



# UPSC MONTHLY

# CURRENTAFFAIRS



Constitution (130<sup>th</sup> Amendment) Bill, 2025

Israel-Palestine Issue

Highlights

Species, Places, Disease and Defence in News





# Our Toppers in CSE 2024



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4 in Top 10 279 + Selections in CSE 2024

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### **Editor's Note**



#### Dear Aspirants,

Welcome to the latest-August- edition of our current affairs magazine, a one-stop solution for all current affairs – designed to provide holistic coverage of domestic and international events.

As the UPSC examination continues to evolve with time, showing dynamism, it requires that we create comprehensive, in-depth, analytical, relevant, and appropriate content. This month, we have curated a mix of infographic-based content and textual descriptions spread across themes. Our feature articles are dedicated to covering the most significant events occurring on the domestic and global planes.

It is our objective to provide readers with structured and easy-to-comprehend content, which can be used by aspirants to broaden their subject-specific worldview and utilize information and analysis to supplement their preparation. Our attempt is to cut the clutter generally found in subject-specific vocabulary and jargon, and instead present it in a simpler manner.

We are committed to providing essential support to aspirants and acting like a pole star, guiding students towards content rooted in the UPSC syllabus.

Wishing you the very best for your journey ahead!

Warm Regards,

Mr. Sriram Chief Mentor SRIRAM's IAS



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### **FEATURE ARTICLES**

### Al Regulation: Need, Challenges, Progress, and the Road Ahead

#### Context

The head of the United Nations' International Telecommunication Union (ITU) recently called for a global approach to AI (Artificial Intelligence) regulation. In this context, we need to study, analyse, and frame comprehensive regulatory norms in India as well.

#### **Background**

- Artificial intelligence as a general-purpose technology has been touted since the 1950s, with very minimal growth. However, the stagnant era of AI was replaced by what some commentators called "AI revolution" in the early 2020s.
- OpenAI's ChatGPT brought a tectonic shift in AI adoption globally. It took over the public imagination and rode on popularity. Other AI chatbots - X AI's Grok to Meta's Llama, and Alphabet's Gemini AI.
- As AI begins to transform everyday sectors like healthcare, farming, and education, there is a growing need for rules that can keep up with this rapid change.
- Still, about 85% of countries in the world do not have specific policies or strategies to regulate AI. Most countries have strategies that focus on innovation, capacity building, and infrastructure investments.
  - India also lacks a dedicated regulation for AI. However, it has established a series of initiatives and guidelines aimed at the responsible development and deployment of AI technologies.
- While AI tools are being used in policing, public welfare, and even courts, there's no clear law to govern how they work or protect people from their risks. This necessitates the global regulation of AI, including in India.

#### Potential Risks & Need for AI Regulation

Potential Risk	Examples of Harm			
	Unauthorized impersonation of			
Harmful	an individual using AI-generated			
Content	deepfakes, leading to violation of			
	personality rights and financial loss.			

Privacy Violations	Use of personal data without the consent of the individual for the purpose of training AI models results in a violation of privacy rights.			
Cybersecurity Threats	Sophisticated attacks using AI systems, leading to breaches of critical infrastructure through AI-powered cyber attacks.			
Discrimination	AI systems are discriminating against certain groups in hiring decisions, leading to a violation of the fundamental right to equality.			
Loss of Control	AI systems are making autonomous decisions without human oversight, leading to unintended consequences or failure to stop harmful actions, which could compromise individual safety.			
National Security	Public safety is compromised due to AI-powered cyber attacks, misuse of AI in CBRN (chemical, biological, radiological, and nuclear) weapons, leading to national security threats.			
Product Safety	Misleading advertisements about the performance of AI systems that exploit consumers and cause physical or financial harm.			
Intellectual Property Rights Violations	AI models are being trained on copyrighted data without proper consent or compensation, undermining the rights of creators and owners.			
Market Concentration	Increased ownership and control of AI technologies by a small number of powerful corporations, limiting access to compute resources.			
Global Inequality	Widening digital divide between the Global North and South, with wealthier nations gaining access to AI technologies faster, deepening economic and technological disparities.			



### **Environmental Degradation**

Increased energy consumption from training and deploying large AI models contributes to environmental harm, such as carbon emissions and resource depletion etc.

#### **Globally Prevalent Regulatory Approaches**

Across the globe, three approaches to AI regulation have been adopted so far:

- Self-regulation: In this approach, a "group of firms in a particular industry, or entire industry sectors, agree to act in prescribed ways, according to a set of rules or principles."
- Co-regulation: In this approach, the government or regulators play a more proactive role by developing, recognizing, endorsing, or implementing standards. This is a more stringent approach and "represents a midpoint in the continuum between self-regulation and full government regulation."
- Binding regulations: In this approach, policymakers enact a law or some other binding framework that makes them legally enforceable. The most prominent example is the EU's Artificial Intelligence Act, which contains rights and obligations in relation to AI systems.

### Summary of Approaches to AI Regulation in Different Jurisdictions

Jurisdiction	Approach	Type of regulation	
Australia	The government has released a discussion paper proposing mandatory guardrails to regulate AI in high-risk settings and general-purpose AI models.	Binding government regulations are currently under discussion.	
European Union	Statutory framework in the form of the AI Act that categorizes systems by risk levels, imposes stringent requirements on high- risk applications, and aims for transparency and accountability	Binding government regulations have been adopted and are in force, with provisions for co- regulation	
Singapore	Voluntary, use-case- based approach that emphasizes a sectoral approach based on governance frameworks	Self-regulatory approach.	

United Kingdom	Context-based and cross-sectoral framework that focuses on core principles that will be implemented by sectoral regulators.	Self-regulatory approach, with the option for sectoral regulators to frame binding regulations.
United States of America	Voluntary commitments and executive orders that emphasize a principle-based, cross-sectoral approach to promote industry best practices and risk mitigation tools with input from various federal agencies.	Self-regulatory approach, with limited downstream impact on advanced AI model providers from executive orders.

#### Various Development in AI Regulation

- Efforts by NITI Aayog
  - ➤ 2018: NITI Aayog released The National Strategy for Artificial Intelligence (NSAI) document which recommended establishment of clear mechanisms to ensure that the technology is used in a responsible manner.
  - 2021 and 2022: NITI Aayog released two documents and one discussion paper of Responsible AI Approach Document for India.

#### • Initiatives by Ministry of Electronics and IT (MEITY)

- 2023: MeitY published a blueprint for a new Digital India Act, which includes a specific reference to the regulation of high-risk AI systems, and Digital Personal Data Protection Act was passed whose provisions may be used for regulating AI.
- 2024: Government issued an advisory that jolted the industry. The advisory, mandated compliance with immediate effect, directed companies to obtain the government's permission before deploying certain AI models in India. However, the advisory was replaced by a new advisory which does not require government permission.

