.
- **Recent Industrial Investments in Assam:**
Major corporates like the **Tata Group have pledged ₹30,000 crore (\$3.5 billion)** for manufacturing and renewable energy. The state is now conducting **roadshows across Delhi, Mumbai, Bengaluru, and Chennai** to attract more players.

Conclusion:

Assam's proactive semiconductor strategy, backed by the **IMT Highway** and **generous subsidies**, reflects a bold attempt to **leverage geopolitics and infrastructure** for industrial transformation. While infrastructure gaps remain, strategic connectivity with Southeast Asia under **India's Act East Policy** and **PLI-backed incentives** can position Assam as a **rising player in high-tech manufacturing**, fostering inclusive regional development.

8. Government Crackdown on Dark Patterns in E-Commerce

- **What are Dark Patterns?**
Dark patterns are **deceptive design practices** used in user interfaces of websites or apps to manipulate users into making choices they might not otherwise make — such as **pre-selected checkboxes, hidden charges, or confusing cancellation paths**. These undermine consumer autonomy and violate ethical business practices.
- **Consumer Affairs Ministry Steps In:**
The Union Ministry of Consumer Affairs has convened a **meeting with major e-commerce players** (e.g., Amazon, Flipkart, Swiggy, Zomato, Apple, Meta) to discuss **measures to curb dark patterns** and **possible penal actions** for continued non-compliance with consumer protection regulations.
- **Ensuring Fair Digital Commerce:**
The government emphasizes that curbing dark patterns is crucial for **fairness, transparency, and consumer trust** in the fast-growing digital marketplace. This is aligned with the **Consumer Protection (E-Commerce) Rules, 2020**, and the **Guidelines for Prevention of Misleading Advertisements and Endorsements, 2022**.
- **Stakeholder Involvement for Holistic Policy:**
The meeting will involve **industry associations, consumer advocacy groups, and law universities** to share best practices, research insights, and compliance models. This is aimed at formulating **robust, participatory, and enforceable digital consumer policies**.





- **Legal and Constitutional Backing:**

- **Article 38 & 39** of the Indian Constitution: Mandate the State to protect consumer interests and prevent exploitation.
- **Consumer Protection Act, 2019**: Recognizes unfair trade practices and misleading advertisements as violations.
- **Section 10 of the IT Rules, 2021**: Requires online platforms to ensure user autonomy and transparency.
- The **Central Consumer Protection Authority (CCPA)** is empowered to take suo motu action against violations.

- **Balanced Regulatory Approach:**

The government clarifies its intention is **not to stifle innovation**, but to ensure that **technological progress does not come at the cost of consumer rights**. Businesses that comply will be encouraged, while habitual violators may face stricter penalties.

Conclusion:

The growing menace of **dark patterns** challenges the core principles of **ethical business, informed consent, and digital fairness**. By tightening regulatory oversight and engaging with stakeholders, the government is moving towards a **consumer-friendly digital ecosystem**. This intervention highlights the need for **tech regulation with a human rights perspective**, making it a key development under the **Digital India** and **Ease of Doing Business** frameworks.

9. Shortage of Essential Medicines and Diagnostics in Public Healthcare

- **Critical Shortage in Public Health Facilities:**

A recent review shows that several Indian states and Union Territories — including populous ones like **Uttar Pradesh, Maharashtra, Gujarat, West Bengal, and Bihar** — have **less than 40% availability of essential drugs and diagnostic services** in government-run hospitals and health centres. This shortage hampers delivery of basic health services amid rising disease burden.

- **Free Drugs and Diagnostics Service Initiative (FDSI):**



Launched under the **National Health Mission (NHM)** in 2015, **FDSI** aims to provide **free essential medicines and diagnostic services** to reduce **out-of-pocket expenditure (OOPE)**. However, poor implementation, lack of public awareness, and **gaps in data reporting and portal updating** have hindered its effectiveness.

- **Role of IPHS and DVDMS:**

The **Indian Public Health Standards (IPHS) 2022** provide benchmarks for public healthcare delivery. The **Drugs and Vaccines Distribution**

Management System (DVDMS) is an IT-enabled logistics and supply chain platform being used to monitor availability and distribution of drugs and diagnostic supplies at district levels. A new diagnostic module is being piloted under DVDMS.



