

WEEKLY NEWS

August 01-10, 2024

Boilers Bill, 2024



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PM-KUSUM



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HIGHLIGHTS

- Global Methane Emissions
- Seaweed Farm
- Middle Income Trap

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mRNA Vaccine Development Against H5N1

● **Why in News?**

- ➡ The World Health Organization (WHO) has launched a new initiative to advance the development of mRNA vaccines against human avian influenza (H5N1).

● **Key Highlights**

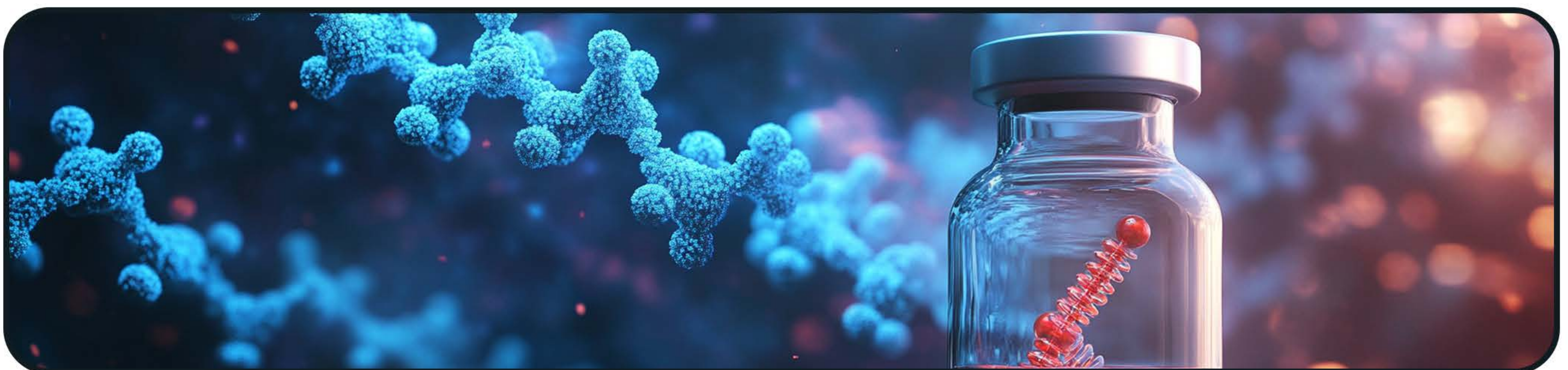
- ➡ **Objective:** To accelerate the development and accessibility of H5N1 mRNA vaccine candidates for manufacturers in low- and middle-income countries (LMICs).
- ➡ **Implementation:** This will be done through the WHO's mRNA Technology Transfer Programme (MTTP), complementing the ongoing work under the Pandemic Influenza Preparedness (PIP) Framework.

● **Pandemic Influenza Preparedness (PIP) Framework**

- ➡ **Aim:** To improve the sharing of influenza viruses with human pandemic potential and enhance LMIC access to vaccines.
- ➡ **Significance:** Promotes vaccine equity and prepares for future pandemics in a decentralized manner.

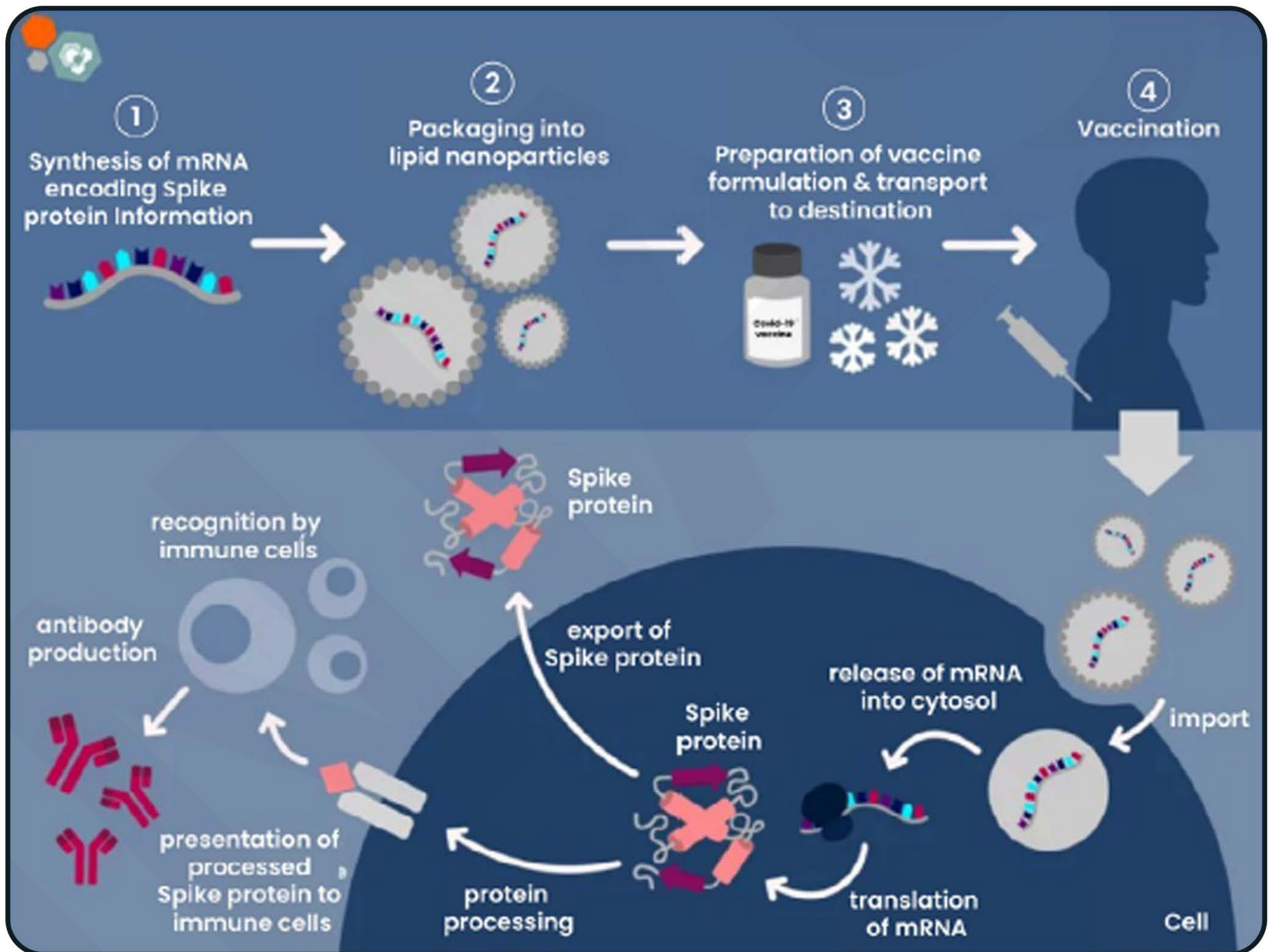
● **About mRNA Vaccine Technology**

- ➡ **Mechanism:** mRNA vaccines introduce a piece of mRNA corresponding to a viral protein, usually found on the virus's outer membrane.
- ➡ **Function:** The mRNA instructs cells to produce viral proteins, triggering the immune system to create antibodies and boost immunity.
- ➡ **Example:** The COVID-19 mRNA vaccine directs cells to produce the coronavirus "spike protein," leading to an immune response.



● **Way Forward**

- ➡ **Vaccine Equity:** Ensure broader access to mRNA vaccine technology in LMICs.
- ➡ **Pandemic Preparedness:** Strengthen global readiness for future pandemics through decentralized vaccine development and distribution.



IPEF's Supply Chain Council

● Why in News?

- ➔ India has been elected as the Vice-Chair of the Indo-Pacific Economic Framework (IPEF) Supply Chain Council, alongside 13 other IPEF partners.

● Key Highlights

- ➔ **Supply Chain Council:** Established to pursue targeted, action-oriented work to strengthen supply chains in critical sectors, ensuring national security, public health, and more.
- ➔ **Crisis Response Network:** Provides a forum for collective emergency responses to disruptions in supply chains.
- ➔ **Labor Rights Advisory Board:** Brings together workers, employers, and governments to strengthen labor rights and workforce development across regional supply chains.

● Supply Chain Resilience (SCR)

- ➔ **Definition:** SCR is the ability of a supply chain network to withstand disruptions and minimize impacts on revenues, costs, and customers.
- ➔ **Journey:** Supply chain refers to the interconnected process from raw material assembly to the final sale of products.
- ➔ **Threats:** Includes geopolitical issues (e.g., energy disruptions from Russia-Ukraine conflict) and economic shocks (e.g., COVID-19 induced disruptions).

● Measures Taken for SCR by India

- ➔ **Global Initiatives:** Supply Chain Resilience Initiative (Australia, India, Japan), Quad Supply Chain Initiative, etc.
- ➔ **National Initiatives:** PM Gati Shakti National Master Plan, National Logistics Policy, PLI Scheme for various sectors, etc.



