

INDEX

POLITY AND GOVERNANCE

- [Aircraft Amendment Bill](#)
- [Uttar Pradesh Nazul Properties \(Management and Utilization for Public Purposes\) Bill](#)
- [UCC to be implemented before state's Foundation Day, says Uttarakhand CM Pushkar Singh Dhama](#)
- [All India Sufi Sajjadanashin Council welcomes amendments in Waqf Amendment Bill](#)
- [Boilers Bill, 2024 introduced in Rajya Sabha](#)
- [Rajya Sabha takes up appropriation bills passed by Lok Sabha](#)
- [Mullaperiyar Dam Issue reopens old wounds between allies](#)
- [National District Mineral Foundation \(DMF\)](#)
- [Congress moves privilege motion against Education Minister Pradhan](#)
- [Lok Sabha passes Bharatiya Vayuyan Vidheyak 2024](#)
- [PM Modi calls for discussions on Uniform Civil Code in Independence Day speech: 'It needs to be secular'](#)
- [Lok Sabha Speaker constitutes six new parliamentary panels](#)

- [Suo Motu](#)
- [President Murmu Prorogues Parliament After Adjournment Sine Die](#)
- [Kolkata rape-murder case LIVE: SC to resume hearing shortly; CBI to file status report](#)
- [Siddaramaiah slams Governor for not granting permission to prosecute former BJP ministers and Kumaraswamy](#)
- [TRAI releases Telecommunication Tariff draft amendment order on regulatory framework for PM-WANI scheme](#)
- [Union Government issues Comprehensive Guidelines for Handling Public Grievances](#)
- [Protection of Women from Sexual Harassment Act \(POSH Act\)](#)

DEFENCE AND SPACE

- [Tarang Shakti-2024: Indian Air Force's First Multinational Air Exercise](#)
- [Working Mechanism for Consultation and Coordination on India-China Border Affairs](#)
- [Axiom-4 mission](#)
- [India to Host First Multinational Air Exercise 'Tarang Shakti 2024' in Tamil Nadu](#)
- [NIA secures extradition of 'pro-Khalistan' terror accused](#)
- [Indian Naval ship Tabar reaches London, UK for a 4 day visit](#)

- [The Indian Air Force \(IAF\) contingent returned to India after successfully participating in Exercise Udara Shakti 2024 in Malaysia's Kuantan](#)
- [India Celebrates First National Space Day on August 23](#)
- [DRDO successfully carries out maiden test flight of Long-Range Glide Bomb GAURAV from Sukhoi-30 MK-I](#)
- [ISRO launches Earth Observation Satellite EOS-08](#)
- [Navy Chief Reaffirms Support for Gaganyaan & Samudrayan Missions in Meeting with Jitendra Singh](#)
- [A look at ongoing Indian space missions](#)
- [INS Mumbai arrives in Colombo for three-day visit](#)
- [India commissions its second nuclear-submarine INS Arighaat](#)

INTERNATIONAL RELATIONS

- [India elected as Vice-Chair of the Supply Chain Council](#)
- [India and Vietnam Relations](#)
- [India assures Taiwan of policy stability in semiconductor sector](#)
- [How Sheikh Hasina's resignation will impact India-Bangladesh ties](#)
- [EAM S Jaishankar reaches Maldives on three-day visit](#)
- [Maldives is key partner for India and two countries aspire to turn their cooperation into modern partnership: EAM Dr Jaishankar](#)
- [India, Brazil to discuss defence, Agri at Joint Commission meet](#)
- [Australia, U.S. and U.K. sign nuclear transfer deal for AUKUS submarine](#)
- [President Droupadi Murmu honoured with Timor-Leste's highest civilian award; PM says, proud moment for country](#)
- [Philippines President condemns China's actions in disputed South China Sea](#)
- [Third Voice of the Global South Summit \(VOGS\) hosted by India in virtual format](#)
- [Malaysian PM arriving today; trade, people-to-people links on agenda](#)
- [India, Malaysia upgrade strategic partnership, discuss entry to BRICS](#)
- [Prime Minister presents BHISHM Cubes to Ukraine](#)
- [India-Ukraine Joint Statement on the Visit of Prime Minister of India to Ukraine](#)
- [10th Round of India-Australia CECA Negotiations held on five tracks in Sydney](#)

- Union Minister Dr. Jitendra Singh chaired bilateral meeting on US-India Civil Nuclear Commerce
- India & Singapore Strengthen Ties at Second Ministerial Roundtable
- India-Brazil co-chair 9th Joint Commission Meeting; Discuss ways to advance key G20 outcomes