- **Definition – Essential Drugs & Diagnostics:**
These are **life-saving or routinely required medicines and tests**, selected based on disease prevalence, evidence of efficacy, safety, and cost-effectiveness. They are included in the **National Essential Medicines List (NLEM)** and **National Essential Diagnostics List (NEDL)** and are crucial for achieving **Universal Health Coverage (UHC)**.
- **Constitutional and Legal Provisions:**
 - **Article 21:** Guarantees the Right to Life, which includes the right to health.
 - **Directive Principles of State Policy (Article 39(e), 47):** Direct the State to improve public health and prevent exploitation.
 - **National Health Mission (NHM):** A centrally sponsored scheme aimed at accessible, affordable, and quality health services.
 - **IPHS Guidelines:** Mandate minimum service delivery and infrastructure in public healthcare institutions.
- **Expert Viewpoint & Government Directive:**
Experts like Dr. K. Srinath Reddy emphasize that **lack of essential drugs/diagnostics** contributes significantly to **financial hardship and poor health outcomes**, especially for chronic diseases. The Union Health Ministry has urged states to **update their essential drug and diagnostic lists** to align with national standards and improve FDSI implementation.

Conclusion:

India's goal of **Universal Health Coverage** cannot be achieved without ensuring the **uninterrupted availability of essential drugs and diagnostic services**. Gaps in public healthcare delivery reflect both **administrative inefficiencies** and **resource constraints**. Effective implementation of FDSI, integration with IPHS, and real-time data monitoring through DVDMS are crucial to reduce OOPE and enhance public health outcomes.

10. U.S. Deploys NEMESIS to Counter China's Naval Expansion in the Pacific

- **Deployment of NEMESIS near Taiwan:**
The U.S. has deployed the **Navy-Marine Expeditionary Ship Interdiction System (NEMESIS)**—a land-based, remote-controlled anti-ship missile launcher—to **Batan Island in the northern Philippines**, about 120 miles south of Taiwan. This is part of a broader strategy to **deter China's naval dominance** in the **Indo-Pacific region**, especially amid tensions over **Taiwan** and the **South China Sea**.
- **Key Capabilities of NEMESIS:**
The system uses **Naval Strike Missiles (NSMs)** with a range of about **115 miles** and high precision in targeting moving ships. NEMESIS enhances **concealment, mobility, and remote operation**, making it more survivable and unpredictable compared to traditional ship- or land-based missile platforms like **HIMARS**.





- **Strategic Significance & Deterrence Value:**
NEMESIS can be hidden on **small mountainous islands**, complicating Chinese military planning by creating **strategic uncertainty**. This aligns with "**distributed lethality**"—a U.S. Navy concept of dispersing offensive capabilities to avoid easy targeting and enhance deterrence.
- **Philippines–U.S. Defence Cooperation:**
Under **EDCA (Enhanced Defense Cooperation Agreement)**, the **Philippines**, a key U.S. treaty ally, has granted access to more bases. This facilitates **pre-positioning of equipment**, training, and enhanced readiness. The deployment of NEMESIS demonstrates **increased U.S. operational flexibility** without needing permanent military bases.
- **Definition – NEMESIS:**
NEMESIS (Navy-Marine Expeditionary Ship Interdiction System) is a mobile, truck-mounted, unmanned missile launcher capable of firing precision anti-ship missiles from land, enhancing the U.S. Marine Corps' **expeditionary and littoral warfare** capabilities.

Additional Key Points for UPSC:

- **South China Sea Dispute:**
The South China Sea is a **vital trade corridor** where China asserts expansive territorial claims, overlapping with those of the Philippines, Vietnam, Malaysia, Brunei, and others. It has become a flashpoint for **freedom of navigation operations (FONOPs)** and military posturing.
- **India's Strategic Concerns:**
While not directly involved, India upholds **freedom of navigation** and opposes unilateral changes to the status quo in the Indo-Pacific. India's participation in **QUAD**, **Malabar exercises**, and **Indo-Pacific Oceans Initiative (IPOI)** reflects its interest in maintaining **regional security balance**.
- **International Law:**
The **UN Convention on the Law of the Sea (UNCLOS)** is central to territorial disputes in maritime zones. China's disregard for the 2016 PCA ruling (in favour of the Philippines) remains a major **legal and diplomatic challenge**.

Conclusion:

The deployment of **NEMESIS** reflects the U.S.'s strategic shift to **asymmetric, agile military postures** in the Pacific to counter China's naval rise. By leveraging **geographical chokepoints**, advanced missile systems, and partnerships with allies like the Philippines, the U.S. is enhancing its **deterrence architecture**. For India, these developments underscore the growing **militarization of the Indo-Pacific**, reinforcing the need for **maritime awareness, diplomatic readiness, and strategic alignment with like-minded nations** to preserve regional stability.