● **Way Forward**

- ➔ **Strengthen Participation:** Enhance India's role in global supply chain initiatives and promote resilience.
- ➔ **Focus on Resilience:** Continue implementing national and global strategies to mitigate supply chain disruptions and ensure stability.



About IPEF (Indo-Pacific Economic Framework)

- **Launch:** Established in 2022 in Tokyo, Japan.
- **Members:** Includes 14 countries—Australia, Brunei, Fiji, India, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, Vietnam, and USA.
- **Objective:** To strengthen economic engagement among partner countries, advancing growth, peace, and prosperity in the Indo-Pacific region.
- **Four Pillars:**
 - Pillar I: Trade
 - Pillar II: Supply Chain Resilience
 - Pillar III: Clean Economy
 - Pillar IV: Fair Economy
- **India's Participation:** Active in Pillars II-IV, while maintaining observer status in Pillar I.



Bharatiya Vayuyan Vidheyak 2024

● Why in News?

- ➡ The **Bharatiya Vayuyan Vidheyak 2024** has been introduced in the Lok Sabha, set to replace the 90-year-old **Aircraft Act of 1934**.

● Key Highlights of the Bill

- ➡ **Aim:** To address ambiguities in the current law and facilitate ease of business and manufacturing in the aviation sector.

➡ Important Provisions:

International Compliance: Empowers the Central Government to make rules for implementing international civil aviation conventions, such as **Chicago Convention (1944) & International Telecommunication Convention (1932)**.

Enhanced Authority: Increases the powers of the Directorate General of Civil Aviation (DGCA), the Bureau of Civil Aviation Security (BCAS), and the Aircraft Accident Investigation Bureau (AAIB).

Emergency Powers: Allows the Central Government to issue orders, like detaining aircraft, in the interest of public safety during emergencies.

● Significance of the Bill

- ➡ **Atmanirbhar Bharat:** Aligns with the initiative by regulating the design and manufacturing of aircraft domestically.
- ➡ **Technological Inclusion:** Expands coverage to include drones, unmanned aerial vehicles (UAVs), flying taxis, and certain electronic gliders.
- ➡ **Market Adaptation:** Addresses the needs of a rapidly growing aviation market. ICRA estimates domestic air passenger traffic will grow by 8-13% in FY2024.

● Way Forward

- ➡ Implement the bill to **streamline aviation regulations**.
- ➡ Strengthen the aviation sector through **enhanced regulatory frameworks**.
- ➡ Support the **growth and modernization** of the Indian aviation industry.



Privilege Motion

● Why in News?

- ➔ A breach of privilege notice has been moved in the Rajya Sabha against the Union Home Minister.

● About Privilege Motion

- ➔ **Definition:** A privilege motion is raised when a member believes their privilege has been breached or misused.
- ➔ **Scope:** Parliamentary privileges include specific rights enjoyed by both Houses collectively and individual members, such as freedom of speech.
- ➔ **Relevant Article:** Article 105 of the Indian Constitution addresses the powers, privileges, and functions of the Houses of Parliament and their members and committees.

● Conditions for Raising a Privilege Motion

- ➔ **Specific Matter:** The question of privilege must pertain to a specific, recent occurrence.
- ➔ **House Intervention:** The matter must require intervention from the House.

● Way Forward

- ➔ **Investigation:** The Rajya Sabha will investigate the breach of privilege notice to determine the validity and necessary actions.
- ➔ **Uphold Privileges:** Ensure that parliamentary privileges are protected and adhered to by all members to maintain the integrity of parliamentary proceedings.



The Disaster Management (Amendment) Bill, 2024

● **Why in News?**

- ➔ The Bill seeks to amend the **Disaster Management (DM) Act, 2005**, integrating disaster management more effectively into development plans, aligning with recommendations of the **15th Finance Commission**.

● **Key Features of the Bill**

➔ **Disaster Database**

Creation of disaster databases at national and state levels.

Includes disaster assessments, fund allocation details, expenditure, preparedness, and mitigation plans, and risk registers.

➔ **Disaster Plan**

Empowers the **National Disaster Management Authority (NDMA)** and **State Disaster Management Authority (SDMA)** to prepare disaster plans at national and state levels, respectively.

National plan to be reviewed every three years and updated at least once every five years.

➔ **Urban Authority**

Proposes the establishment of "**Urban Disaster Management Authority**" for state capitals and large cities with Municipal Corporations.

➔ **Statutory Recognition**

Grants statutory recognition to existing bodies:

National Crisis Management Committee (nodal body for major disasters)

High-Level Committee (for approval of financial assistance)

➔ **State Force**

Enables state governments to constitute **State Disaster Response Forces** to strengthen state disaster response capabilities.



● **Key Provisions of DM Act, 2005**

⇒ Institutional Structure

National Level: NDMA, headed by the **Prime Minister**.

State Level: SDMAs, headed by respective **Chief Ministers**.

District Level: District Disaster Management Authorities (DDMAs), headed by **District Collectors, District Magistrates, or Deputy Commissioners**.

⇒ Response Force and Fund

Establishes the **National Disaster Response Force** (for specialist response) and the **National Disaster Response Fund** (for meeting threatening disaster situations).

● **Way Forward**

⇒ Implement the amendments to enhance disaster management integration with development plans.

⇒ Strengthen disaster preparedness and response at national, state, and urban levels.

⇒ Regularly update disaster plans and maintain comprehensive disaster databases.



Eco-Sensitive Zone

● Why in News?

- ➔ The National Green Tribunal (NGT) has directed the Ministry of Environment, Forests and Climate Change (MoEF&CC) to finalize a deadline for declaring the Western Ghats as an Eco-Sensitive Zone (ECZ).

● About Western Ghats

- ➔ **Geographic Spread:** The Western Ghats extend across six states: Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu.

- ➔ **Historical Recommendations:**

2011 Gadgil Panel: Recommended declaring the entire Western Ghats as an "Ecologically Sensitive Area" due to its dense forests and high biodiversity.

Kasturirangan Panel: Reviewed and revised the Gadgil report.

● Draft Notification (2022)

- ➔ **Regulation of Human Activities:**

Restricted: Mining, quarrying, sand mining, 'Red' category industries, and new thermal power projects.

Regulated: Hydropower projects.

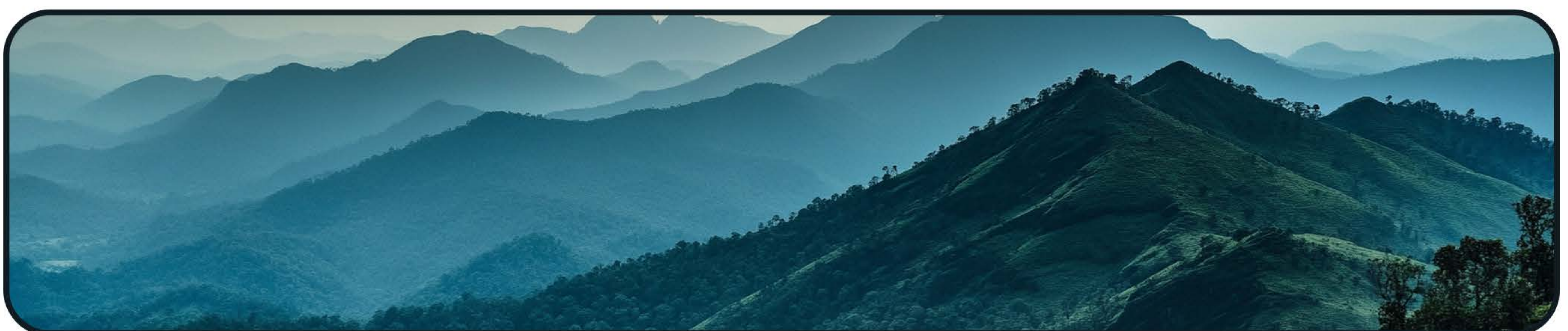
Unrestricted: Existing healthcare establishments, agriculture, and plantation activities.

- ➔ **Monitoring:** Establishment of a Decision Support & Monitoring Centre for assessing and reporting on the ecology of the Western Ghats.

● Issues

- ➔ **Local Impact:** Concerns that the draft notification may adversely affect local residents' livelihoods and development activities.

- ➔ **Scientific Basis:** Claims that no comprehensive scientific survey was conducted before issuing the draft notification.