ECONOMICS

- Centre aims to reduce debt-GDP ratio by 1 percentage point annually till it reaches 50%
- Minister Rajeev Ranjan Singh Highlights Growth in Fisheries Sector Due to Pradhan Mantri Matsya Sampada Yojana
- Union Minister of Labour and Employment directed the implementation of the Employment-Linked Incentive-ELI Scheme in a mission mode
- RBI can't ignore food inflation Governor Shaktikanta Das
- RBI holds repo rate at 6.5% for ninth time
- Ministry of Coal Unveils Ambitious Plan to Boost Coal Production Through Global Mining Operators
- India & US Sign MoU to Promote Cooperation on Small & Medium Enterprises
- Centre launches new AI-based surveillance system to manage pests, connect scientists with farmers
- Greening in India gets a boost with Green Tug Transition Program (GTTP) SOP launched by Shri Sarbananda Sonowal

- [Periodic Labour Force Survey \(PLFS\) – Quarterly Bulletin \[April – June 2024\]](#)
- [APEDA facilitates first shipment of Fig Juice to Poland](#)
- [‘Abandoning inflation targeting could be counterproductive’](#)
- [Union Minister of Textiles interacted with the beneficiaries of the Production Linked Incentive \(PLI\) Scheme](#)
- [Prime Minister Shri Narendra Modi will give certificates to 11 lakh Lakhpati Didis](#)
- [21.67 lakh new workers enrolled under ESI Scheme in the month of June, 2024](#)
- [Union Minister of Civil Aviation launched the guidelines for seaplane operation under RCS-UDAN](#)
- [77th PM GatiShakti meeting evaluates infrastructure projects across Railways, Roads, Aviation, and Ports](#)
- [Cabinet approves Unified Pension Scheme](#)
- [Prime Minister Shri Narendra Modi marks 10 years of Jan Dhan Yojana](#)
- [Union Minister to inaugurate the 18th Divya Kala Mela - an embodiment of the ‘Vocal for Local’ movement - in Ranchi](#)
- [Special Skill Development Project Empowering Adolescent Girls and Women for High-Demand, Non-Traditional Careers](#)
- [Pradhan Mantri Kaushal Vikas Yojana \(PMKVY\) 4.0](#)

- **Cabinet accords approval for progressive expansion of Central Sector Scheme of "Agriculture Infrastructure Fund"**
- **Department of Economic Affairs amends Securities Contracts Regulation Rules (SCRR), 1956**

ENVIRONMENT

- [The State of the World's Mangroves 2024](#)
- [Eco sensitive areas in Western Ghats](#)
- [Asiatic lions](#)
- [After 61 years, four-ringed butterfly resurfaces in India](#)
- [SC panel: Bar pvt vehicles in Sariska reserve, raise tiger protection force.](#)
- [Neelakurinji that blooms once in 12 years included in Red List of threatened species](#)
- [PM Modi to release 109 climate resilient crop seeds](#)
- [Three more Ramsar wetland sites now in India, taking total to 85](#)
- [Centre plans to start e-waste audit, impose penalty as environment compensation](#)
- [FSSAI Launches Project to Address Microplastic Contamination in Indian Food](#)
- [Clean Ganga mission head flags slow pace of projects](#)
- [FSSAI urges states to establish inter-ministerial committee to focus on reducing pesticide use](#)
- [Mega hydropower project on Siang](#)

GEOGRAPHY

- [Cloudbursts in Himachal Pradesh](#)
- [Coal India eyes lithium in Chile](#)
- [Illegal mining, encroachments, deforestation a threat to Aravali as natural green wall](#)
- [Centre unveils new system to study weather, crop patterns](#)
- [Earthquake of magnitude 4.2 hits Andaman Islands](#)
- [The rise and rise of red sanders mafia](#)
- [Prime Minister congratulates people of Ladakh for creation of five new districts](#)

SCIENCE AND TECHNOLOGY

- [Lung cancer](#)
- [Ransomware Attack](#)
- [39% TB cases found during T.N. TB survey had no symptoms](#)
- [Science award for ISRO team, IISC's ex-chief Padmanabhan](#)
- [CAR-T cell therapy](#)
- [Perseid meteor shower](#)

- [Anti-diabetic herb Gurmar found on Gaya's Brahmayoni Hill](#)
- [From Gaming to Digital Assets: How Web 3.0 is transforming India's tech industry through metaverse](#)
- [Sweden reports first case of Mpox strain outside Africa amid global health emergency](#)
- [Zebrafish use surprising strategy to regrow spinal cord](#)
- [Union Minister Rajiv Ranjan Singh Assesses Progress on India's 2030 FMD-Free Target Through Vaccination](#)
- [Blue moon](#)
- [Thalassemia Bal Sewa Yojana reaches successfully completes 500 bone marrow transplants](#)
- [Cabinet approves BioE3 \(Biotechnology for Economy, Environment and Employment\) Policy for Fostering High Performance Biomanufacturing](#)
- [Cabinet approves the Department of Science and Technology scheme namely 'Vigyan Dhara'](#)
- [Vaccine-derived polio](#)
- [New smart sensor for adjusting drug dosage to manage Parkinson's Disease](#)
- [Single-strain Oral Cholera vaccine launched in Hyderabad](#)
- [Ayurvedic Whole System effective in Managing Rheumatoid Arthritis: Study](#)