11. Indigenous High-Resolution Weather Forecasting Model Developed by IMD

- **BharatFS – A New Forecasting System:**
The **India Meteorological Department (IMD)** has developed a new indigenous weather forecasting model called **Bharat Forecast System (BharatFS)**, which operates at a **6-km horizontal spatial resolution**—an improvement over the earlier 12-km model. This will enable **weather forecasts at the panchayat level**, strengthening local decision-making.
- **Technological Advancements & TCO Grid:**
BharatFS uses a **Triangular Cubic Octahedral (TCO) grid**, designed to enhance resolution over the **tropics**, especially South Asia. This allows accurate weather prediction at micro-geographic levels, aiding **early warning systems, climate resilience, and disaster preparedness**.



- **Significance Across Sectors:**

The system will boost capabilities in **agriculture, public safety, transportation, energy management, and disaster risk reduction**. It also enables **timely and targeted advisories** to farmers and local authorities, helping in **crop planning**, resource use optimization, and protection of lives and infrastructure during extreme weather events.

- **India's Leadership in Global Forecasting:**

BharatFS is the **only global numerical weather prediction system** with such **high resolution deployed in the tropics**, marking a major milestone in India's push for **technological self-reliance** and leadership in **climate science**.

- **Constitutional & Legal Provisions:**

- **Article 48A** of the Constitution (Directive Principles) requires the State to protect and improve the environment.
- **Disaster Management Act, 2005** mandates institutions like **NDMA, IMD, and state disaster authorities** to develop capabilities for **risk assessment and early warning**.
- **National Policy on Disaster Management (NPDM), 2009** emphasises the need for accurate forecasting and dissemination of warnings at the grassroots.

Key Definition:

- **Numerical Weather Prediction (NWP):** A method of forecasting weather using mathematical models of the atmosphere and oceans, based on current weather conditions and high-performance computing.

Conclusion:

The launch of **BharatFS** marks a transformational step toward **localised and accurate weather forecasting** in India. This initiative enhances India's ability to tackle the growing risks of **climate change-induced extreme weather events**, strengthens **grassroots disaster preparedness**, and supports key developmental goals in **agriculture and rural governance**. It reflects a strong push toward **Atmanirbhar Bharat** in the field of **climate and environmental governance**.

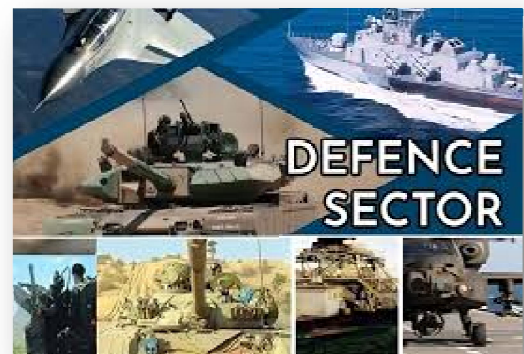
12. Defence Sector in India – Strategic Importance & Investment Implications (UPSC-Centric)

- **Strategic Significance of the Defence Sector**

India's challenging geopolitical neighbourhood, marked by hostile and unstable neighbours (e.g., Pakistan, China), necessitates sustained defence preparedness. India is the world's 5th largest military spender (2024: \$86.1 billion) and maintains the second-largest standing army, underlining its strategic need for a robust and self-reliant defence sector.

- **Shift from Importer to Manufacturer**

India was the second-largest global arms importer from 2000–2024 (SIPRI). However, with strong policy interventions (Make in India, Defence Corridors, Indigenisation Lists), the country has reversed this trend—65% of defence goods are now indigenously produced, up from 30–35% a decade





ago. Defence exports surged from ₹686 crore in 2013–14 to ₹23,622 crore in 2024–25, with a goal of ₹50,000 crore by 2029.

- **Key Government Initiatives & Policy Measures**

- **FDI Reforms:** Up to 74% through automatic route, 100% via government route.
- **Agnipath Scheme:** Optimises defence expenditure by reducing pension burden.
- **Defence Corridors:** Set up in Tamil Nadu and Uttar Pradesh for cluster-based manufacturing.
- **Defence Acquisition Council (DAC):** Cleared procurements worth ₹8.45 trillion between 2021–25.
- **Budgetary Allocation:** ₹6.8 trillion in 2025–26, forming 13.45% of Union Budget – the highest among all ministries.