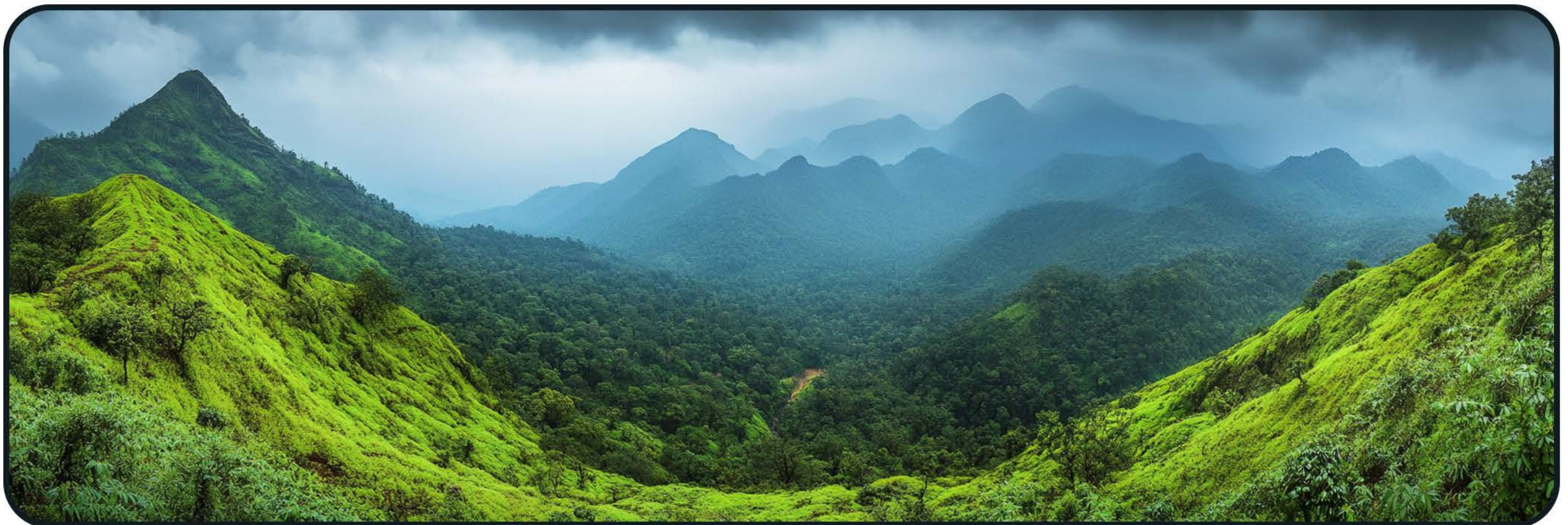
● **Way Forward**

- ➔ **Finalize Deadline:** MoEF&CC to establish a deadline for the final notification of the Western Ghats as an Eco-Sensitive Zone.
- ➔ **Balance Interests:** Address concerns regarding the impact on local livelihoods and ensure the notification is based on comprehensive scientific surveys.
- ➔ **Enhance Monitoring:** Strengthen monitoring mechanisms to protect the ecological integrity of the Western Ghats.



Eco-Sensitive Zones

- **Definition:** Areas with unique environmental resources requiring special conservation attention due to their landscape, wildlife, biodiversity, and historical value.
- **Regulation:** Defined under the National Environment Policy (2006) and the National Wildlife Action Plan (2002-2016), and regulated by MoEF&CC under the Environment Protection Act, 1986.



World Bank Report 2024: Middle-Income Trap

● Why in News?

- ➔ The World Bank has released its **World Development Report 2024**, focusing on the “**Middle-Income Trap**” and providing a roadmap for developing countries to advance beyond this economic challenge.

● About the Middle-Income Trap

- ➔ **Definition:** A situation where a middle-income country (with an annual GDP per capita between \$1,136 and \$13,845) faces growth slowdowns and struggles to transition to high-income status.
- ➔ **Trap Threshold:** Countries often hit a growth plateau at approximately 10% of annual U.S. GDP per person (\$8,000) and fail to progress further.
- ➔ **Statistics:** Since 1990, only 34 middle-income countries (MICs) have successfully transitioned to high-income status.
- ➔ **Current Scenario:** As of late 2023, 108 MICs, accounting for 75% of the global population and generating over 40% of global GDP, are facing these challenges.

● Challenges for MICs

- ➔ **Aging Populations:** Many MICs are experiencing rapidly aging populations.
- ➔ **Rising Protectionism:** Increased protectionism in advanced economies impacts trade and economic growth.
- ➔ **Energy Transition:** The need to accelerate energy transitions to sustainable sources.



● **India's Situation**

- ➡ **Current Status:** India has been classified as a Lower MIC since 2007, with a GNI per capita of \$2,540.
- ➡ **Projections:** At current growth trends, it would take India 75 years to reach one-quarter of U.S. income per capita.

● **Key Recommendations**

➡ **3I Strategy:**

Investment: Prioritize investments in key sectors.

Infusion: Introduce new technologies and innovations.

Innovation: Adopt a balanced approach integrating investment, infusion, and innovation.

➡ **Foster Business Dynamism:** Reward value-adding firms and deepen capital markets.

➡ **Enhance Social Mobility:** Provide equal opportunities to women, minorities, and disadvantaged groups. For example, removing barriers for women entrepreneurs in India could boost real income by 40%.

➡ **Economic Efficiency:** Reflect environmental costs in energy prices to enhance overall efficiency.

● **Way Forward**

➡ **Policy Implementation:** Develop and execute policies based on the 3I strategy to stimulate growth and innovation.

➡ **Support Inclusivity:** Focus on removing barriers to entrepreneurship and enhancing social mobility.

➡ **Promote Sustainability:** Ensure that economic practices reflect environmental costs to achieve long-term efficiency.



Seaweed Farming

● Why in News?

- ⇒ NITI Aayog has released a report outlining strategies for advancing the seaweed value chain in India.

● Significance of Seaweed Farming

- ⇒ **Economic Value:** Seaweeds offer valuable bioactive compounds for food and pharmaceuticals.
- ⇒ **Environmental Impact:** Plays a crucial role in carbon sequestration and enhancing climate resilience.
- ⇒ **Nutritional Benefits:** Rich in essential minerals and vitamins (A, B1, B12).

● Challenges in Seaweed Farming

- ⇒ **Policy Framework:** Absence of a comprehensive policy.
- ⇒ **Quality Seeds:** Limited availability of high-quality seeds.
- ⇒ **Ecological Concerns:** Potential impacts of exotic species on biodiversity and coral reefs.

● Recommendations for Promoting Seaweed Farming

- ⇒ **Regulatory Reforms:** Establish a National Steering Committee; introduce Priority Sector Lending (PSL) for seaweed.
- ⇒ **Social Security & Financial Support:** Provide crop insurance; mobilize farmers through Self-Help Groups (SHGs).
- ⇒ **Infrastructure Development:** Set up seed banks, processing centers, and marketing centers.



● **Steps Taken by India**

- ➡ **PM Matsya Sampada Yojana:** Aims for 1 million tons of seaweed production annually by 2025.
- ➡ **Expert Committee:** Chaired by Dr. V K Saraswat to review seaweed development policies.
- ➡ **Offshore Cultivation:** Initiated in the Andaman region by NIOT-ACOSTI.
- ➡ **GIS-based Portal:** Developed to map seaweed cultivation sites.

● **Way Forward**

- ➡ **Policy Development:** Implement recommended regulatory and governance reforms.
- ➡ **Investment & Infrastructure:** Enhance infrastructure and support mechanisms for seaweed farming.
- ➡ **Research & Innovation:** Focus on improving seed quality and addressing ecological concerns.



China Plus One Strategy

● Why in News?

- ➔ The Economic Survey (2023-24) suggests leveraging Foreign Direct Investment (FDI) from China to benefit from the 'China Plus One Strategy'.

● China Plus One Strategy

- ➔ **Definition:** A practice where international businesses active in China couple their investments with a second facility in another Asian economy.
- ➔ **Drivers:** Disruptions due to China's zero-COVID policy, growing US-China tensions, and rising labour costs in China.

● Beneficiaries

- ➔ **Current Beneficiaries:** Mexico, Vietnam, Taiwan, and Korea.
- ➔ **Potential for India:** India could capitalize by integrating into China's supply chain or encouraging Chinese FDI. The latter is more advantageous:
 - Reduces trade deficit with China.
 - Aligns with the growing trend of beneficiaries increasing FDI inflow from China.

● Concerns with Chinese FDI in India

- ➔ **Border Dispute:** Ongoing military tensions and China's regional supremacy ambitions.
- ➔ **Security Risks:** Potential for espionage due to Chinese laws mandating cooperation with national intelligence.
- ➔ **China's Support for Pakistan:** Adds a layer of complexity to India-China relations.



● **India-China Economic Relations**

➡ **Bilateral Trade:**

China is India's top import partner.
 Bilateral trade was US\$ 118.4 billion in FY24.
 India faces a trade deficit of around US\$ 85 billion.

➡ **China's FDI in India:**

Accounts for around 0.37% of total FDI inflow (April 2000 - March 2024).

● **India's Initiatives to Narrow Trade Deficit**

- ➡ **PLI Scheme:** Production-Linked Incentive scheme to boost manufacturing.
- ➡ **Anti-dumping Duties:** Measures to protect domestic industries from unfair foreign competition.
- ➡ **Quality Control Orders:** Ensuring imported goods meet Indian standards.