SOCIETY

- Government spends 14% of funds under Ayushman Bharat on those over 70 years.
- Nandini Sahakar Yojana
- PMAY-U 2.0 to give housing financiers more credit cushion
- WCD Minister Annpurna Devi calls for Centre-State collaboration to enhance welfare programs
- Dr. Virendra Kumar to administer Mass Pledge on Nasha Mukta Bharat Abhiyaan
- Kiren Rijiju & George Kurian Launch Haj Application 2025 & Jiyo Parsi Scheme Portal
- IEC Campaign on PM-JANMAN mission, to raise awareness and ensure 100% saturation of Government Schemes in PVTG majority tribal areas
- Government gears up to host World Audio Visual and Entertainment Summit (WAVES) in Goa
- ANUBHAV AWARDS 2024 will be conferred by Union Minister Dr Jitendra Singh in Vigyan Bhawan, New Delhi
- SC's National Task Force Holds First Meeting to Address Medical Professionals' Safety
- Union Minister of Women and Child Development launches new She-Box Portal to make Workplaces safer for Women

ART & CULTURE

- [Panchvaktra temple](#)
- [Virupaksha temple in Hampi](#)
- [Bharatanatyam](#)
- [PROJECT PARI](#)
- [Jallikattu](#)
- [International Buddhist Confederation to organize a Two-day Conference at Nalanda, Bihar on the Life and Legacy of Guru Padmasambhava](#)

FACTS FOR PRELIMS

- [PM Modi Extends Condolences on the Passing of classical dancer Dr. Yamini Krishnamurthy](#)
- [10th National Handloom Day Celebrations](#)
- [PM Modi pays tribute to participants of the Quit India Movement](#)
- [Flood Watch India 2.0](#)
- [Partition Horrors Remembrance Day: PM Modi remembers victims, says day to pay tribute to their courage](#)
- [Handwritten translation of Rabindranath Tagore's 'Jana Gana Mana' goes viral on Independence Day 2024](#)
- [PM Modi Pays Homage to Sri Aurobindo on Birth Anniversary](#)
- [PM Modi greets citizens on occasion of World Sanskrit Day](#)
- [PM Modi pays homage to Maharaja Bir Bikram Kishore Manikya Bahadur on his birth anniversary](#)
- [Ayurvedic Whole System effective in Managing Rheumatoid Arthritis: Study](#)

POLITY AND GOVERNANCE

Aircraft Amendment Bill

- Bill to replace Aircraft Act 1934 tabled in Lok Sabha amid protest.
- It intends to bring radio telephone operator restricted certificate test within the DGCA ambit.

Aircraft Amendment Bill

Key provisions of the Bill include:

- **Authorities:** The Bill converts three existing bodies under the Ministry of Civil Aviation into statutory bodies under the Act.

These three authorities are:

- (1) the Directorate General of Civil Aviation (DGCA),
- (2) the Bureau of Civil Aviation Security (BCAS), and
- (3) the Aircraft Accidents Investigation Bureau (AAIB).

Each of these bodies will be headed by a Director General who will be appointed by the centre.

- **The DGCA** will carry out safety oversight and regulatory functions with respect to matters under the Bill.
- **The BCAS** will carry out regulatory oversight functions related to civil aviation security.
- **The AAIB** will carry out investigations related to aircraft accidents and incidents.

The central government may issue directions to these authorities on matters related to their functions, if considered necessary in public interest.

- **Power of centre to make rules:**

The Bill adds the regulation of air navigation services to this list. It also allows the centre to empower the Director General of BCAS or any authorised officer to issue directions and make rules on certain matters.

- **Adjudicating officers:** The Bill provides for the appointment of designated officers, not below the rank of Deputy Secretary to adjudicate penalties under the Bill
- **Offences and Penalties:**

The Bill raises the maximum limit on fines for all these offences from Rs 10 lakh to one crore rupees.

- Only courts equivalent or superior to a Metropolitan Magistrate or a Magistrate of the first class may try offences under the Act.

Uttar Pradesh Nazul Properties (Management and Utilization for Public Purposes) Bill

- The Uttar Pradesh Nazul Property Bill, 2024, aims to regulate **Nazul land** by preventing its conversion into private ownership.
- Under this Bill, court proceedings or applications for transferring Nazul land to private individuals or institutions will be cancelled and rejected, ensuring these lands remain under government control.
- If payments were made anticipating ownership changes, the Bill mandates refunds with interest calculated at the State Bank of India's **Marginal Cost of Funds Based Lending Rate (MCLR)** from the deposit date.
- Additionally, the Bill allows the government to extend lease for current

leaseholders in good standing, who regularly pay rent and comply with lease terms. This ensures compliant leaseholders can continue using the land while maintaining it as government property.

- The Bill aims to streamline Nazul land management and prevent unauthorised privatisation.

