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# DAILY CURRENT AFFAIRS

04 July 2024



SOURCES



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## GS II

### 1. Relevance of NATO after 75 years

**Source:** IE

**Context:** Russia's aggression has revitalized NATO, reaffirming its relevance as it celebrates 75 years of establishment in 2024.

#### About NATO:

- NATO, or the North Atlantic Treaty Organization, is a military alliance of countries.
- Establishment: It was founded in 1949 with the signing of the North Atlantic Treaty, more popularly known as the Washington Treaty.
- Aim: To ensure the security and defense of its member countries through collective defense.
- Founding Members: The original members of NATO were Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States.
- Collective Defense: The cornerstone of NATO is Article 5 of the North Atlantic Treaty, which states that an armed attack against one or more of its members is considered an attack against all members.
- Decision-Making: Decisions within NATO are made on the basis of consensus among member countries.
- The North Atlantic Council, which includes the ambassadors of all member countries, is the principal political decision-making body.

**Members:** It has 32 member countries, Finland and Sweden became the 31st and 32nd members respectively.

- On signing the Treaty, countries voluntarily commit themselves to participating in the political consultations and military activities of the Organization.

#### Expansion of NATO :

- NATO now has 32 members across Europe and North America, including the UK, US, Canada, France, Germany, Italy, Spain and Turkey.
- After the Soviet Union's collapse in 1991, many Eastern European countries joined: Albania, Bulgaria, Hungary, Poland, the Czech Republic, Slovakia, Romania, Lithuania, Latvia and Estonia.
- Sweden and Finland applied to join in 2022, following Russia's invasion of Ukraine. They had been neutral for decades.
- Finland – which has a 1,340km (832 mile) land border with Russia – joined in 2023. Sweden became a member in March 2024.
- With Sweden and Finland joining Nato, it is seeing its biggest expansion since the 1990s. They will add nearly 300,000 active and reserve troops to the alliance's ranks.
- Ukraine, Bosnia and Herzegovina, and Georgia also hope to join Nato.



### Relevance of NATO:

- **Counterbalancing Russian Influence:** It serves as a counterbalance to Russian influence in Eastern Europe and the former Soviet space.
- **Benefits for Eastern Europe:** The enlargement of NATO will help to promote democratic reform and peaceful coexistence between the nations of Europe.
- **Enhanced Collective Defense:** NATO strengthens the collective defense capabilities of member states.
- **Addressing New Security Concerns:** NATO allows it to adapt to new security threats such as terrorism, cyber attacks, and hybrid warfare, which require a coordinated and collective response from member states.

### Concerns of NATO Expansion

- **Geopolitical Tensions:** Expanding NATO's borders potentially provokes tensions with neighboring countries, especially those with close ties to Russia.
- **The immediate reason for the Russian – Ukraine war** can be associated with the fact that Russia wanted to prevent Ukraine from joining NATO.
- **Security Dilemma:** NATO expansion can trigger a security dilemma wherein one country's effort to enhance its security is seen as a threat by another, leading to an arms race or increased military tensions.
- **Strategic Interests:** Expanding NATO's membership raises questions about the strategic interests of the alliance and its commitment to collective defense.
- Some argue that NATO should focus on consolidating its existing members rather than taking on new ones.
- **European Security Architecture:** NATO expansion could undermine efforts to develop a broader European security architecture, including initiatives such as the Organization for Security and Co-operation in Europe (OSCE).
- **Promoting such new alliances:** Countries who see NATO as a security threat can come up with a counter alliance such as the Warsaw Treaty Organization by Russia. These alliances can further accelerate the geopolitical tensions.
- **Potential for Conflict:** NATO expansion raises the risk of conflict, particularly if it involves regions with existing territorial disputes or unresolved conflicts.
- This could escalate tensions and increase the likelihood of military confrontation.

### Way Forward:

- Overall, while NATO expansion can enhance the security of new member states and contribute to the stability of the Euro-Atlantic region, it also poses various challenges and concerns that need to be carefully considered by all parties involved.
- Diplomacy, dialogue, and a nuanced understanding of each other's security concerns are essential for addressing these concerns and maintaining peace and stability in the region.



## GS III

# 2. India has large gap to bridge in quantum capabilities

**Source:** IE,

**Context:** Itihaasa, a non-profit organization, has recently published an assessment of India's National Quantum Mission.