● **Way Forward**

- ➡ Encouraging Chinese FDI for export-driven growth.
- ➡ Strengthening security measures to mitigate risks associated with foreign investments.
- ➡ Continuing initiatives to reduce trade deficit and improve domestic manufacturing capabilities.



NPA Provision Norms for Cooperative Banks

● Why in News?

- ➔ The Reserve Bank of India (RBI) has revised the norms for Non-Performing Assets (NPAs) provisions for cooperative banks.

● Need for New Norms

- ➔ Some banks were not recognizing required provisions for NPAs as an expense.
- ➔ The new norms aim to bring uniformity in the treatment of **Bad & Doubtful Debt Reserve (BDDR)**.

● New Norms

- ➔ All provisions under Income Recognition, Asset Classification, and Provisioning (**IRACP**) norms must be charged as an expense to the Profit and Loss Account.
- ➔ After accounting for all provisions as per IRACP norms and other regulations, cooperative banks may appropriate net profits to BDDR.

● Cooperative Banks

- ➔ Operate on the principle of cooperation and are owned and operated by their members.
- ➔ Divided into Rural and Urban cooperative banks.

● Issues with Cooperative Banks

- ➔ **Regional Disparity:** 82% of total Urban Cooperative Banks (UCBs) and around 90% of branches are concentrated in Western and Southern regions (2020).
- ➔ **Dual Regulation:** State governments oversee managerial and administrative activities, while RBI/NABARD regulates banking activities.
- ➔ **Other Issues:** Inadequate avenues for raising capital, high Gross NPAs, etc.



● **Steps Taken for Reform**

- ➡ **Banking Regulation (Amendment) Act, 2020:** Brought management, governance, winding up, etc., under RBI's purview.
- ➡ **Umbrella Organization for Urban Cooperative Banks:** National Federation of Urban Co-operative Banks and Credit Societies Ltd.

● **Way Forward**

- ➡ Implement new norms to ensure financial stability and uniformity.
- ➡ Address regional disparities and dual regulation challenges.
- ➡ Strengthen cooperative banks through adequate capital-raising avenues and improved governance.



India's Foreign Policy Dilemma in West Asia

● Why in News?

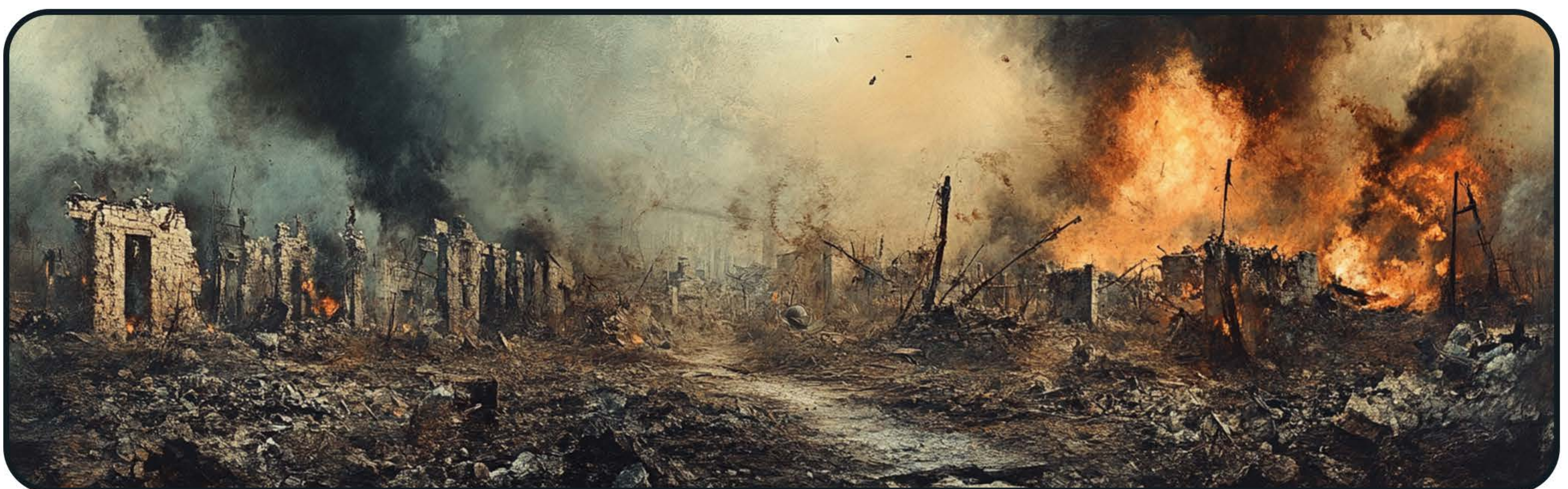
- ➡ Recent tensions between Iran and Israel, exacerbated by the assassination of Hamas and Hezbollah leaders, have prompted increased diplomatic efforts from the US and regional powers to prevent a broader conflict.
- ➡ India faces a complex foreign policy dilemma due to its significant interests in both countries.

● India's Stakes in the Region

- ➡ **Energy Security:** The Gulf-West Asia-North Africa region accounts for over two-thirds of India's crude oil imports.
- ➡ **Diaspora & Remittances:** Approximately 8 to 9 million Indians reside in West Asia, with countries like UAE, Saudi Arabia, Kuwait, and Oman being major sources of remittances.
- ➡ **Strategic Interests:** Key projects such as the India-Middle East-Europe Economic Corridor and the Chabahar Port (Iran) are crucial for India's strategic goals.

● India's Foreign Policy Approaches

- ➡ **Extended Neighbourhood:** The Gulf region is considered part of India's 'extended neighbourhood,' with Iran included in its 'proximate neighbourhood.'
- ➡ **Look West Policy:** Since 2005, this policy aims to enhance cooperation with West Asian countries and secure India's national interests in the region.
- ➡ **Policy of De-hyphenation:** India maintains separate and independent diplomatic relations with Israel and Palestine, focusing on merit-based interactions rather than linked relations.



● **Way Forward**

- ➔ **Diplomatic Balancing:** Continue to navigate the delicate balance between maintaining strong ties with both Iran and Israel.
- ➔ **Strategic Investments:** Enhance engagement in strategic projects that benefit India's national interests while managing regional tensions.
- ➔ **Diversification:** Explore additional avenues for energy security and economic cooperation to reduce dependency on any single region or country.



Global Methane Emissions

● Why in News?

➔ Recent study reveals that global methane emissions have been increasing at the fastest rate in decades, with a significant rise since 2006 and especially since 2020.

The trend is expected to persist throughout the 2020s.

● Key Highlights of the Study

➔ **Contribution to Warming:** Methane emissions since 1850 have contributed approximately 65% as much warming as CO₂.

➔ **Recent Surge:** The sharp increase in methane emissions in the early 2020s is primarily due to warming-induced responses from wetlands, along with contributions from fossil fuel use.

● About Methane Emissions

➔ **Climate Impact:** Methane is a short-lived climate pollutant and the second-largest contributor to global warming after CO₂.

● Emission Sources

➔ **Natural Sources:** Wetlands produce about 30% of methane; other sources include wildfires, biomass burning, permafrost, termites, and oceans.

➔ **Anthropogenic Sources:**

Agriculture: Includes livestock, waste management, and rice cultivation (20%).

Fossil Fuels: Extraction processes (30%).

Other Activities: Waste management and industrial activities.



● **Impact**

- ➡ **Global Warming Potential (GWP):** Methane has approximately 28 times the GWP of CO₂.
- ➡ **Pollution:** Contributes to ground-level ozone formation, which is harmful, and methane leaks can cause explosions.

● **Initiatives to Reduce Methane Emissions**

➡ **Global Initiatives:**

Global Methane Pledge: Aims for a 30% reduction in methane emissions by 2030.

Methane Observatories: Includes Earth Surface Mineral Dust Source Investigation (EMIT) and Airborne Visible InfraRed Imaging Spectrometer - Next Generation (AVIRIS-NG).

Other Programs: Global Methane Initiative (2004), Methane Alert and Response System (MARS).

➡ **India's Initiatives:**

National Mission on Sustainable Agriculture (NMSA).

Direct Seeded Rice & Crop Diversification Programme.

Gobar-Dhan Scheme (Galvanizing Organic Bio-Agro Resources).

National Livestock Mission.



Carry Trade

● Why in News?

- ➔ The yen carry trade has garnered attention recently due to the sell-off in shares of US technology giants.

● About Carry Trade

- ➔ **Definition:** A carry trade is an investment strategy primarily associated with foreign currency trading.
- ➔ **Mechanism:**
 - Investors borrow in a low interest-rate currency.
 - They use the borrowed funds to buy a currency or asset that earns a higher interest rate.
- ➔ **Risks:** It is a high-risk strategy due to potential volatility in currencies and changes in interest rates.