#### Other developments

- ➤ 2024: Prime Minister's Economic Advisory Council has published a report that characterizes AI as a "complex adaptive system" that requires "proactive regulatory intervention.
- ➤ Ongoing Effort: Office of the Principal Scientific Advisor (PSA), set up to advise the Prime Minister and the cabinet on matters of science and technology,







to consult with different ministries and provide "strategic guidance" on AI regulation.

o A sub-committee, convened by MeitY and reporting to the PSA, has prepared a draft report on "AI Regulation," though it has not yet been published.

#### Current Framework of AI Regulation in India

These existing laws, although not tailor-made for AI, do cover several AI-related activities:

- Legal provisions under the IT Act, 2000: It deals with misinformation, deepfakes, cheating by personation, or identity theft.
- Legal provisions under Bharatiya Nyay Sanhita, 2023: Section 111 of the BNS punishes the commission of any continuing unlawful activity, including economic offence, cyber-crimes like cheating, public mischief, by any person or a group of persons, either as a member of an organised crime syndicate or on behalf of such syndicate.
- Digital Personal Data Protection Act, 2023: The Act aims to protect individuals' privacy while establishing a framework for data accountability and governance across various sectors. Ex - It casts obligations on data fiduciaries.
- Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules, 2021)
  - It casts specific legal obligations on intermediaries, including social media intermediaries and platforms, to ensure their accountability towards a safe and trusted internet, including their expeditious action towards removal of the prohibited misinformation, patently false information, and deepfakes.
  - In case of failure of the intermediaries to observe the legal obligations, they are liable for consequential action or prosecution as provided under the extant laws.
  - There is a provision for grievance redressal mechanism by the intermediaries, which inter alia provides 24-hour timelines for any grievances relating to morphed or artificially generated images affecting the victim.
    - o If not satisfied with the grievance redressal, aggrieved persons can approach the Grievance Appellate Committee.

#### **UPSC Current Affairs Magazine - August 2025**

The Ministry of Home Affairs has launched a dedicated portal to report cybercrimes [cybercrime. gov.in] and has also started a toll-free number 1930.

#### Challenges in AI Regulation

#### Lack of Consensus

- MeitY, which is the nodal ministry for technology regulation in the country, favors a "light touch approach."
- The disagreements exist between the viewpoints of academia, government, and civil society. Issues such as the nature and novelty of AI risks and the utilization of current laws to regulate AI are major bones of contention among these stakeholders.
- Absence of a Comprehensive Legal Regime: India is yet to have a single consolidated AI regulation regime.
  - Due to the absence of such legislation, AI regulation in the country is being dealt in pieces by various regulatory bodies and statutory provisions. E.g IT act 2000, Bharatiya Nyaya Samhita etc. are used to deal with issues emanating from AI.
- Finding the Goldilock Zone of AI Regulation: The suitable policy choice to regulate AI and promote the healthy development of AI industries focused on innovation, is yet to be achieved.
  - Balancing privacy and data principles and nurturing a favorable AI ecosystem is a tough job.
- Functional Creep: AI has crept into various domains. From defense to health, education, and many other fields. This has created a regulatory vacuum, as regulation is unable to keep pace with innovation and the diffusion of AI in society.
- Capacity Constraint of State: Limited state capacities, especially of provincial governments, is a major hurdle in creating and implementing a robust AI regulatory mechanism. Ex - Low AI literacy, Lack of personnel and resources.
- **Tech Dependence:** Currently, India's AI ecosystem is dependent on Western nations, especially for foundation LLM open source models and AI chips, which fuel the computational capability.
- **Lack of Infrastructure:** Issues with regard to data flow, data control, processing, etc., abroad challenge India's digital sovereignty.







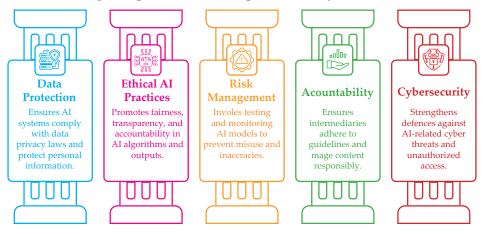


#### Way Ahead for An Effective Regulation

- Understand the Risks and Benefits of AI: Having a clear understanding of the current capabilities of AI is crucial for cost-benefit analyses, regulatory impact assessments, and risk assessments.
- Classify AI Risks Based on Evidence of Harm: A comprehensive risk assessment is required to identify specific AI risks based on input from multiple agencies.
  - ➤ A "whole of government" approach is required in developing, monitoring, and enforcing regulations.
- Need to Establish a Central AI Regulatory Authority:
   To oversee AI risk classification, audit mechanisms, certification, and enforcement, and to coordinate among ministries, industry, and academia.
- Balancing Safety and Innovation: To strive for establishing a goldilock zone, promoting innovation

- at the same time addressing market failures and information asymmetry, and thereby minimising harm to users.
- Duty of Care and Regulatory Involvement: Before implementing regulatory oversight, it is crucial to establish the four foundational pillars: a duty of care, transparency, safety, and responsibility.
- Encourage Self-regulation: Based on India's larger strategic goals, at the starting point, it would be prudent for India to adopt a light-touch, voluntary, and principle-based approach to AI regulation, at least for now.
- Define Liability Frameworks: By defining and establishing clear rules for civil and criminal liability, safe harbor provisions for compliant developers, and insurance models for autonomous systems.

#### Building a Responsible And Complaint AI Ecosystem In India



#### Conclusion

To realize this process of institutionalization, it is important for India's AI governance framework to work in tandem with the IndiaAI Mission's mandate to develop foundational AI innovation capabilities. A balanced legal framework that promotes innovation while safeguarding individual rights, fairness, and accountability is the need of the hour. Drawing on global best practices and tailoring them to India's socioeconomic context, policymakers must act swiftly to build a comprehensive and forward-looking AI regulatory regime.

### Trump's Tariff Challenge: A Roadblock in India's Growth Story

#### Context

Recently, the US administration has imposed an additional 25% tariff on Indian goods, due to India's purchases of Russian oil, bringing the combined tariffs imposed by the US to 50%.

#### Background

- In 2018, during his first term, Trump imposed a 25% tariff on steel and a 10% tariff on aluminum imports.
   It affected Indian steel and aluminum manufacturers too.
- In the second term of administration, the Trump regime imposed sweeping tariffs (in April) on multiple countries including India. A tariff of 25% was announced.
- Now in August, the United States added another tranche of tariff with 25% top up, taking over all tariff on Indian goods to 50%.
- Economists and public commentators have raised the alarming impact of tariffs on Indian industries, especially labour intensive ones.