**National Quantum Mission:**

- Union Cabinet approved the National Quantum Mission (NQM) in April 2023 at a total cost of **6000crores** from **2023-24 to 2030-31**.
- The mission aims to seed, nurture, and scale up scientific and industrial R&D, creating a vibrant and innovative ecosystem in **Quantum Technology (QT)**.
- This initiative will accelerate QT-led economic growth, foster the ecosystem in the country, and position India as one of the leading nations in the development of Quantum Technologies & Applications (QTA).

**Mission Objectives:**

- Developing intermediate-scale quantum computers with 50-1000 physical qubits within 8 years using various platforms like superconducting and photonic technology.
- Satellite-based secure quantum communications between ground stations over a range of 2000 kilometres within India.
- Long-distance secure quantum communications with other countries.
- Inter-city quantum key distribution over 2000 km.
- Multi-node quantum networks with quantum memories.

**Focus Areas:**

- Developing magnetometers with high sensitivity in atomic systems.
- Creating atomic clocks for precision timing, communications, and navigation.
- Supporting the design and synthesis of quantum materials such as superconductors, novel semiconductor structures, and topological materials for the fabrication of quantum devices.
- Developing single photon sources/detectors and entangled photon sources for quantum communications, sensing, and metrological applications.

**Mission Implementation:**

- The mission implementation includes the establishment of four **Thematic Hubs (T-Hubs)** in top academic and National R&D institutes in the following domains:
  - Quantum Computing
  - Quantum Communication



- Quantum Sensing & Metrology
- Quantum Materials & Devices
- These hubs will focus on generating new knowledge through basic and applied research and promoting R&D in their respective areas.

#### Impact & Significance:

- NQM has the potential to elevate the country's technology development ecosystem to a level of global competitiveness.
- The mission will greatly benefit various sectors including communication, health, financial, and energy, with applications in drug design, space, banking, security, etc.
- The mission will also provide a significant boost to national priorities such as Digital India, Make in India, Skill India, Stand-up India, Start-up India, Self-reliant India, and Sustainable Development Goals (SDG).

#### Assessment report of National Quantum Mission:

- Iitihaasa, a non-profit organization, has recently published an assessment of India's National Quantum Mission.
- As per the assessment, India may have done the right thing by launching a Rs 6,000 crore-worth National Quantum Mission to develop some of the most sought-after technologies for the future.
- The assessment shows that **India was just one among 17 countries to have a dedicated government programme to back research in quantum technologies**, and one of the 12 to have committed separate investments for the purpose.
- However, the report cautions that **India would have to overcome a significantly large gap that currently exists between its capabilities and those of other leading countries in these areas like the United States and China.**
  - **India's Spending** = USD 0.75 billion
  - **China's Spending** = USD 15 billion
  - **United States' Spending** = USD 3.75 billion
- India was far behind of the United States and China in terms of patents obtained in quantum technologies till now, and in publications in top journals.
- The assessment report found **about 110-145 Indian researchers, at the principal investigator level, already working on quantum technologies at major laboratories and institutions.**
- About 75-100 Post-docs and 300-400 PhD students were working with them. In addition, there were about 50-100 MTech students in different areas related to quantum technologies.
- Also, **India was producing the highest number of graduates in areas related to quantum technologies**, the assessment found.

## 3- New Species of Bird Discovered on the Lesser Sunda Islands



**Source: Science News**

**Context:** A team of scientists recently described a new species of nightjar, named *Caprimulgus ritae*, living in the tropical forests of Timor and Wetar, Lesser Sunda Islands.

**Nightjars:**

- They are medium-sized nocturnal insectivorous birds in the family Caprimulgidae and the order Caprimulgiformes.
- These birds are found all around the world, with the exception of Antarctica and certain island groups, such as the Seychelles.

**Features:**

- They are characterized by long wings, short legs, and very short bills.
- They feed on flying insects that they catch on the wing at night.
- Their grey-brown, mottled, streaked, and stripey plumage provides ideal camouflage in the daytime.
- During the day, they sleep on the ground or perched, usually lengthwise, on a branch.
- They are among the most difficult bird species to study due to their unobtrusive and nocturnal behavior and cryptic plumage.

**Lesser Sunda Islands:**

- The Lesser Sunda Islands are an archipelago in maritime Southeast Asia.
- It is located to the immediate east of Java and to the north of Western Australia.
- Major islands in the group include Bali, Lombok, Sumbawa, Flores, Sumba, and Timor.
- Together with the Greater Sunda Islands to the west, they make up the Sunda Islands.
- The islands are part of a volcanic arc, the Sunda Arc, formed by subduction along the Sunda Trench in the Java Sea.