● Key Highlights

- ➔ **Borrowing Currency:** Typically involves low interest-rate currencies like the Japanese yen.
- ➔ **Investment Target:** Higher interest rate currencies or assets, offering better returns.
- ➔ **Market Impact:** Fluctuations in interest rates or currency values can lead to significant gains or losses.

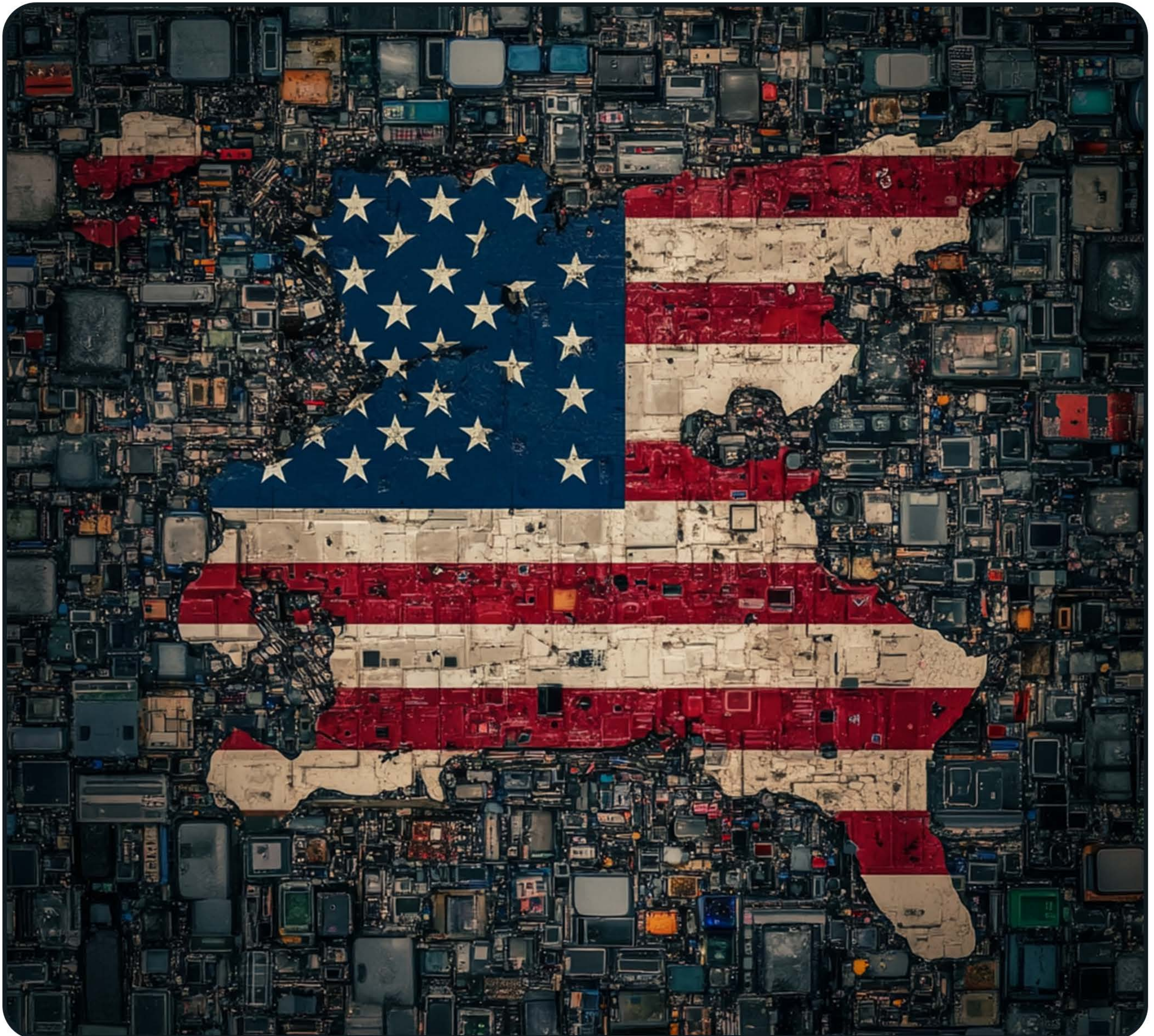
● Implications

- ➔ **Investor Strategy:** Investors need to carefully manage risks associated with currency volatility.
- ➔ **Market Volatility:** Changes in global economic conditions can impact the effectiveness of carry trades.



● **Way Forward**

- ➔ **Monitoring Economic Indicators:** Keep an eye on global interest rate trends and currency movements.
 - ➔ **Risk Management:** Employ strategies to mitigate potential losses due to market fluctuations.
- This strategy continues to be a significant topic in the financial markets, especially during periods of economic uncertainty.



Role of Technology in DMRR

● Why in News?

⇒ Advancements in geospatial technology, AI, Machine Learning, and IoT are being increasingly utilized in **Disaster Management and Risk Reduction (DMRR)**.

● Use of Technologies in DMRR

⇒ Disaster Prediction and Early Warning Systems:

Technologies: Remote sensing, ML, GIS, drones.

Application: Collecting and processing data.

Example: Google Disaster Alerts.

⇒ Event Simulation:

Objective: To prepare and train people.

Technologies: Augmented Reality (AR), Virtual Reality (VR).

Example: Mobile Learning Hub Philippines.

⇒ Disaster Detection:

Source: Social media platforms as crucial information and communication tools.

Example: Earthquake detection through social media analysis.

⇒ Search and Rescue:

Methods: Identifying people in critical need through satellite imagery or social media posts.

Technologies: Drones for delivery of medical supplies and aid.

⇒ Emergency Communication:

Tools: AI-powered chatbots for managing and communicating with the public during disasters.

Example: COVID-19 chatbots launched by WHO.



● **Challenges in Use of Technology**

- ➡ Digital divide.
- ➡ Biased AI.
- ➡ High implementation costs.
- ➡ Security breaches.

● **Steps Taken**

➡ **Forecasting Natural Disasters:**

By: ISRO.

Example: Flood Early Warning System in Assam.

➡ **INSAT-3D Satellite:**

Purpose: Aid in search and rescue operations.

➡ **GEMINI Device:**

Developed by: INCOIS.

Use: Disaster warnings for fishermen in the ocean.

➡ **SATARK Web-Based Platform:**

Developed by: Odisha State Disaster Mitigation Authority.

➡ **Connecting Business Initiative (CBI):**

Joint initiative of: UNDP and United Nations Office for the Coordination of Humanitarian Affairs (OCHA).



Oilfields (Regulation and Development) Amendment Bill, 2024

● **Why in News?**

- ➔ The Oilfields (Regulation and Development) Amendment Bill, 2024 has been introduced in the Rajya Sabha to amend the existing **Oilfields (Regulation and Development) Act, 1948**.

● **Background**

- ➔ **Original Act:** Initially, the regulation of oilfields, mines, and minerals was governed by the Mines and Minerals (Regulation and Development) Act, 1948.
- ➔ **1957 Amendment:** The Mines and Minerals (Development and Regulation) Act was established to separately handle the development and regulation of mines and minerals.

● **Key Features of the Bill**

- ➔ **Expanded Definition:** Broadens the scope of “mineral oils” to include naturally occurring hydrocarbons such as crude oil, natural gas, petroleum, condensate, coal bed methane, oil shale, and shale gas.
- ➔ **Petroleum Lease:** Introduces the concept of “petroleum lease” for activities related to prospecting, exploration, development, and production of mineral oils.
- ➔ **Separation of Operations:** Delinks petroleum operations from mining operations.
- ➔ **Dispute Resolution and Decriminalization:** Provides for efficient dispute resolution mechanisms and decriminalizes certain provisions of the Act.

● **Significance of the Amendment**

- ➔ **Energy Access and Security:** Aims to enhance energy access, security, and affordability.
- ➔ **Reduced Import Dependence:** Seeks to increase domestic oil and gas production, reducing reliance on imports.
- ➔ **Investment and Innovation:** Attracts investment in the sector, promoting ease of business and technological advancements.
- ➔ **Energy Transition:** Supports the transition to cleaner fuels and energy sources.
- ➔ **Compliance Enforcement:** Establishes a robust enforcement mechanism for ensuring compliance with regulations.

QCI Surajya Recognition & Ranking Framework

● Why in News?

- ➔ The **Quality Council of India (QCI)** has introduced the **QCI Surajya Recognition & Ranking Framework** to acknowledge and reward excellence in quality and innovation across various sectors in India.

● About the Framework

- ➔ **Objective:** To recognize and reward states and organizations that excel in quality and innovation, contributing towards the goal of a Developed (Viksit) India.