### INTERNATIONAL RELATIONS

#### **India and Maldives Relations**

#### Context

Recently, the Indian Prime Minister attended the 60th anniversary celebrations of the independence of Maldives as the 'Guest of Honour'. This is the first time that an Indian Prime Minister is attending the Independence Day celebrations in Maldives.

#### Background

- India and Maldives share ethnic, linguistic, cultural, religious, and commercial links steeped in antiquity.
   The relations have been close, cordial, and multidimensional.
- India was among the first to recognize Maldives after its independence in 1965 and to establish diplomatic relations with the country.
- India has a pre-eminent position in the Maldives, with relations extending to virtually most areas.
- The importance of India's strategic role in the Maldives is well-recognized, with India being seen as a net security provider. Maldives occupies a special place under the "First" foreign policy of India, which aims to bring stability and prosperity to the Indian Ocean Region (IOR).

#### **Evolution of India-Maldives Relationship**



- Pre-1965 era: Ancient trade routes connected the Maldives to India for trade, education, and culture. The Dhivehi language has many words from Sanskrit, and early Maldivian religion was mainly Buddhist, sharing strong links with India.
- Independence and establishment of relations (1965-1970s): The Maldives became an independent nation on July 26, 1965.
  - ➤ India was one of the first countries to recognize this independence and establish diplomatic relations on November 1, 1965.
- Era of close cooperation and intervention (1980s-2000s): In 1988, India responded quickly to a coup attempt in Male by launching "Operation Cactus." This action led to India being seen as a dependable security partner.
- Shifting dynamics, strategic balance, and challenges (2010-present): Between 2013–18, India–Maldives ties strained due to a pro-China tilt. Trust revived under Solih's 2018 "India First" policy, dipped again in 2023 due to the "India Out" campaign, but are now improving.
- The recent 2025 PM Visit and Outcomes:
  - Extension of INR 4,850 crore Line of Credit.
  - Reduced annual debt repayment on GoI-funded LoCs.
  - Launch of India-Maldives Free Trade Agreement (IMFTA) talks.

#### **India-Maldives Relationship in Different Domains**

#### **Defence Relations**

- India is a key security provider for the Maldives, focusing on capacity building, equipment supply, comprehensive training, and disaster response.
- The Action Plan for Defence (2016) has been signed to consolidate defence partnership.
- Joint exercises include Ekuverin, Ekatha, etc.

#### **Economic and Developmental Engagement**

• **Development Assistance:** India has extended a fresh ₹4,850 crore rupee-denominated line of credit for the Maldives to fund infrastructure prioritized by the Maldivian authorities.





 The Reserve Bank of India (RBI) has entered into a Currency Swap Agreement with the Maldives Monetary Authority (MMA) under the SAARC Currency Swap Framework 2024-27.

#### Key infrastructure projects

- Greater Male Connectivity Project (GMCP): A \$500 million investment, India's largest developmental project in the Maldives.
- Addu roads and reclamation projects: This includes infrastructure upgrades (roads, drainage, bridges) across southern atolls, directly improving daily life and resilience.
- ➤ Others: Hanimaaadhoo Airport expansion, Gulhifalhu Port, Social housing construction in Hulhumale etc.

#### **Digital Connectivity**

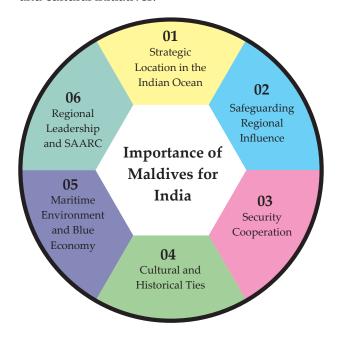
 India and the Maldives have signed an agreement to introduce the Rupay Card & Unified Payments Interface in the nation.

#### **Environment**

 Climate Action: There are joint initiatives for water management, disaster resilience, and green technologies, where India is sharing renewable energy expertise and participating in mass tree-planting campaigns.

#### Societal and Cultural Linkages

 People-to-People Ties: The relationship is supported by years of educational exchanges, medical tourism, and cultural initiatives.



#### Challenges in Indo-Maldivian Partnership

- Geopolitics & Chinese Influence: Increasing Chinese investments and projects like the Belt and Road Initiative challenge India's traditional dominance in the Maldives.
- Domestic Political Pressures: Maldivian concerns about sovereignty, particularly regarding the presence of Indian troops, strain ties despite positive engagement.
  - ➤ The "India Out Campaign" intensified negative public sentiment towards India, resulting in the halting of hydrographic surveys and the withdrawal of Indian military personnel.
  - ➤ The Maldives shifted its stance from an "India First Policy" to a "Maldives First Policy," which focused on broadening its foreign policy options.
- Radicalisation & Security Risks: Islamist extremism is one of the important concerns for India, requiring continued vigilance and cross-border cooperation.
- **Economic Fragility:** The Maldives' high reliance on tourism, climate vulnerability, and its debt obligations make it dependent on external support.

#### **Way Forward**

- Timely Completion and Delivery of Development Projects: Such as the GMCP, Addu roads, and affordable housing. This can enhance grassroots goodwill.
- Deepening Defence And Security Coordination: To counter shared threats, supported by enhanced training and maritime surveillance.
- Accelerating FTA and Digital Agreements: To boost trade, tourism, and connectivity.
- Expanding Soft Diplomacy: Engaging through more educational, medical, and cultural exchanges to consolidate long-term people-to-people ties.
- **Constructive Engagement:** Prioritizing respect for sovereignty and political sensitivities while advocating for a stable and prosperous Indian Ocean region.

#### Conclusion

India and the Maldives must enter the next decade with a recalibrated and resilient relationship—supported by economic convergence, shared security interests, and a commitment to regional stability.

#### India and the Philippines Relations

#### Context

Recently, the President of the Philippines made his maiden visit to India to mark the 75th anniversary of India-Philippines diplomatic relations.





### **ECONOMY**

### "Surging India's Economic Growth: A Myth or Reality

#### Context:

The President of the United States recently stated that India's economy, the fastest-growing in the world, is dead. It has triggered a debate in Parliament over the country's economic growth, with significant concerns being raised about the health of India's economy.