Nazul Land

- Nazul land is owned by the government but is most often **not directly administered as state property**.
- The state generally allots such land to any entity on lease for a fixed period, generally between 15 and 99 years.
- In case the lease term is expiring, one can approach the authority to renew the lease by submitting a written application to the Revenue Department of the local development authority.
- The government is free to either renew the lease or cancel it, taking back Nazul land.
- In almost all major cities in India, Nazul land has been allotted to different entities for a variety of different purposes.

Governance of Nazul Land

- **For Adjudication:** While several states have brought in government orders for the purpose of framing rules for Nazul land, **The Nazul Lands (Transfer) Rules, 1956** is the law mostly used for Nazul land adjudication.
- **Lease Renewal:** By submitting a written application to the Revenue Department of the local development authority. The government is free to either renew the lease or cancel it — taking back Nazul land.

UCC to be implemented before state's Foundation Day, says Uttarakhand CM Pushkar Singh Dhami

Uniform Civil Code (UCC) aims to replace personal laws based on the scriptures and customs of each major religious community in India with a common set governing every citizen. To ensure equality before the law by providing a single legal framework for personal matters such as marriage, divorce, inheritance, and adoption.

Constitutional Basis:

Article 44: Directive Principle of State Policy (DPSP) in the Indian Constitution states: "The State shall endeavor to secure for the citizens a uniform civil code throughout the territory of India."

Current Status:

- **Personal Laws: India** has diverse personal laws for different communities:
- **Hindu Law:** Includes Hindu Marriage Act (1955), Hindu Succession Act (1956), and others.
- **Muslim Law: Includes** Muslim Personal Law (Shariat) Application Act (1937), etc.
- **Christian Law:** Includes Indian Christian Marriage Act (1872), Indian Divorce Act (1869), etc.
- **Parsi Law: Includes** Parsi Marriage and Divorce Act (1865), etc.

Arguments for UCC:

- **Equality and Justice:** A single set of laws would eliminate discrimination based on religion and ensure equal treatment.
- **National Integration:** Promotes a sense of unity and national integration by providing a common legal framework.
- **Simplification:** Simplifies legal processes and reduces legal complexities associated with diverse personal laws.

Arguments Against UCC:

- **Cultural Diversity: Concerns** that UCC might undermine the cultural and religious diversity of India.
- **Religious Freedom: Fears** that it might infringe on the rights of religious communities to practice their personal laws.
- **Political Sensitivity: Sensitive** nature of personal laws in India makes it a contentious issue, leading to political and social opposition.

Legislative and Policy Developments:

- **Law Commission Reports:** Various reports have recommended the implementation of UCC, with the **22nd Law Commission Report (2018)** suggesting gradual reforms.
- **Shayara Bano v. Union of India (2017):** The Supreme Court declared the practice of triple talaq as unconstitutional and violative of the dignity and equality of Muslim women. It also recommended that the Parliament should enact a law to regulate Muslim marriages and divorces.
- **Government Stance:** Different governments have shown varying degrees of commitment to the implementation of UCC, with some prioritizing reforms in specific areas rather than a complete overhaul.

All India Sufi Sajjadanashin Council welcomes amendments in Waqf Amendment Bill

- The government of India is all set to table the waqf bill Amendment Bill 2024 in the Lok Sabha.
- The Waqf Board Amendment Bill 2024 will make crucial changes to the Waqf Act of 1995 while revoking several clauses.

The Waqf Board Amendment Bill 2024

- The Waqf Board Amendment Bill 2024 proposes a series of around 40 amendments to the existing Waqf Act of 1995. The bill is known as the amendment bill as it seeks to modify the existing act. This bill is designed to regulate the management of Waqf properties more effectively.
- The primary focus of the Waqf Board Amendment Bill 2024 is to ensure greater accountability, transparency, and inclusivity within the Waqf system.

The Waqf Board Act

- Waqf Act was first passed by Parliament in 1954. Subsequently, it was repealed and a new Waqf Act was passed in 1995 which gave more powers to Waqf Boards. In 2013, this Act was further amended to give far-reaching powers to the Waqf Board to designate the property as "Waqf Property".
- The Waqf Boards Act provides provisions to manage and designate properties as Waqf and establish a Central Waqf Council for oversight. The act aims to protect the interests of the Muslim community by ensuring that Waqf properties are used for charitable and religious purposes.

Key Provisions of the Waqf Act, 1995 -

Establishment of Waqf Boards:

- The Act mandates the establishment of Waqf Boards in each state and Union Territory for the administration of Waqf properties.

Functions of Waqf Boards:

- Waqf Boards are responsible for maintaining Waqf properties, ensuring their proper use, and generating revenue for their upkeep.

Survey of Waqf Properties:

- The Act requires periodic surveys of Waqf properties to maintain updated records and prevent encroachments.

Registration of Waqf Properties:

- Waqf properties must be registered with the Waqf Boards, providing details of their location, usage, and revenue.

What Are the Proposed Amendments in the Waqf Act?