➔ Pillars

Shiksha (Education)

Swasthya (Health)

Samriddhi (Prosperity)

Sushasan (Governance)

● About QCI

- ➔ **Establishment:** Founded in 1996 as the national accreditation body under the Societies Registration Act, 1860.
- ➔ **Origin:** Established jointly by the Government of India and Indian Industry (ASSOCHAM, FICCI, CII), based on the recommendations of the Expert Mission of the European Union.
- ➔ **Nodal Department:** Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry.
- ➔ **Governing Council:** Consists of 39 members including the Chairperson and Secretary General, with equal representation from Government, Industry, and other stakeholders. The Chairperson is appointed by the Prime Minister.



● **Role of QCI**

- ➡ **National Accreditation Body (NAB):** Promotes quality through the National Quality Campaign aligned with global standards.
- ➡ **Assessment Mechanism:** Provides third-party assessment for products, services, and processes.
- ➡ **Quality Improvement:** Aims to enhance the quality of life and wellbeing of Indian citizens.

● **Achievements**

- ➡ **Healthcare:** Collaborated with ICMR to expand COVID-19 testing labs. Implemented ABPMJAY quality certification and Kayakalp Certification for healthcare facilities.
- ➡ **Sanitation:** Certified Urban Local Bodies (ULBs) as ODF, ODF+, and ODF++.
- ➡ **Education:** Launched eQuest: E-Quality Platform for skill development and employability.
- ➡ **Agriculture:** Developed standards and certification schemes for Good Agriculture Practices (GAP) in SAARC countries, in collaboration with FAO.

● **Way Forward**

- ➡ **Implementation:** Expand the framework's application to more states and sectors to further enhance quality and innovation.
- ➡ **Monitoring and Evaluation:** Regularly assess the impact of the framework on achieving developmental goals and improving service quality across the identified pillars.



Tropospheric Ozone Pollution

● Why in News?

⇒ A report highlights the increasing levels of Ground-level Ozone (GLO) pollution across India's major cities, with Delhi being the most affected.

● Key Findings on Ground-level Ozone (GLO)

⇒ **Exceeding Standards:** India's 10 metropolitan areas have exceeded the national ozone standard.

⇒ **Hotspots:** GLO hotspots are in areas with low levels of NO₂ and PM_{2.5}, as the unavailability of NO₂ hampers its dissipation.

⇒ **Persistent Night-time GLO:** Night-time GLO continues to persist in all metropolitan areas.

● About Ground-level Ozone (GLO)

⇒ **Definition:** Ozone (O₃) is a variant of oxygen composed of three oxygen atoms. It occurs both in the Earth's upper atmosphere and at ground level.

⇒ **Formation:** GLO is a secondary, short-lived pollutant formed by the reaction between oxides of nitrogen and volatile organic compounds (VOCs) in the presence of sunlight. Peak O₃ levels occur in summers.

⇒ **Sources:** Pollution from cars, power plants, industries, and electronic equipment like photocopiers.

● Impact of Ground-level Ozone (GLO)

⇒ **Health:** Worsens bronchitis, triggers asthma, and permanently damages lung tissue.

⇒ **Climate:** Absorbs radiation and acts as a strong greenhouse gas.

⇒ **Agriculture and Ecosystem:** Interferes with photosynthesis and stunts the overall growth of some plant species.

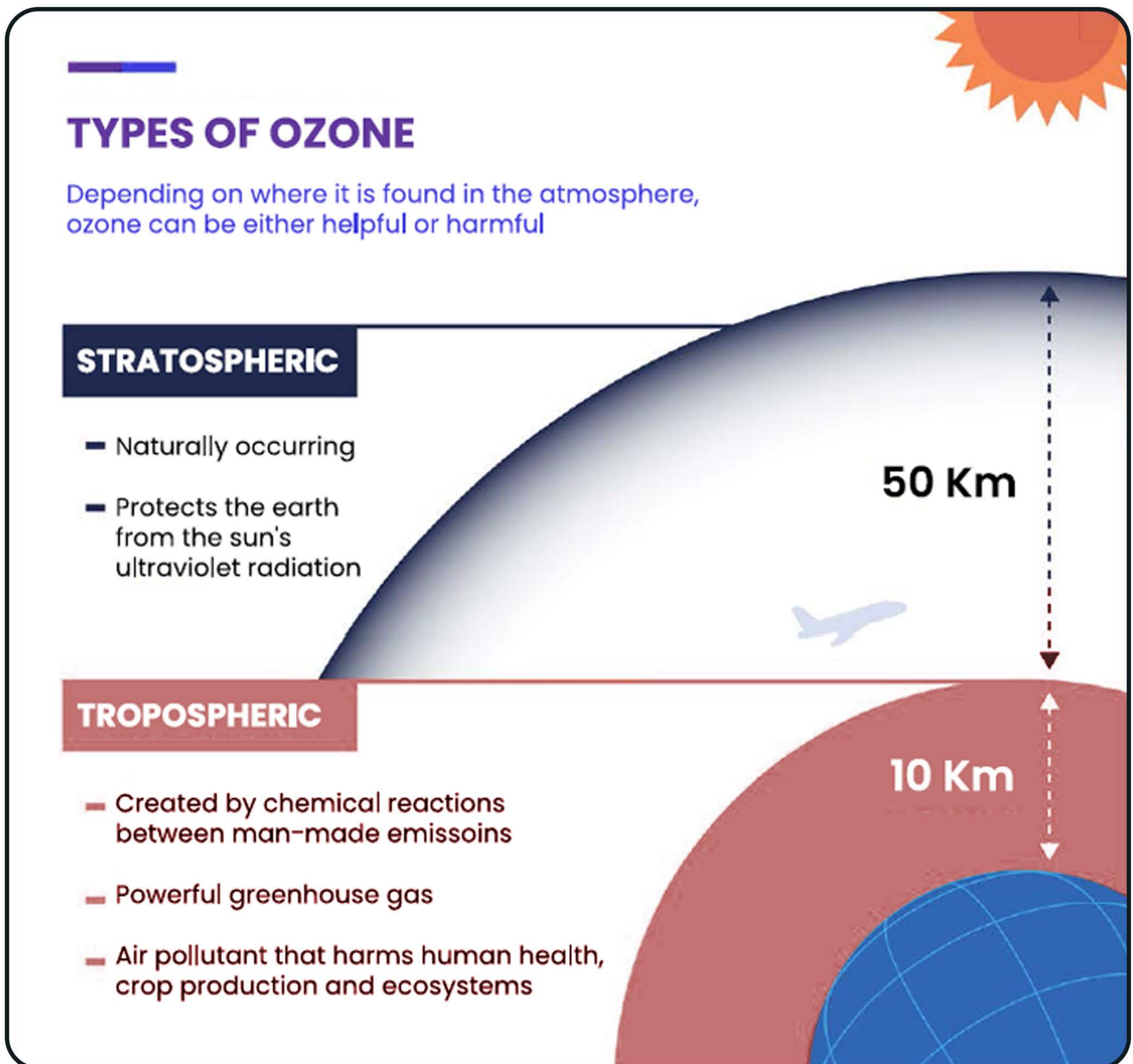


● **Strategies to Prevent Ozone Pollution**

- ➡ **Methane Reductions:** Reducing methane emissions.
- ➡ **Cutting Pollution Levels:** Decreasing atmospheric pollution from cars, power plants, and other sources.

● **Way Forward**

- ➡ **Policy Implementation:** Enforce stricter regulations on emissions from vehicles and industries.
- ➡ **Public Awareness:** Increase awareness about the sources and impacts of GLO pollution.
- ➡ **Technological Innovations:** Invest in cleaner technologies and alternative energy sources to reduce emissions.



Namami Gange Mission 2.0

● Why in News?

- ➔ Four projects under Namami Gange Mission 2.0 have been operationalized in **Bihar** and **Uttar Pradesh**.
- ➔ These initiatives aim to enhance sewage treatment capacity by 145 MLD, improve sewer networks, and intercept various drains.

● Key Highlights of Namami Gange Mission 2.0

➔ Background

Namami Gange Programme, launched in **2014**, is an **Integrated Conservation Mission** extended up to **31st March 2026** as NGM 2.0.

➔ Objective

Focused on the effective abatement of pollution and rejuvenation of the River Ganga.

➔ Main Pillars

Sewage Treatment: Increase in sewage treatment capacity and infrastructure.

River-Front Development: Enhancing riverfronts for better public access and environmental quality.

River Surface Cleaning: Regular removal of debris from the river's surface.

Afforestation: Increasing green cover to improve the river's ecosystem.

Biodiversity: Conservation of aquatic and terrestrial biodiversity along the Ganga.

Public Awareness: Engaging communities in the conservation effort.

Effluent Management: Regulation and treatment of industrial effluents.

Ganga Gram: Development of model villages along the Ganga.

● Implementation Agency

- ➔ **National Mission for Clean Ganga (NMCG):** Primary body under the Ministry of Jal Shakti, responsible for execution, registered under the Societies Registration Act, 1860.



● **Achievements**

- ➡ **Projects:** 457 projects undertaken, 280 completed and operational as of February 2024.
- ➡ **Local Engagement:** Formation of 139 District Ganga Committees chaired by District Magistrates.
- ➡ **Industrial Treatment:** Sanction of Common Effluent Treatment Plants (CETPs) for managing industrial pollution.