#### **Background**

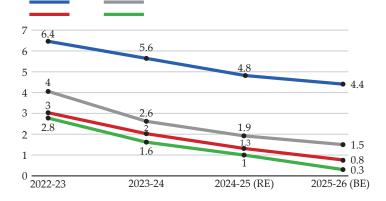
- The Trump 2.0 regime has imposed an additional 25% tariff on Indian goods and threatens to double the trade penalty to a crushing 50% total.
- The US has indirectly targeted India's continued purchase of Russian oil amid geopolitical friction over the Russia-Ukraine war.
- India is the 4th largest economy in the world, and recently, the US President commented that India, the world's fastest growing economy, is now dead.
- This sparked the debate in the Indian parliament over whether India's economic growth is a myth or true.

#### Status & Factors Driving India's Economic Health

- Gross Domestic Product (GDP): Economic Survey 2024-25 states that India's real GDP growth is estimated at 6.4% in the financial year 2024-25 remained close to the decadal average.
  - This survey expects the real GDP growth in the financial year 2025-26 to be between 6.3 and 6.8%.
  - ➤ India's projected GDP is US\$7.3 trillion by 2030.
- Expanding External Sector: The total exports of India have shown tremendous growth over the past decade, rising from US\$468 billion in 2013–14 to US\$825 billion in 2024–25, marking a substantial increase of approximately 76%.
- Foreign Direct Investment: During the financial year 2024-25, the FDI inflows rose to USD\$81.04 billion, marking a 14% increase from 2023-24.

- Foreign Exchange Reserves: It stood at USD\$697.9 billion as of June 2025. These reserves are enough to cover more than 11 months of goods imports, providing a safety net in times of global shocks.
- *India's External Debt:* It remains at a moderate level, about 19% of the GDP.
- Remittances: India is the top recipient of remittances globally, receiving USD\$135.46 billion during the financial year 2024-25.
- Agricultural Activities: This sector has recorded an annual average growth rate of 5% between 2016-17 and 2022-23. It grew at 3.5% in the second quarter of 2024-25.
- **Industrial Sector:** As per the recent Economic Survey, it grew by 6.2% in the financial year 2024-25, led by robust growth in the electricity and construction sectors.
  - ➤ The Gross Value Added of manufacturing at constant prices rose from ₹15.6 lakh crore in 2013–14 to ₹27.5 lakh crore in 2023–24, showing a robust increase.
- Infrastructure: Capital expenditure has increased at a rate of 39% from 2019-20 to 2023-24 in the major Infrastructure sector (such as Roads, Railways, Ports, and Airports).
- **Fiscal Status:** As per the Union Budget estimate, the fiscal deficit is projected to decline from 6.4% in 2022-23 to 4.4% in 2025-26, and the revenue deficit is projected to decrease from 4% to 1.5% over the same period.

#### Trends in fiscal and revenue deficits (% of GDP)







 Goldilocks Situation: The Indian economy has a rare alignment of moderate growth, subdued inflation, and supportive monetary conditions, reflecting a balanced economy.

#### Challenges Associated with India's Economic Growth

- Tariff & Trade Protectionism: Recently, the USA has imposed a 25% tariff (+ extra 25%) on Indian Goods, which threatens export-oriented growth.
- **Minimum Global Trade Share:** India's total global exports of goods share is just 1.8% and total global exports of services are just 4.5%.
- **Agricultural Distress**: The Farm economy of India is plagued with distress, with the bulk of the farmers living at subsistence levels.
- Paralyzed Manufacturing Sector: This sector has witnessed a slower growth rate (CAGR of 4.04%) since 2019-20 than even agriculture and its allied activities (4.72%).
- Poverty & Inequality: Approximately 24% of the population is below the World Bank poverty line for India, and the widening inequality gap is an alarming concern.
- Jobless Economic Growth: Unemployment in India rises to very high levels due to skill mismatch. India has among the lowest female participation in the economy in the world.

#### Comparison of India's Economy with Major Global Economies

- *India's Economy:* Almost 12 times its size in 1995.
  - India was less than 5% the size of the US economy in 1995, but in 2025 it is almost 14%.
  - India has transformed from being one of the 'fragile five' to the fastest-growing major economy in the world in just over a decade.
  - India has risen from the 11th largest economy to the 4th largest economy in the world after the U.S., China, and Germany. India has surpassed Japan.
- **US's Economy:** Only four times its 1995 size.
- The United Kingdom's Economy: Have grown by less than 3 times.
- Germany's Economy: Has grown less than double its economy.
- Japan's Economy: It is lower than what it was in 1995, which would, by this metric, qualify it to be not just a "dead" but perhaps a decaying economy.

### WORLD ECONOMIES: WHAT THE NUMBERS SHOW

- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1					
	GDP Current Prices*		GDP in 2025 Relative to	GDP in 1995 as percentage	GDP in 2025 as percentage
	1995	2025	GDP in 1995	of US GDP in 1995	of US GDP in 2025
Argentina	288	684	2.4	3.8%	2.2%
China	738	19,232	26.1	9.7%	63%
Germany	2,595	4,745	1.8	34%	15.6%
India	360	4,187	11.6	4.7%	13.7%
Japan	5,546	4,186	0.8	72.6%	13.7%
Pakistan	99	373	3.8	1.3%	1.2%
Russian Federation	336	2,076	6.2	4.4%	6.8%
UK	1,345	3,839	2.9	17.6%	12.6%
US	7,640	30,507	4	100%	100%
*Billion of US dollars					

#### India's Initiative to Boost the Economic Growth

- For External Sector Boost: India has implemented the Foreign Trade Policy 2023, whose objective is to attract FDI in various sectors.
- Free Trade Agreement (FTA): India has signed FTAs with various countries to reduce trade barriers and increase cooperation. Recently, an FTA was signed with the United Kingdom.
  - ➤ Across the country, 65 Export Facilitation Centres are established, and Special Economic Zones are promoting the export of Indian Goods.
- **For Digital Transformation:** The Digital India initiative has revolutionised the online payment system, such as Unified Payments Interface (UPI), Immediate Payment Service (IMPS), and NETC FASTag.
- Initiative for Inclusive Growth: MGNREGA, Pradhan Mantri Jan Dhan Yojana, Stand-Up India Scheme, PM Vishwakarma Scheme, etc., are helping to reduce poverty.

#### For Industrial Growth:

- ➤ Public-Pri.vate Partnership (PPP) through Disinvestment Policy by selling a portion or the entire Government shareholding of a Central Public Sector Enterprise.
- Mission Purvodaya to help the development of India's steel belt.
- Emergency Credit Line Guarantee Scheme to boost the MSMEs.
- Initiative for Infrastructure Development: PM Gati Shakti National Master Plan, Bharatmala Pariyojana, Pradhan Mantri Grameen Sadak Yojana, Smart Cities Mission are transforming India's infrastructure.