The cabinet has reviewed around 40 changes that will be brought through the Waqf Board Amendment Bill 2024. These amendments aim to curb the extensive powers previously held by Waqf Boards, ensuring a more regulated approach. Here are some of the key amendments proposed in the bill:

- **Property Registration and Verification:** Waqf Boards will be required to register their properties with district authorities to ensure proper verification and oversight.
- **Verification of Properties:** The bill requires mandatory new verification of disputed lands, enhancing the clarity around property ownership and management.
- **Reform in Functioning:** Revision in sections 9 and 14 to reform the functioning of the Waqf Boards to curb its arbitrary powers.
- **Inclusion of Women:** The proposed amendments advocate for the inclusion of women in Waqf Boards, promoting gender equality in decision-making processes.

Political and Social Implications of Waqf Act

Support for Reforms:

- Proponents argue that the amendments will enhance transparency, accountability, and proper management of Waqf properties, preventing misuse and irregularities.

Opposition from Muslim Organizations:

- Several Muslim organizations and political parties oppose the amendments, viewing them as an infringement on the autonomy of Waqf Boards and an attempt to control Muslim religious and charitable affairs.

Broader Political Context:

- The amendments are seen in the broader context of the government's efforts to reform laws related to Muslim personal law, with parallels drawn to previous initiatives like the Triple Talaq Bill.

Boilers Bill, 2024 introduced in Rajya Sabha

Key Highlights:

- The Boilers Bill, 2024 was introduced in the Rajya Sabha to repeal and replace the **Boilers Act, 1923**. The Bill aims to modernize and simplify the legislative framework governing boiler safety and regulation.

Key Features:

- **Reorganization and Clarity:** The Bill consolidates provisions into six chapters for better clarity and understanding, detailing the roles and functions of the Central Government, State Governments, and the Central Boilers Board.

- **Ease of Doing Business:** It incorporates *decriminalization measures* by retaining criminal penalties for major safety-related offences while converting minor offences into fiscal penalties. This aims to reduce the burden on the judiciary and facilitate easier compliance.
- **Safety Enhancements:** New provisions ensure that boiler repairs are conducted by qualified professionals, enhancing overall safety.
- **Redundancy and Updates:** Outdated provisions from the 1923 Act have been removed, and new definitions and enabling clauses have been added for clarity and modern relevance.
- **Regulatory Powers:** The Bill details the rule-making powers of the Central Government, State Governments, and the **Central Boilers Board**, and includes provisions for handling difficulties and saving existing regulations until new ones are established.

The Bill represents a significant update to ensure that boiler regulations meet current industry needs and safety standards.

What is a boiler?

- A boiler is simply an enclosed vessel which boils water and ultimately turns it into steam which is used for heating of rooms and heavy fuel oils on the ships.
- The boilers are fitted with different safeties as the steam pressure is upto 8 bars in most cases.

The Indian Boiler Act, 1923

Indian Boilers Act-1923 was enacted with the objective to provide mainly for the safety of life and Property of persons from the danger of **explosions of steam boilers** and for achieving uniformity in registration and inspection during the operation and maintenance of boilers in India.

Salient features:

- Every boiler owner is required to make an application to the Chief Inspector of Boilers for the inspection of the boiler along with the treasury challan of the requisite fees as per requirements of Indian Boilers Act-1923.
- Under Indian Boilers Act-1923 Indian Boilers Regulation-1950 has been framed. This Regulation deals with the materials, procedure & inspection techniques to be adopted for the manufacture of boilers & boiler mountings & fittings.
- The boiler is inspected by the Inspectorate as per the procedure laid under IBR -1950 and if found satisfactory, a Certificate is issued for operation for a maximum period of 12 months.
- The boilers which are not found satisfactory during the inspection are repaired as per the procedure laid under Indian Boilers Regulation-1950 & are re-inspected as explained above.
- The Boilers which are transferred to NCT of Delhi are also inspected in the similar fashion after their records are obtained from the parent state.
- The Boilers are also casually visited by the Inspectorate from time to time to check the validity of their certificates, safe and efficient operation.

Rajya Sabha takes up appropriation bills passed by Lok Sabha

Appropriation Bill

- It is a money bill that allows the government to withdraw funds from the Consolidated Fund of India to meet its expenses during a financial year.
- As per **Article 114(3)** of the Constitution, no amount can be withdrawn from the Consolidated Fund without the enactment of such a law by Parliament.
- The whole process beginning with the presentation of the Budget and ending with discussions and voting on the Demands for Grants requires a fairly long time.
- The Lok Sabha is, therefore, empowered by the Constitution to make any grant in advance in respect of the estimated expenditure for a part of the financial year pending completion of procedure for the voting on the demands.
- However, if during the course of the financial year, the funds so appropriated are found to be insufficient, the Constitution provides for seeking approval from the Parliament or State Legislature for supplementary grants.

Procedure Followed:

- The Appropriation Bill is introduced in the Lok Sabha after discussions on Budget proposals and Voting on Demand for Grants.
- The defeat of an Appropriation Bill in a parliamentary vote would lead to the resignation of a government or a general election.
- Once it is passed by the Lok Sabha it is sent to the Rajya Sabha.
- Rajya Sabha has the power to recommend any amendments in this Bill. However, it is the prerogative of the Lok Sabha to either accept or reject the recommendations made by the Rajya Sabha.
- After the bill receives assent from the president it becomes an Appropriation act.