## 4-RBI's Draft Foreign Exchange Management Regulation, 2024

**Source:** The Hindu

**Context:** The RBI has proposed draft regulations (Draft Foreign Exchange Management (Export and Import of Goods and Services) Regulations, 2024) to streamline export-import transactions, enhancing ease of business for small exporters and importers

### Key Highlights of the Draft Regulation:

- The full export value must be realized and repatriated to India within nine months from the date of shipment for goods and the date of invoice for services.
- Authorized Dealers (AD) may extend the specified period for reasonable and sufficient cause.
- No advance remittance for the import of gold and silver is permitted unless specifically approved by RBI.

**Aim of the Draft:** The draft regulations aim to enhance business convenience, particularly for small exporters and importers, while enabling Authorized Dealer Banks to offer faster and more efficient services to foreign exchange clients. These regulations align with India's progressive liberalization policies governing foreign exchange transactions under FEMA.

### What is FEMA?

FEMA, or the Foreign Exchange Management Act, 1999, is Indian legislation that regulates foreign exchange transactions, payments, and dealings..

- **Enactment Date:** June 1, 2000
- **Objective:** Facilitate external trade and payments, promote orderly development of foreign exchange market.
- **Scope:** Regulates foreign exchange transactions, acquisitions, payments, exports, imports, and related activities.
- **Regulatory Authority:** Reserve Bank of India (RBI)
- **Nature of Offence:** Civil offence
- **Penalties:** Penalties and fines for violations
- **Applicability:** Entire India; includes agencies and offices managed by Indian citizens outside India.
- **Entities Covered:** Foreign exchange, foreign securities, export and import of commodities/services, securities under the Public Debt Act 1994, banking, financial, and insurance services.
- **Control of Foreign Exchange:** RBI controls through Authorized Persons: authorized dealers, money changers, offshore banking units, etc.





Under FEMA all foreign exchange transactions are categorized into two types: current account transactions and capital account transactions.

- **Current Account Transactions:** These include transactions that do not significantly impact the resident's assets or liabilities outside India. Examples include payments for foreign trade, expenses related to foreign travel, and educational expenses abroad.
- **Capital Account Transactions:** These involve transactions that alter the resident's assets or liabilities outside India, such as investments in foreign securities or acquisition of immovable property overseas.

**Resident Indians:** Defined under Section 2(v) of FEMA, 1999, a resident in India typically includes individuals residing in India for more than 182 days during the preceding financial year, Indian-registered corporations, and offices or agencies in India owned or controlled by non-residents or vice versa.



## Editorial, Ideas and Opinions

### 5. Factory accidents, a pointer to rusty inspection reform

**Source:** The Hindu

**context:** Industrial safety issues such as factory accidents in India highlight poor enforcement of safety regulations. Moreover, existing deficiencies in the Labour Inspection System necessitate significant reforms to align with international standards and ensure worker safety.

**What is the issue?**

The recent Dombivli factory explosion in May 2024 has raised the concerns about industrial accidents and poor safety standards in India.

**Reasons for the cause:**

- Increasing use of unregistered boilers.
- Lacking enforcement of safety regulations.
- Lack of adequate inspections from the enforcement departments and low prosecution rates.
- Insufficient monitoring due to high workload per inspector.

**Existing regulatory norms:**

- **Constitutional Provisions:** Article 21 (Right to Life), Article 41 & 48 (Directive Principles for safe working conditions).
- **Regulations:** The Factories Act, 1948, is enacted for the health, safety and welfare of workers in factories in India.
- **Supreme Court Judgements:** Rural Litigation and Entitlement Kendra vs. State of UP (1988) & M.C. Mehta vs. Union of India (1987) have recognised the right to live in pollution free environment under Article 21.

**Reforms required:**

- Strengthening of labour inspection system with adequate staff and resources.
- Increased inspection rates and prosecution for violations may have reduce industrial accidents.
- Strictly opposing online inspections and self-certifications that violates International Labour Organization (ILO) standards.

**International Standards:**

- Strict adherence to ILO's Labour Inspection Convention (1947).



- Implementation of best practices enshrined under ILO's Occupational Safety, Health and Working Conditions (OSH) Code 2020, especially conventions like 187 and 155.

**Way forward:**

- Providing worker compensation or rehabilitation and enhancing enforcement machinery.
- Setting national standards that are aligned with international norms.
- Promoting safe and clean technology and phasing out all the hazardous materials in work environment.
- Creating awareness among community and promotion of Safety, Health & Environment (SH&E) education in schools.

**Conclusion:**

Effective labour inspection and enforcement are crucial for improving industrial safety. And also, the commitment from all stakeholders is essential for achieving national safety and health goals in India.