Make in India Initiative: Its objective is to make India
a hub for manufacturing, design, innovation, and to
promote indigenisation of defence equipment.

#### Way Forward

- Focus on the National Interests: Over trade disputes and International pressure by negotiating trade safeguards, diversifying export markets, and strengthening the domestic supply chain.
- Accelerate Infrastructure: Including digital penetration, expedite projects under the National Infrastructure Pipeline, and fast-track fiber broadband rollout to rural areas.
- Promote Sustainable Manufacturing: By expanding the Production Linked Initiative beyond electronics and strengthening the textile and MSME sectors.
- Scale Up Skill Training: Particularly in handicrafts, digital, and manufacturing, and accelerate female participation.
- Need to Promote Green Transition: Focusing on selfreliance in the energy sectors to reduce dependency on crude oil.

#### Goods and Services Tax Reform: GST 2.0

#### Context

Recently, during the 56th meeting of the Goods and Services Tax (GST) Council, it was decided to revamp the GST tax structure into a primarily two-rate system. It was done and finalised based on the "Next-Generation GST Reforms" announced by the Prime Minister of India on the occasion of Independence Day.

#### Background

- Goods & Service Tax (GST) is a comprehensive indirect tax levied on the supply of goods and services. It is a multi-stage, destination-based tax applied at every point of value addition, replacing a range of earlier indirect taxes such as Value Added Tax (VAT), Excise Duty, and Service Tax
  - Goods and services are included under a single domestic indirect taxation law for the whole of India. In this regime, tax is charged at each point of sale.
- Evolution of GST in India:
  - ➤ 1986: The Modified Value Added Tax (MODVAT) was introduced to reform the existing indirect tax structure.

- ▶ 2000: A committee under Vijay L. Kelkar, set up by then Prime Minister Atal Bihari Vajpayee, recommended GST as a means to strengthen India's tax framework.
- ➤ **2006:** The Union Ministry of Finance proposed the rollout of GST from 1st April 2010.
- ➤ 2011: The Constitution (115th Amendment) Bill was introduced but lapsed in 2013 due to a lack of consensus.
- ➤ 2014: The Constitution (122nd Amendment) Bill was introduced and later enacted as the Constitution (101st Amendment) Act, 2016, laying the legal foundation for GST.
- ➤ 2017: After the passage of enabling legislation, GST was officially implemented on 1st July 2017, marking a landmark tax reform in India.

GST was first implemented in 1954 in France. Since then, over 160 countries worldwide have adopted it, with Malaysia being among the most recent in 2015.

#### Components of GST

- State Goods and Services Tax (SGST): Levied and collected by the State Government under the SGST Act, 2017, it applies to intra-state supplies (transactions occurring within a state) of goods and services.
- Central Goods and Services Tax (CGST): Imposed and collected by the Central Government under the CGST Act, 2017, it also applies to intra-state transactions of goods and services, alongside SGST.
- Union Territory Goods and Services Tax (UTGST):
   Applicable to intra-state supplies within Union Territories (UTs) under the UTGST Act, 2017. It covers UTs without legislative assemblies, while Delhi, Jammu & Kashmir, and Puducherry follow SGST provisions.
- Integrated Goods and Services Tax (IGST): Levied on the inter-state supply of goods and services, including imports and exports, under the IGST Act, 2017. It is collected by the Central Government, which later distributes the revenue between the Centre and the states. \*IGST = CGST + SGST

#### **Establishment of the GST Council**

The GST Council was constituted under Article 279A
 (1) of the Constitution to govern and regulate matters related to Goods and Services Tax. As per Article 279A
 (2), its composition includes:







introduce high levels of nitrogen and phosphorus into freshwater bodies.

- **Industrial Discharge:** Industrial waste also adds to nutrient pollution, further promoting the formation of algal blooms.
- Municipal Wastewater: A large share of India's wastewater remains untreated, resulting in nutrientrich water bodies.

#### **Climatic and Oceanographic Factors:**

- Warm Water Temperatures: Elevated temperatures stimulate algal growth, leading to more frequent and intense bloom events.
- Monsoon Influence: Intense monsoon rainfall transports excess nutrients from land to sea, thereby fueling the growth of algal blooms.
- **Upwelling of Ocean Water:** The upwelling of deep, nutrient-rich ocean water to the surface creates favorable conditions for rapid algal proliferation.
- Water Salinity: Changes in water salinity, influenced by factors such as monsoons, also contribute to the formation of algal blooms.

#### Anthropogenic and Natural Activities:

- Coastal Development: Urbanisation and coastal development contribute to higher nutrient inflows into water bodies.
- Dams: Dams and reservoirs can trap nutrients, leading to their higher concentration in the water.
- **Invasive Species:** The introduction of non-native species can disrupt marine ecosystem balance, potentially affecting the frequency and intensity of algal blooms.

#### Impact on the Water Bodies

- Oxygen depletion, which poses a threat to fish and other aquatic organisms.
- These algae create dense surface mats that prevent sunlight from reaching submerged plants, decreasing lake productivity and disrupting the ecological balance.
- Red or green scums, unpleasant odors, and turbid water diminish the recreational, cultural, and religious value of water bodies, particularly in urban India.
- Algal blooms obstruct filtration systems (waste water treatment), introduce unpleasant odors and tastes, and raise the cost of treating water for domestic consumption.
- For fish farms and aquaculture, these blooms pose significant economic challenges.

#### NITI Aayog's Vision for \$200 Billion **EV Opportunity & India Electric Mobility** Index (IEMI)

#### Context

Recently, NITI Aayog launched the Report on 'Unlocking a \$200 Billion Opportunity: Electric Vehicles in India,' which presents a timely and comprehensive assessment of current challenges while highlighting major unlocks essential to accelerate India's Electric Mobility transition.

#### **Key Highlights of the Report**

- According to the report, India has the highest EV penetration rate in three-wheelers (16 per cent), followed by buses (7 per cent), two-wheelers (5 per cent), cars (2 per cent), and trucks (0.07 per cent).
- Challenges Highlighted: Reports highlight various challenges in the electric transition:
  - ➤ Challenges of financing vehicles, especially electric buses and electric trucks.
  - Inadequacy of charging facilities on one hand and low utilisation of existing public charging facilities on the other.
  - > Lack of adequate awareness regarding EV performance among public and private stakeholders.
  - ➤ Inadequate data and regulatory gaps hinder evidence-based decision-making.