- The unique feature of the Appropriation Bill is its automatic repeal clause, whereby the Act gets repealed by itself after it meets its statutory purpose.
- The government cannot withdraw money from the Consolidated Fund of India till the enactment of the appropriation bill. However, this takes time and the government needs money to carry on its normal activities. To meet the immediate expenses the Constitution has authorised the Lok Sabha to make any grant in advance for a part of the financial year. This provision is known as the 'Vote on Account'.
- A vote on account is defined in Article 116 of the Indian Constitution.
- During an election year the Government either opts for 'interim Budget' or for 'Vote on Account' as after the election the Ruling Government may change and so the policies.

Appropriation Bill Amendment

- No change to an appropriation bill may be made that would have the effect of changing the amount or destination of a grant that has already been made or the amount of any expenditure charged to the Consolidated Fund of India, and the Lok Sabha Speaker's determination of whether such a change is admissible is final.

Appropriation Bill and Finance Bill Difference

- An appropriation bill defines the amount and reason for taking money whereas a finance bill contains measures on paying government expenses. Money legislation includes both appropriation and finance measures, both of which can be passed without the Rajya Sabha's explicit consent. Only after discussion do they return the bills to the Rajya Sabha.

Mullaperiyar Dam Issue reopens old wounds between allies

The Mullaperiyar dam:

- It is situated at the confluence of the **Mullayar** and **Periyar rivers**.
- The dam is located entirely in Kerala.
- It was built in the late 1800s in the princely state of Travancore (present-day Kerala) and given to British-ruled Madras Presidency on a 999-year lease in 1886.
- The agreement granted full rights to the Tamil Nadu to construct irrigation projects on the land.
- The dam was built to divert **eastwards** a part of the west-flowing Periyar river, to feed the arid areas of Tamil Nadu.



What is the Dispute?

- In late 1979, after the eruption of the controversy over the structural stability of

the dam, it was **decided at a tripartite meeting** chaired by K. C. Thomas, the then Chairman of central water commission that **the water level be lowered to 136 feet** against the full reservoir level of 152 feet so that Tamil Nadu could take up strengthening measures.

- In 2006 and 2014 the **Supreme Court held that the water level be raised to 142 feet**, up to which Tamil Nadu stored water even last year (2021).
- The court's judgment of 2014 also **provided for the formation of the supervisory committee** and the completion of the remaining work by Tamil Nadu.
- But, **there has been no end to litigation over the dam** with Kerala witnessing Landslides in recent years.
- Though **there had been no reports of landslides in the vicinity of the dam site**, the events in other parts of the **State led to a renewed campaign against the dam**.
- The Kerala government **proposed that the existing dam be decommissioned** and a fresh one be built
- These **options are not completely acceptable to Tamil Nadu** which wants to complete the remaining strengthening work and restore the level to 152 feet.

Dam Safety Act and Mullaperiyar dam

About the act

- The act is aimed at addressing the long-felt need for addressing issues concerning the safety of major dams all over the country.
- The act came into force in December 2021.
- It provides for surveillance, inspection, operation, and maintenance of certain dams for prevention of disasters related to dam failure.
- It also creates institutional mechanisms to ensure their safe functioning.

Key provisions of the act:

- The Act covers those dams having a height of over **15m and between 10m and 15m** with certain stipulations.

It seeks to create two national institutions:

1. **National Committee on Dam Safety** (NCDS) to evolve dam safety policies and recommend necessary regulations, and
 2. **The National Dam Safety Authority** (NDSA) to implement policies and address unresolved issues between the two States.
- The NDSA will be the regulatory body.
 - The legislation also envisages the formation of State Dam Safety Organisations and State Committees on Dam Safety.
 - Dam owners will be held responsible for the construction, operation, maintenance, and supervision of dams.

Linkages between Dam Safety Act and the Mullaperiyar dam

- As per the Act, the NDSA will perform the role of the State Dam Safety Organisation for a dam located in one State and used by another.
- Hence, the Mullaperiyar dam comes under the purview of the NDSA.
- Experts believe that there is every possibility of the Union government will indicate in the court that the NDSA can subsume the functions of the supervisory committee.

National District Mineral Foundation (DMF)

DMF is a trust set up as a non-profit body under the Mines and Minerals (Development and Regulation) (MMDR) Amendment Act 2015.

- To work in the interest and benefits of persons and areas affected by mining-related operations in a manner as may be prescribed by the respective State Government.
- It is funded through the contributions from the holders of major or minor mineral concessions in the district, as may be prescribed by the Central or State Government.