- **Rise of Indigenous Defence Manufacturing**

Major indigenous platforms include LCA Tejas, Arjun MBT, Dhanush and ATAGS artillery systems, Akash missile, and indigenous aircraft carriers. India's defence industrial base comprises 16 DPSUs, over 430 licensed firms, and ~16,000 MSMEs, creating a self-sustaining ecosystem.

- **Economic and Investment Dimensions**

Defence is transitioning from a **cyclical** to a **strategic growth sector**, comparable to IT, Banking, and FMCG. Key public and private players—HAL, BEL, BEML, Bharat Forge, etc.—have shown exceptional stock performance post-Operation Sindoor. Capital outlay in defence is expected to grow 7–8% annually over five years (~\$130 billion). Defence electronics and naval modernization are expected to lead sectoral growth.

Additional Key Points for UPSC

- **Constitutional Provision:**

- **Article 246 & Schedule VII (List I):** Defence falls under Union List—Centre has exclusive powers to legislate.
- **Article 53(2):** The supreme command of the Defence Forces is vested in the President.

- **Legal Framework:**

- **Defence Production Policy (DPrP) 2018** and **Defence Acquisition Procedure (DAP) 2020** aim to boost indigenous capability.
- **Factories Act, 1948** and **Arms Act, 1959** govern aspects of defence manufacturing and regulation.

- **Definition: Indigenisation**

The process of developing and producing defence equipment and platforms domestically to reduce reliance on foreign suppliers, enhance self-reliance (Atmanirbhar Bharat), and promote strategic autonomy.



Conclusion

India's defence sector is no longer merely a response mechanism to conflict but a cornerstone of national security, strategic autonomy, and economic opportunity. From being a top arms importer to aspiring for export leadership, India's transformation is driven by robust policy backing, budgetary support, and public-private participation. For UPSC aspirants, understanding this sector's evolution reflects the broader themes of strategic planning, indigenisation, and Atmanirbhar Bharat, making it crucial for both GS Paper 2 (Governance, International Relations) and GS Paper 3 (Economy, Security).

13. Odisha Moves to Patent Terms & Logos Related to Puri Jagannath Temple

Key Points

- **Patenting Religious Terms and Symbols:** The **Shree Jagannath Temple Administration (SJTA)** has initiated the process of securing **intellectual property rights (IPR)** over specific terms and logos associated with the **12th-century Puri Jagannath Temple**. This includes terms like *Mahaprasad*, *Srimandir*, *Shree Jagannath Dham*, *Shreekshetra*, and *Purushottam Dham*.
- **Trigger for the Move:** The action follows a **dispute with West Bengal**, where a new temple at **Digha** was named a "Dham," leading to objections from Odisha over potential cultural appropriation and dilution of the distinct identity of **Puri's religious heritage**.
- **Cultural and Religious Significance:** The **Jagannath Temple in Puri** is one of the **Char Dham pilgrimage sites** in Hinduism and a symbol of **Odisha's religious and cultural identity**. Its associated traditions like *Mahaprasad* and the *Rath Yatra* are integral to India's intangible cultural heritage.
- **Legal and Constitutional Provisions Involved:**
 - **Article 29 and 30:** Protection of cultural and religious rights of minorities and communities.
 - **The Trade Marks Act, 1999** and **Geographical Indications of Goods (Registration and Protection) Act, 1999:** Provide mechanisms for protecting **names, logos, and symbols** of cultural importance.
 - **Intellectual Property Rights (IPR) under TRIPS Agreement (WTO):** Allow communities to safeguard their traditional knowledge and cultural expressions from misappropriation.
- **Implications for Inter-State Cultural Harmony:** This move reflects growing **sensitivity to cultural ownership and identity**, and highlights the **need for cooperative federalism** to manage and respect **shared cultural and religious symbols** across Indian states.



Additional Key Points

- The '**Mahaprasad**' offered at Puri temple is unique and holds a special religious sanctity, often seen as a **sacred offering rather than regular food**, giving weight to its protection under IPR.
- Similar instances include **GI tag for Rasgulla**, which was also contested between Odisha and West Bengal, showing a trend of states using **IP laws to assert cultural identity**.



- Such moves can also promote **cultural tourism**, local pride, and **global branding** of India's spiritual heritage.

Conclusion

The SJTA's decision to patent terms and logos related to the Puri Jagannath Temple underscores the **growing importance of cultural sovereignty in a federal setup**. As India seeks to preserve and promote its rich **intangible heritage**, it is essential to strike a balance between **heritage protection**, **public access**, and **inter-state cultural harmony**. For UPSC, this serves as a case study in **cultural federalism**, **IPR application in heritage protection**, and **constitutional mechanisms for cultural rights**.