#### Steps Required

- Need For Soft Mandate: According to a report, India will need "soft" mandates -that could become more stringent over time -to accelerate electric vehicle (EV) adoption.
- ➤ **National Target For EVs:** To meet the national target of 30 per cent EV sales by 2030, mandates on the sale of certain segments of vehicles, such as public buses, freight fleets, and government vehicles, could give the market the right signal.
- > Incentive Limitation: According to the report, incentives alone cannot increase the demand for the EV vehicle.
- India's Slow Penetration Rate: EVs' penetration in India is at a slower pace than not only in China, but also in the US and the EU. Global penetration is about 17 per cent now, whereas in India it is 7.6 per cent.







- More Mandates and Disincentives: Reports say that it is time to give a stronger push for the shift by introducing some gentle mandates and disincentives, which will help signal the required direction more firmly.
- Limited Mandate: The mandates could be limited to only a certain segment of the vehicle fleet and need not be extremely stringent to begin with.
  - o It proposes that the mandates could cover public transport buses, paratransit vehicles (like minibuses), government vehicles, and urban freight vehicles.

#### Related News

Context: NITI Aayog recently launched the India Electric Mobility Index (IEMI), a first-of-its-kind tool developed to comprehensively track and benchmark the progress of States and *Union Territories (UTs) in achieving their Electric Mobility goals.* 

#### India Electric Mobility Index

- About: The India Electric Mobility Index (IEMI) tracks, evaluates and scores all Indian States and UTs out of 0-100 score across 16 indicators under 3core themes:
  - > Transport Electrification Progress to capture demandside adoption,
  - > Charging Infrastructure Readiness to track allied charging infrastructure development and
  - > EV Research and Innovation Status: Covers supply-side ecosystem R&D efforts.
- Aim: To inform decision-making, foster healthy competition among states, and promote sharing of best practices.

#### Significance:

- The Index underscores the importance of state-level coordination, integrated planning, and cross-sectoral collaboration in achieving India's electric mobility vision.
- > By identifying strengths and gaps, the Index aims to support states in aligning with national goals while addressing local needs.
- > It provides a transparent, comparative framework to assess progress across key themes such as electrification, infrastructure, and innovation.
- It enables states to benchmark their efforts, identify gaps, and learn from each other's successes.

Ranking				
All States	Score ↑	Rank ↑		
Delhi	77	1		
Maharashtra	68	2		
Chandigarh	65	3		
Karnataka	64	4		
Tamil Nadu	59	5		

#### Mangroves and the Role of M.S. **Swaminathan**

#### Context

Recently, World Mangrove Day was observed on July 26, commemorating the pioneering contributions of M.S. Swaminathan in advancing mangrove conservation.

#### **Mangrove Species**

- Mangroves are salt-tolerant trees and shrubs that grow in the intertidal regions of the tropical and subtropical coastlines. These species grow luxuriantly in the places where freshwater mixes with seawater and where sediment is composed of accumulated deposits of mud.
- These species thrive in high-rainfall areas with 1,000-3,000 mm rainfall with temperatures ranging from 26°C to 35°C.

#### Mangrove Species Found in India:

Avicennia officinalis, Rhizophora mucronata, Sonneratia alba, Avicennia alba, Bruguiera cylindrica, Heritiera littoralis, Phoenix paludoso, Morindo citrifolio, and Ceriops tagol.

#### Adaptation of Mangrove:

- Breathing **Roots:** Mangrove species have specialized above-ground roots called breathing roots or pneumatophores to take oxygen from the Atmosphere.
- > Silt Roots: It is found in some mangrove species, in which roots diverge from stems and branches and penetrate the soil some distance away from the main stem, providing the main physical support.
- **Vivipary:** In this method of reproduction, seeds germinate and develop into seedlings while the seeds are still attached to the parent tree.

#### Distribution & Status of Mangrove in India

- As per the India State of Forest Report 2023, India's total mangrove cover stands at 0.15% of the nation's geographical area.
- A net increase of 7.86% in the Mangrove cover area in 2023, as compared to 2013, and a net increase of 11.4% between 2001 and 2023.
- West Bengal holds the largest share of mangrove forests, 42.45% of the total cover, followed by Gujarat (23.32%) and the Andaman & Nicobar Islands (12.19%).



### **SPECIES IN NEWS**

#### Alpine Musk Deer and Himalayan Musk Deer

#### Context

A recent report of the Central Zoo Authority (CZA) reveals a mix-up in identifying the Alpine musk deer with the Himalayan musk deer.

#### Morphology and Structure of Musk Deer

- It is a unique deer with fangs and without antlers. It possesses a gallbladder and a pair of teats in its females, whereas the gallbladder is missing, and it has four mammae in other deer species.
- It is famous for the waxy substance called musk, originating from the gland in the abdomen.
- Three species of Musk Deer are Alpine Musk Deer, Himalayan Musk Deer, and Dusky Musk Deer.
- It is a solitary and shy animal and maintains well-defined territories. The pungent secretion from the musk gland is typically used to mark territories and deter rival males during the breeding season in the natural state.

#### Alpine Musk Deer

- Its scientific name is Moschus chrysogaster.
- It is a native species of India, Nepal, Bhutan, and China.
- It inhabits mainly the temperate forests and alpine scrub of Eastern and Southern Tibet, as well as along the Southern slopes of the Himalayas.
- It is known as the true deer or primitive deer of the world.

#### **Conservation Status:**

- IUCN Red List: Endangered.
- Wildlife Protection Act 1972: Schedule I.
- CITES: Appendix-I



#### Himalayan Musk Deer

- Its scientific name is Moschus Leucogaster.
- It is commonly known as 'Kasturi mriga'.
- It inhabits the Himalayan region of Bhutan, Northern India, Nepal, and China
  - In India found in Dachigam National Park (Jammu & Kashmir), Nanda Devi National Park (Uttarakhand).

#### **Conservation Status:**

- IUCN Red List: Endangered
- Wildlife Protection Act 1972: Schedule I
- CITES: Appendix-I



#### **Breeding Centre in India**

- Musk Deer Breeding Centre near Chopta (Uttarakhand).
- Padmaja Naidu Himalayan Zoological Park, Darjeeling (West Bengal).
- Musk Deer breeding Centre in Kedarnath Wildlife Sanctuary (Uttarakhand)



### **PLACES IN NEWS**

#### **Sea of Galilee**

#### Context

The Sea of Galilee recently turned blood red, which created a panic situation among locals.



#### About the Sea of Galilee (Lake Tiberias)

- Located at: Northeastern Israel.
- **Type:** It is a lake that flows through the Jordan River.
- Features
  - ➤ It is considered the lowest freshwater lake on the planet and the world's second-lowest lake after the Dead Sea.
  - It is a pear-shaped monomictic lake.
  - Throughout its history, the Sea has been referred to by various names such as the Sea of Kinneret, Lake of Gennesaret, Sea of Ginosar, Sea of Tiberias, Lake of Tiberias, Bahr Tubariya, etc.
- Reason for Turning Red of the Sea of Galilee: Caused by algae, called Botryococcus braunii. The algae are originally green, but they turn red when exposed to intense bouts of sunlight, warm temperatures, and nutrient-rich water. The algae are harmless and nontoxic.