Composition and functions of District Mineral Foundations (DMFs)

- The composition and Functions of the DMF are prescribed by the State Governments taking guidelines from **Article 244** of the Indian Constitution, fifth and sixth schedules,
- Funds every mining leaseholder will pay a fraction of royalty, not exceeding one-third of the royalty, to the DMF as per rates prescribed by the Central Government.
- This fund will be used for the welfare of the people affected by the mining of selected areas.
- **The Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)** will be implemented by the DMFs of the respective districts using the funds accruing to the DMF.

Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)

- It was launched in 2015 to provide for welfare of areas & people affected by mining-related operations.

Objectives:

- To implement various developmental and welfare projects in mining-affected areas, complementing the existing ongoing schemes of the State and Central Government;
- To minimize/mitigate the adverse impacts, during and after mining, on the environment, health, and socio-economics of people in mining districts; and
- To ensure long-term sustainable livelihoods for the affected people in mining areas.

Implementation:

- It will be implemented by the DMFs of the respective districts using the funds accruing to the DMF. The MMDR Amendment Act, 2015, mandated the setting up of DMFs in all districts in the country affected by mining related operations.
- The Central Government has notified the rates of contribution payable by miners to the DMFs.
- In case of all mining leases executed before 12th January, 2015 miners will have to contribute an amount equal to 30% of the royalty payable by them to the DMFs. If mining leases are granted after 12.01.2015, the rate of contribution would be 10% of the royalty payable.

Utilisation of Funds

- At least **60%** of the funds to be used in **High priority areas** like drinking water supply, health care, sanitation, education, women, childcare, welfare of aged & disabled people, etc.
- Up to **40%** of the funds for creating a supportive and conducive living environment. It will be spent on making roads, bridges, railways, waterways projects, irrigation and alternative energy sources.
- **Not more than 5%** of the funds can be used for **administrative expenses**.

Congress moves privilege motion against Education Minister Pradhan

Privilege motion

All Members of Parliament (MPs) enjoy rights and immunities, **individually and collectively**, so that they can discharge their duties and functions effectively. Any instance when these rights and immunities are disregarded by any member of Lok Sabha or Rajya Sabha is an offence, called **'breach of privilege', which is punishable under the Laws of Parliament.**

- **Article 105 of the Constitution** expressly mentions two privileges, that is, **freedom of speech in Parliament and right of publication of its proceedings.**
- Apart from the privileges as specified in the Constitution, **the Code of Civil Procedure, 1908**, provides for freedom from arrest and detention of members under civil process during the **continuance of the meeting of the House or of a committee thereof and forty days before its commencement and forty days after its conclusion.**
- It needs to be noted that the **Parliament, till now, has not made any special law** to exhaustively codify all the privileges.

Privilege Committee

- It is a **Standing Committee.** It examines the cases of breach of the privileges of the House and its members and recommends appropriate action.
- The **Lok Sabha** committee has **15** members, while the **Rajya Sabha** committee has **10 members.**

Lok Sabha passes Bharatiya Vayuyan Vidheyak 2024

The Ministry of Civil Aviation tabled the “The Bhartiya Vayuyan Vidheyak Bill 2024” that replaces the Aircraft Act 1943, The Bhartiya Vayuyan Vidheyak Bill 2024 aims to replace it and eliminate redundancies at a time when India's civil aviation business is among the fastest-growing globally. **The Aircraft Act 1934** is an act to make better provision for the control of the manufacture, possession, use, operation, sale, import and export of aircraft.

Need to Replace the Aircraft Act 1943:

- Regulating the design and manufacturing of aircraft is in alignment with the **Atmanirbhar Bharat initiative**.
- Cater to the needs of a rapidly growing market for aviation. ICRA estimates that domestic air passenger traffic **will grow by 8-13% in FY2024**.
- **Redundancy Removal:** Eliminate outdated provisions.
- **To simplify processes and improve ease of doing business,**
- Modernization: Address design, manufacture, and maintenance of aircraft and related equipment.

Major Provisions:

- To empower the Central Government to make rules to implement provisions relating to **international civil aviation** e.g, **Chicago Convention (1944) and the International Telecommunication Convention (1932)**.
- To empower the Central Government to issue orders (like detaining aircraft) in

emergency in the interest of public safety.

- **The government has changed the definition of what qualifies as an aircraft**, with balloons and gliders removed.

The Bill empowers the Central Government to make rules -

- Regulating the design, manufacture, maintenance, possession, use, operation, sale, export, or import of any aircraft or class of aircraft and
- **The new bill has given more powers** to the **DGCA**, the Bureau of Civil Aviation Security (BCAS), and the **Aircraft Accident Investigation Bureau (AAIB)** over the safety of the aviation environment in the country.
- It empowers the Central Government or any officer **to suspend, cancel, or restrict any license or certification** granted under the Act.
- **A concept of second appeal** against such an order has also been added. So earlier there was one appeal and then a final appeal to the Secretary MoCA.

PM Modi calls for discussions on Uniform Civil Code in Independence Day speech: 'It needs to be secular'

Uniform Civil Code

The Uniform Civil Code (UCC) refers to the proposal for a single set of civil laws governing all citizens of India, regardless of their religion. To replace personal laws based on the scriptures and customs of each major religious community with a common set governing every citizen.