● **Way Forward**

- ➡ Continued focus on expanding sewage treatment capacity and infrastructure.
- ➡ Strengthening local and community-based conservation efforts.
- ➡ Ensuring the sustainability of the river's ecosystem through ongoing and new initiatives under NGM 2.0.



PM-KUSUM

● Why in News?

- ➔ The Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) has only achieved 30% of its targets, raising concerns about meeting the 2026 deadline for the scheme.

● Key Findings

- ➔ **Component Performance:** Most progress has been made under Component B, while Components A and C have seen minimal implementation.
- ➔ **Solar-Powered Pumps:** Farmers benefit from solar-powered pumps for daytime irrigation, but the availability of cheap electricity reduces the incentive to switch from electric to solar pumps.
- ➔ **Regional Variability:** In regions like Haryana, the availability of certain pump capacities (e.g., 5 hp and 7.5 hp surface pumps) is limited.

● Recommendations

- ➔ **Decentralized Implementation:** Implementing agencies with local knowledge should be engaged to better address the specific needs of farmers.
- ➔ **Financial Viability:** Allow farmers to pay upfront costs in installments to enhance financial feasibility.
- ➔ **Increased Central Assistance:** Adjust financial support based on state needs and solar module prices.



● **Way Forward**

- ➔ **Enhanced Focus:** Intensify efforts on Components A and C to achieve balanced progress across all scheme components.
- ➔ **Policy Adjustments:** Implement recommendations to improve the scheme's financial viability and regional implementation.



About PM-KUSUM

- **Launched:** 2019
- **Objectives:**
 - De-dieselize the farm sector
 - Ensure water and energy security for farmers
 - Increase farmer income
 - Reduce environmental pollution
- **Target:** Add 34.8 GW of solar capacity by March 2026
- **Nodal Ministry:** Ministry of New and Renewable Energy
- **Components**
 - Component A:** Installation of 10,000 MW of solar capacity through small solar power plants (up to 2 MW each).
 - Component B:** Installation of 1.4 million standalone solar-powered agriculture pumps.
 - Component C:** Solarization of 3.5 million grid-connected agriculture pumps.



Waqf (Amendment) Bill, 2024

● Why in News?

- ➡ The Centre has introduced the **Waqf (Amendment) Bill, 2024** in Parliament, aiming to amend the Waqf Act, 1995.
- ➡ The term "**Waqf**" has been redefined as "**Unified Waqf Management, Empowerment, Efficiency, and Development.**"

● Key Features of the Bill

- ➡ **Waqf Database:** A database of waqf properties must be registered on a portal within six months of the Act's commencement.
- ➡ **Definition of Waqf:** Waqf is defined as property dedicated by any person practicing Islam for at least five years, with ownership of such property.
- ➡ **Inclusive Representation:** Ensures women's and non-Muslim representation on the Central Waqf Council and state boards.
- ➡ **Audit Powers:** The Central Government can direct the audit of any waqf property at any time by an auditor appointed by the Comptroller and Auditor-General of India or another designated officer.
- ➡ **Dispute Resolution:** The District Collector will decide if a disputed property is waqf or government land.

● Objectives of the Bill

- ➡ To effectively address issues related to the powers of State Waqf Boards, and the registration and survey of waqf properties.
- ➡ To enhance the efficiency of the administration and management of waqf properties.

● About Waqf Properties

- ➡ **Definition:** Moveable or immovable properties dedicated in the name of God for charitable purposes by a deed or an instrument.
- ➡ **Management:** Managed by a legal entity with nominated members known as the Waqf board.
- ➡ **Oversight:** The Central Waqf Council (CWC), a statutory body established in 1964, oversees and advises state-level Waqf Boards across India.



● **Way Forward**

- ➡ Implement the Bill to **streamline waqf management**.
- ➡ Ensure **transparency and accountability** in the administration of waqf properties.
- ➡ Enhance **representation and inclusivity** within Waqf Boards.



Government Review of Dam Designs for GLOF Vulnerability

● Why in News?

- ➡ The **Ministry of Power** has identified 47 dams (38 commissioned and nine under construction) that may be affected by Glacial Lake Outburst Floods (GLOFs).
- ➡ In response to the Teesta-III dam collapse last year, the Central Water Commission (CWC) will review the design flood for these dams to assess their vulnerability to GLOFs.

● About Glacial Lake Outburst Flooding (GLOFs)

- ➡ **Definition:** GLOFs occur when glacial lakes breach their boundaries, causing massive amounts of water to flood nearby streams and rivers.

➡ Causes:

Geological: Earthquakes, moraine dam breaches.

Morphological: Mass movements into glacial lakes, water seepage through glacial structures.

Physical: Excessive precipitation, cryoseism (non-tectonic seismic events in glaciers).

Anthropogenic: Climate change and global warming.

● Challenges of GLOFs

- ➡ **Unpredictability:** GLOFs can occur suddenly with minimal warning.
- ➡ **Impact on Lives:** For instance, the 2013 Kedarnath valley lake outburst resulted in approximately 6,000 deaths.
- ➡ **Remote Locations:** Areas like Chamoli's Rishighanga valley have been affected by GLOFs.



● **Strategies to Manage GLOF Risks**

- ➡ **Hazard Risk Zonation and Mapping:** Identifying and mapping areas at risk from GLOFs.
- ➡ **Technology Monitoring:** Using technology to monitor glacial lakes.
- ➡ **Regulation of Construction:** Implementing restrictions and regulations on construction in hazard-prone areas.

● **Way Forward**

- ➡ **Design Reviews:** Assess and update dam designs to ensure they can withstand potential GLOF scenarios.
- ➡ **Enhanced Monitoring:** Strengthen monitoring systems for early detection of GLOFs.
- ➡ **Improved Regulations:** Develop and enforce stricter regulations for construction in areas vulnerable to GLOFs.



Boilers Bill, 2024

● Why in News?

- ➔ The **Boilers Bill, 2024** has been introduced in the Rajya Sabha to repeal the **Boilers Act, 1923**, aiming to modernize and update regulations pertaining to boilers.

● Key Features of the Bill

- ➔ **Repeal and Replacement:** The bill will repeal the Boilers Act, 1923, and introduce new provisions for regulating boilers.
- ➔ **Competent Authority:** Defines a "competent authority" responsible for granting certificates to welders for boiler and component welding.
- ➔ **Penalties for Unauthorized Work:** Imposes penalties, including imprisonment up to two years or a fine up to one lakh rupees, for unauthorized structural alterations to boilers.
- ➔ **Regulatory Authority:** Establishes the Central Boilers Board to oversee the design, manufacture, erection, and use of boilers.
- ➔ **Government Powers:** Grants the Central Government authority to address any difficulties in implementing the new provisions within three years from the Act's commencement.

● Objective of the Bill

- ➔ **Safety and Uniformity:** Aims to regulate the manufacture and use of boilers to ensure safety from explosions, prevent the use of unregistered and uncertified boilers, and standardize registration and inspection processes.
- ➔ **Accident Reporting:** Mandates reporting of boiler-related accidents.

● Importance of Industrial Boilers

- ➔ **Functionality:** Boilers handle burning of large quantities of fuel, operate at high temperatures and pressures, and manage high-energy steam, making their safe operation critical.

● Way Forward

- ➔ **Implementation:** Ensure smooth transition from the Boilers Act, 1923 to the new regulatory framework under the Boilers Bill, 2024.
- ➔ **Regulatory Setup:** Establish and empower the Central Boilers Board for effective regulation and oversight.
- ➔ **Compliance and Enforcement:** Develop mechanisms for enforcement of new regulations and penalties to maintain safety standards in boiler operations.



Banking Laws (Amendment) Bill, 2024

● Why in News?

- ➔ The Banking Laws (Amendment) Bill, 2024, has been introduced in the Lok Sabha to address the evolving needs of the banking sector and improve bank governance.