#### Pacific Microstate Nauru sells First Passports to Fund Climate Action

#### Context

Nauru has launched a "climate resilience citizenship" program to fund climate action by selling passports at \$105,000 each, aiming to raise over \$5 million in its first year.



#### Nauru

- It is an island republic in the Pacific Ocean
- It is a tiny island north-east of Australia.
- It is situated 42 kilometres south of the equator.
- It is surrounded by a coral reef and dotted with pinnacles. The resumption of phosphate mining and exports in 2005 significantly boosted its economy.
- The island is about 800 miles (1,300 km) northeast of the Solomon Islands; its closest neighbor is the island of Banaba, in Kiribati, some 200 miles (300 km) to the east.

#### Kariyachalli Island

#### Context

Recently, the Tamil Nadu government has started an initiative to save the sinking Kariyachalli island in the Gulf of Mannar region, one of India's most ecologically sensitive marine zones.





### **SCIENCE & TECHNOLOGY**

#### **Need for National Space Law in India**

#### Context

Recently, on the occasion of National Space Day (23 August), the space researcher demanded a legal architecture, i.e, a National Space Law for sustainable, equitable, and safe space activities.

#### Background

- The Indian space economy is valued at approximately USD 8.4 billion, constituting a 2% share of the global space market.
- The Indian Space Market is expected to rise to 8% by 2030 and further to 15% by the year 2047.
- Private Investment and Space Startups have increased in the last few years from 1 in 2022 to nearly 200 in 2024, witnessing an unprecedented rise of 200 times increase in these years.
- But India does not have any legal framework to regulate and oversee the space market of the country, the legal implementation of the Space Treaty and regulate activities in outer Space.

#### Need for a Comprehensive National Space Law

- Legal protection: National space legislation offers predictability, legal clarity, and a stable regulatory environment for both government and private actors.
  - Only statutory law can mandate compliance and provide legal certainty.
- To Regulate the Space Mining Industry: It is a whole new industry through which the extraction of valuable minerals from Space Objects like the Moon, Planets, Asteroids, etc., is done.
- Space and Military Security Issue: To take care of related military needs, ensuring space security, as China is galloping ahead with the motive to create "killer space devices".
- Capacity Building & Protection of Intellectual Property Rights: To protect data generated and has prevent adverse implications both for industry and national security.
  - ➤ It will also provide a foundation for skill development and knowledge creation.

- **Accountability:** To clarify the rules and regulations for any possible unforeseen mishap on the part of private companies while undertaking space exploration activities.
- To Promote the Private Sector: A proper legal framework can "serve as a foundation for capacitybuilding efforts, attracting investment, and promoting the growth of a domestic space industry.
- Societal Benefits: Enables effective use of space for agriculture, disaster management, and urban planning.
- Global Alignment & Regional Cooperation: To align India with 43 nations having domestic space laws and UN initiatives and to support capacity building and legislative frameworks.

#### Space Policies in India

- The Satellite Communication Policy, 1997: The policy provided guidelines for the developing satellite communication, launch vehicles and ground equipment industry. The policy was re-visited in 2000 and remains the only policy outlining the principles for establishment, operation and regulation of satellite communication in the country.
- Remote Data Sensing Policy, 2011: The policy introduced in 2001 was amended in 2011 and governs the operation, acquisition, and transmission of "remote sensing data" through the Department of Space (DOS).
- ISRO's Technology Transfer Policy: This policy is aimed at ensuring technology transfer from ISRO's 'technical know-how' to external entities.
  - ➤ It encouraged Indian private industry engagement in ISRO's space endeavours and was the primary objective behind the genesis of this policy.
- The Indian Space Policy, 2023: The new policy permits 'Nongovernment Entities (NGEs) to "offer national and international space-based communication services.
  - The policy opens the Indian space sector to private players, allowing possibilities of commercial exploration.
  - ➤ It further holds the Department of Space (DOS) responsible for implementing and creating pragmatic resolutions for any space disputes.
  - The policy delineates distinct functions for IN-SPACe and NewSpace India Limited (NSIL).





#### Existing International Space Law

- The Liability Convention: Convention on International Liability for Damage Caused by Space Objects. This convention entered into force in 1972.
- The Outer Space Treaty: Formally known as Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space which was entered into force on October 10, 1967.
- The Rescue Agreement: It entered into force in 1968. It deals with the obligation of nations towards astronauts, particularly in distress and emergencies, and the return of space objects.
- The Moon Agreement: It entered into force in 1984. The agreement provides that the moon and other celestial bodies should be used only for peaceful purposes - reaffirming a key element of the Outer Space Treaty.
- The Registration Convention: It entered into force in 1976. It consists of 12 articles. Under this, nations are required to register details about every object launched into space, whether into Earth orbit or beyond, in a registry and furnish them to the United Nations.

#### Conclusion

India is a major player in space technology in the world, and national law will be a catalyst to further boost India's space activities and regulate them to be in sync with the dynamics of global space activities. Therefore, a robust space regime is crucial. Its absence can hinder India's growth in the future.

#### Karlsruhe Tritium Neutrino (KATRIN) **Experiment**

#### Context

The researchers have recently found that the KATRIN Experiment set new constraints on interactions involving neutrinos that could arise from unknown physics that is not explained by the standard model, also known as general neutrino interactions.

Neutrinos: They are tiny subatomic particles, often called 'ghost particles' because they barely interact with anything else. They are, however, the most common particle in the universe.

#### **About the KATRIN Experiment**

- **Definition** 
  - The KATRIN (Karlsruhe Tritium Neutrino) experiment is a large-scale research effort aimed

at precisely measuring the effective mass of the electron anti-neutrino using advanced instruments located at the Karlsruhe Institute of Technology (KIT) in Germany.

#### **Main Objective**

- > To measure the mass of the neutrino.
- This is done through a highly precise measurement of the energy spectrum of the electrons originating from tritium beta decay, using a high-activity tritium source and a one-of-a-kind electron spectrometer.

#### **Muon g-2 Experiment**

#### Context

The first results from the Muon g-2 (pronounced gee minus two) experiment hosted at Fermi National Accelerator Laboratory (USA) show fundamental particles called muons behaving in a way not predicted by the Standard Model of particle physics.