## In Brief

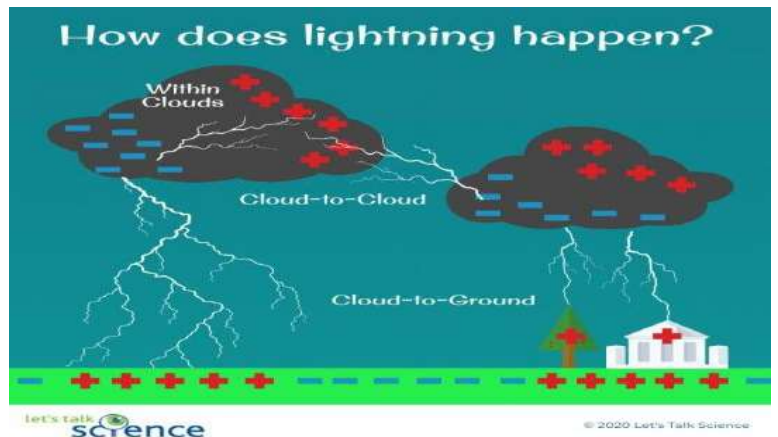
### 6. Palm Trees

**Source:** Down To Earth

**Context:** Odisha plans to plant 1.9 million palm trees and restrict cutting to reduce lightning deaths, targeting areas heavily affected during pre-monsoon and monsoon seasons.

**What is Lightning?**

- It is a powerful electrical phenomenon caused by the buildup of electrical charges within clouds and between clouds and the ground. It results in a brilliant flash of light and thunder.
- India is among a few countries with an early warning system for lightning, providing forecasts up to five days in advance. Lightning accounted for 2,880 deaths in 2021, making up 40% of all accidental deaths due to natural forces, as reported by the National Crime Records Bureau (NCRB). Lightning frequency is highest in northeastern states and West Bengal, Sikkim, Jharkhand, Odisha, and Bihar.



### 7. Talley Wildlife Sanctuary

**Source:** The Hindu

**Context:** Recently, a team of researchers from the Zoological Survey of India recorded the forest-dwelling frog from the Talley Wildlife Sanctuary and named it as *Xenophrys apatani*.

**Background:** The discovery was made by a team of researchers from the Zoological Survey of India (ZSI) in Shillong, in collaboration with their colleagues from ZSI, Pune, and ZSI, Itanagar.

**About Talley Valley:**

- Talley Valley Wildlife Sanctuary is a protected area located in the Indian state of Arunachal Pradesh.
- The sanctuary ranges in elevation from 1,200 to 3,000 meters (3,900 to 9,800 feet) and features subtropical and temperate broadleaved and conifer forests.



- Notable species include the clouded leopard, Malayan giant squirrel, Indian muntjac, and Asian palm civet.
- Additionally, 130 bird species have been observed, including the black eagle, collared owlet, and Verditer flycatcher.
- The sanctuary is also home to 16 endangered plant species, such as *Panax sikkimensis*, *Acer hookeri*, and *Lilium grandiflora*.

#### **Xenophrys Apatani:**

- The *Xenophrys apatani* is a newly discovered species of horned frog found in the Tale Wildlife Sanctuary in Arunachal Pradesh, India.
- It has been named after the Apatani tribe, which predominantly resides in the Lower Subansiri Valley of Arunachal Pradesh.
- It is distributed along the Eastern Himalayan and the Indo-Burma biodiversity hot spots of the country.

## **8. Vanuatu**

**Source:** The Hindu

**Context:** The government of Vanuatu will soon settle into a suite of new buildings funded by China, a move which has reignited concerns about Beijing's reach in the South Pacific nation

**Background:** This initiative underscores China's strategic interests in the Pacific islands, where it has funded major infrastructure upgrades across the archipelago, competing with Western rivals for influence.

#### **About Vanuatu :**

- Vanuatu is an island country consisting of a chain of 13 principal and many smaller islands located in the southwestern Pacific Ocean.
- These islands are situated approximately east of Australia.
- The islands extend north-south in an irregular Y shape.
- The northernmost group is the Torres Islands, and southward from there, the main islands include Vanua Lava, Santa Maria (Gaua), Espiritu Santo, Aoba (Ambae), Maéwo, Pentecost, Malakula, Ambrym, Épi, Éfaté, Erromango, Tanna, and Anatom.
- Formerly the jointly administered Anglo-French condominium of the New Hebrides, Vanuatu achieved independence in 1980.
- The capital, largest city, and commercial centre is Port-Vila (Vila), on Éfaté.





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