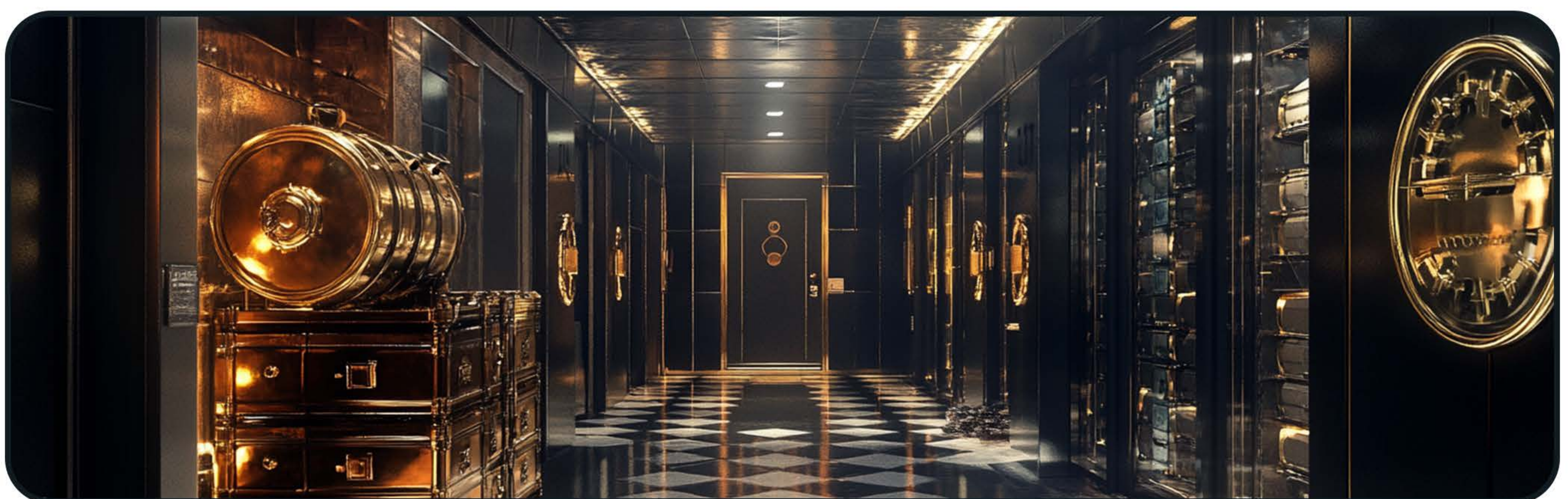
● Key Provisions of the Bill

- ➔ **Increased Nominees:** Allows depositors to nominate up to four individuals simultaneously, with specified proportions of their shares, and successively.
- ➔ **Successive Nomination:** Establishes a process for contacting nominees in the listed order for claiming funds.
- ➔ **Investor Education and Protection Fund (IEPF):**
 - Transfers unclaimed dividends, shares, and interest or bond redemptions to the IEPF if unclaimed for seven consecutive years.
 - Individuals can claim transfers or refunds from the IEPF.
- ➔ **Threshold for Directorships:** Increases the threshold for substantial interest in shareholding from ₹5 lakh to ₹2 crore for directorship eligibility.
- ➔ **Cooperative Banks:** Extends the tenure of directors in cooperative banks from 8 years to 10 years.

● Significance

- ➔ **Consistency in Reporting:** Enhances consistency in reporting to the RBI.
- ➔ **Reduction of Unclaimed Deposits:** Aims to reduce unclaimed deposits, which were over ₹42,000 crore as of March 2023, by increasing the number of nominees.

Unclaimed Deposits: Include savings/current account balances not operated for 10 years or term deposits not claimed within 10 years of maturity.

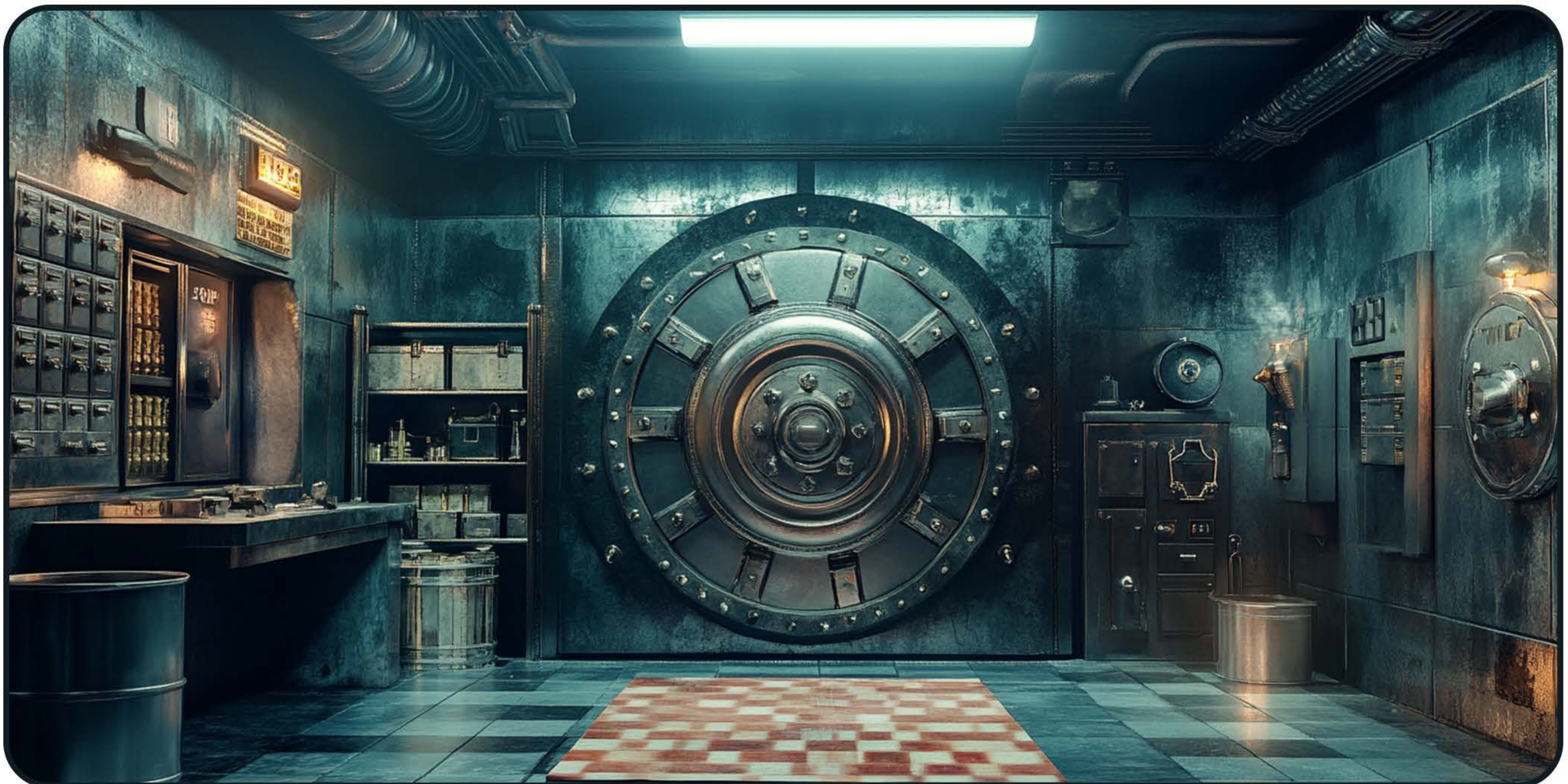


● **Investor Education and Protection Fund (IEPF)**

- ➡ **Establishment:** Created under the **Companies Act, 1956**, via the **Companies (Amendment) Act, 1999**.
- ➡ **Objective:** To promote investor awareness and protect investor interests.
- ➡ **Administration:** Managed by the Investor Education and Protection Fund Authority (**IEPFA**) under the **Ministry of Corporate Affairs**.

● **Way Forward**

- ➡ **Implementation:** Ensure effective implementation of the new provisions to enhance governance and protect depositor interests.
- ➡ **Education and Awareness:** Promote awareness about the IEPF and the changes in nomination provisions to prevent unclaimed deposits.
- ➡ **Regulatory Adjustments:** Monitor and adjust regulatory frameworks as needed to ensure the effective functioning of the banking sector.



Grain ATM

● Why in News?

- ➔ The World Food Programme (WFP) and the **Government of Odisha** have jointly launched India's first 24/7 '**Grain ATM**' called '**Annapurti**' in Bhubaneswar.

● Key Highlights

➔ Annapurti

Made-in-India: Designed and developed by **WFP India**.

Functionality: Dispenses food grains (wheat, rice, or millet) to beneficiaries **24/7** under the National Food Security Act (**NFSA**) after biometric authentication.

Efficiency: Reduces waiting time **by 70%** while ensuring universal access to food grains, with **energy-efficient**, solar-powered refilling.

Recognition: Recognized as one of WFP's top 5 innovative solutions for disrupting hunger at the 2022 WFP Innovation Awards.

➔ National Food Security Act (NFSA)

Coverage: Covers up to **75% of the rural** and **50% of the urban** population.

Entitlement: Provides access to **subsidized food grains**.

● Way Forward

- ➔ **Expansion:** Consider expanding the 'Grain ATM' initiative across other states to ensure food security and reduce hunger.
- ➔ **Efficiency:** Enhance the efficiency and accessibility of public distribution systems through innovative technologies like Annapurti.

● About UN World Food Programme (WFP)

- ➔ **Established:** In 1961 by the United Nations to alleviate world hunger.
- ➔ **Scale:** The world's largest humanitarian organization providing food assistance in emergencies.
- ➔ **Recognition:** Awarded the Nobel Peace Prize in 2020 for its efforts to combat hunger.






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