#### About

- Muon g-2 uses Fermilab's powerful accelerators to explore the interactions of short-lived particles known as muons with a strong magnetic field in "empty" space.
- It examines the precession of muons that are subjected to a magnetic field.
- It is the world's most precise measurement yet of the magnetic moment of the muon.
- The main goal is to test the Standard Model's predictions. If there is an inconsistency, it could indicate the Standard Model is incomplete and in need of revision.
- The centerpiece of the experiment is a 50-foot-diameter superconducting magnetic storage ring, situated in its detector hall alongside electronics racks, the muon beamline, and other equipment.

#### The Standard Model of Particle Physics

- The standard model is the name given in the 1970s to a theory of fundamental particles and how they interact and predict the behaviour of the building blocks of the universe.
- It incorporated all that was known about subatomic particles at the time and predicted the existence of additional particles as well.
- There are seventeen named particles in the standard model - twelve fermions and five bosons.
  - Fermions include Leptons and Quarks.







### **DISEASES IN NEWS**

### Primary Amoebic Meningoencephalitis (PAM)

#### Context

The Kerala Government has recently issued an alert against primary amoebic meningoencephalitis (PAM) in the districts, given the reporting of three cases of the infection and a death in recent days.

#### About

- It is a rare brain infection.
- It is caused by Naegleria fowleri, a free-living amoeba (brain-eating amoeba).

#### • Route of Infection

- When people swim or take a bath in stagnant water, the amoeba enters their body through the nose and reaches the brain. Children could be more vulnerable as their cribriform plate (which separates the nasal cavity and the skull) has more porous openings.
- Another route of the infection is through the eardrum.
- Transmission: Not transmitted from person to person.

#### • Treatment Involves

- ➤ The treatment of choice for PAM is the antifungal amphotericin B.
- Some survivors in North America were treated with a combination of drugs that included amphotericin B, rifampin, fluconazole, and a drug called miltefosine.

#### • Prevention

- Avoid swimming and bathing in stagnant or unhygienic water sources, and nose clips could be used while swimming.
- Wells, Ponds, and swimming pools, including those in water theme parks, need to be chlorinated at regular intervals.

#### **Human Metapneumovirus**

#### Context

These days, seasonal respiratory infections have been taking a big toll on our health; one of them, Human Metapneumovirus, has surfaced as a new concern.

#### About

- HMPV is a single-stranded enveloped RNA virus responsible for the common cold, a respiratory infection. While it typically causes mild illness, it can lead to severe sickness in some individuals.
  - ➤ It was first discovered in 2001 and is found around the world.
- HMPV belongs to the Pneumoviridae family along with Respiratory Syncytial Virus (RSV), which is a common cause of cough and cold.

#### Treatment

- ➤ There is no approved antiviral medicine available for HMPV.
- ➤ Individuals can treat their symptoms with over-thecounter medicines to treat pain, fever, stuffy nose, and cough by getting plenty of rest and staying hydrated also helps.
- ➤ A Polymerase Chain Reaction (PCR) test is the most reliable way to diagnose this virus.

#### WHO Classifies Hepatitis D as Cancer-Causing

#### Context

The World Health Organization (WHO) recently announced the reclassification of hepatitis D as cancerous, emphasizing the urgency for preventing viral hepatitis, which is a growing public health crisis.

#### Hepatitis

- It is an inflammation of the **liver** that is caused by a variety of infectious viruses and non-infectious agents leading to a range of health problems, including severe liver damage and cancer, some of which can be fatal.
- The **five main hepatitis virus types**—A, B, C, D, and E—all cause liver disease but differ in transmission, severity, distribution, and prevention methods.
  - ➤ Hepatitis A (HAV): Spread through contaminated food, water, or certain sexual practices. Infections are usually mild, with full recovery and lifelong immunity. Common in areas with poor sanitation. A safe and effective vaccine is available.



### **SOCIAL ISSUES**

### India's First Al-Powered Anganwadi Centre

#### Context

Maharashtra has recently launched India's first AI-powered Anganwadi Centre, bringing cutting-edge technology to rural classrooms.

#### About

 It is located at Waddhamna village, about 18 kilometres from Nagpur.

#### Features

- ➤ The upgraded anganwadi uses advanced technologies to make learning more engaging and adaptive for young children.
- ➤ It included interactive smartboards, Meta VR headsets, tablets, and gamified content. Children learn concepts in an immersive environment tailored to their learning pace.
- ➤ It is implemented under the Mission Bal Bharari initiative, which aims to give children from rural areas the same digital access as their urban counterparts.
- **Collaboration:** It collaborates with the Central government's IndiaAI programme.
  - Alongside learning tools, the centre has Wi-Fienabled CCTV cameras so education officers and other stakeholders can monitor activities remotely.

#### Aanganwadi Services

• It is one of the flagship programmes of the Government, providing early childhood care and development of the beneficiaries, i.e children in the age group of 0-6 years, pregnant women and lactating mothers through a large network of Anganwadi workers (AWW) and Helpers (AWH).

#### IndiaAI Programme

- IndiaAI is a knowledge portal, research organisation and an ecosystem-building initiative. It stands to unite and promote collaborations with various entities in India's AI ecosystem.
- It offers the latest and up-to-date information and analysis on AI as news and articles, provides detailed information on the key ecosystem players, and provides insights into the global and Indian AI landscape.

### State Health Regulatory Excellence Index (SHRESTH)

#### Context

Recently, the Union Health Ministry launched the SHRESTH State Health Regulatory Excellence Index.

#### State Health Regulatory Excellence Index (SHRESTH)

- Union Health Secretary virtually launched the State Health Regulatory Excellence Index (SHRESTH), a first-of-its-kind national initiative to benchmark and strengthen state drug regulatory systems through a transparent, data-driven framework.
- **Proposed by:** The initiative, proposed by the Central Drugs Standard Control Organization (CDSCO).
- Aim: To drive improvements in the performance of state drug regulatory authorities across India, ensuring drug safety and quality standards are consistently met.
- Under the index, States will be divided into two categories – Manufacturing States and Primarily Distribution States/UTs, and will be ranked accordingly on the index.
- It will have 27 indices for Manufacturing States across 5 key themes and 23 indices for primarily distribution states. 5 themes are:
  - > Human Resources.
  - > Infrastructure.
  - Licensing Activities.
  - > Surveillance Activities, and
  - > Responsiveness.
- It is a virtual gap assessment tool for states to assess their current position and help towards maturity certification.

### UNDP Equator Initiative Award for Bibi Fatima SHG of Teertha village

#### Context

The Bibi Fatima Women's Self-Help Group (SHG) from Teertha village in Dharwad district of Karnataka has been selected as one of the 10 winners of the Equator Prize 2025.





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