Article 44: Directive Principle of State Policy.

- **Text:** "The State shall endeavour to secure for the citizens a uniform civil code throughout the territory of India."
- **Significance:** Provides a directive for the establishment of UCC but is not justiciable (cannot be enforced by the courts).

Historical Background

- **Pre-Independence:**
 - **British Era:** British administration introduced various legal reforms but retained separate personal laws for different communities.
- **Post-Independence:**
 - **Constitutional Assembly:** Debate on UCC, with emphasis on balancing secularism and minority rights.

Arguments For UCC

- **Equality and Justice:** Promotes equal treatment and justice irrespective of religion.
- **Secularism:** Aligns with secular principles of the Indian Constitution.
- **Legal Uniformity:** Simplifies legal processes and enhances the rule of law.

- **Social Cohesion:** Reduces communal tensions arising from religious differences in personal laws.

Arguments Against UCC

- **Religious Freedom:** Concerns about infringing upon the freedom to practice and follow one's religion.
- **Cultural Diversity:** Fears that it might erode the rich cultural and religious diversity.
- **Political Sensitivity:** Subject to political and religious opposition, potentially leading to societal unrest.

Key Challenges

- **Political and Social Opposition:** Different communities and political parties have varied stances on UCC.
- **Implementation Complexity:** Harmonizing diverse personal laws and addressing specific community concerns.
- **Judicial and Legislative Hurdles:** Balancing the directive principles with fundamental rights and existing legal frameworks.

Conclusion

The UCC remains a significant but controversial topic in Indian legal and political discourse. Its future depends on balancing constitutional ideals with socio-cultural realities and addressing diverse opinions and concerns.

Lok Sabha Speaker constitutes six new parliamentary panels

Key highlights:

New Committee Appointments:

- **Public Accounts Committee (PAC):**

- Headed by senior Congress leader K.C. Venugopal.
- The PAC is a crucial financial committee that scrutinizes government expenditure.
- Traditionally led by a senior member of the principal Opposition party.
- **Estimates Committee:**
 - Chairperson: Sanjay Jaiswal (Bharatiya Janata Party - BJP).
 - This committee examines the estimates of expenditure proposed by the government.
- **Public Undertakings Committee:**
 - Chairperson: Baijayant Panda (BJP).
 - It focuses on the performance of public sector undertakings.
- **Welfare of Other Backward Classes Committee:**
 - Chairperson: Ganesh Singh.
 - This committee looks into the welfare of Other Backward Classes.
- **Welfare of Scheduled Castes and Scheduled Tribes Committee:**
 - Chairperson: Faggan Singh Kulaste.
 - This committee addresses issues related to the welfare of Scheduled Castes and Scheduled Tribes.

Tenure and Composition:

- The committees are appointed for a one-year tenure.
- They include members from both the Lok Sabha and Rajya Sabha.

Pending Appointments:

- The Lok Sabha Speaker has yet to form the 24 departmentally related Standing Committees that cover all Ministries and Departments of the Government of India.

Formation Process:

- Unlike previous Lok Sabhas, the formation of committees in the 18th Lok Sabha (after the June 2024 General Election) has been largely through consensus rather than election.

What is a Parliamentary Committee?

- A Parliamentary committee is a committee of **Members of Parliament (MPs)** who are elected or appointed from amongst the members of the house or nominated by the Speaker or Chairman. The concept of Parliamentary committees originated in the British Parliament. These committees operate under the direction of the Speaker of Lok Sabha or Chairman of Rajya Sabha and present their findings and recommendations to the respective houses.

The Parliamentary committees draw their authority from the constitution.

- **Article 105:** Powers, privileges, etc., of the houses of Parliament and of the members and committees thereof.
- **Article 118:** Each House of Parliament may make rules for regulations, subject to the provisions of this constitution, its procedure and the conduct of its business.

Suo Motu

SC takes *suo motu* cognisance of rape and murder of doctor

What is Suo Motto?

Suo Moto Cognizance: In law, the term “suo moto cognizance” refers to the court’s authority to hear cases on its **own initiative** without any formal complaint or petition being submitted by any party. Based on information obtained from media reports, letters, or any other reliable source, the court starts the procedures on its own.

Constitutional Provisions: According to Articles 32 and 226 of the Indian

Constitution, the Supreme Court and High Courts in India have the ability to take suo moto cognizance of cases. The Supreme Court is given the authority to issue writs for the enforcement of basic rights by Article 32, and the High Courts are given the same authority by Article 226 within their respective spheres of jurisdiction.

Judicial Activism: Suo Moto Cognizance is regarded as an example of judicial activism, in which the judge takes proactive measures to solve pressing concerns that could otherwise go ignored or neglected. By taking on such cases, the courts hope to guarantee the prompt and effective administration of justice.

What are the types of cases where Suo Moto can be applied?

- **Contempt of Court:** Cases involving contempt of court, which may include deliberate disobedience of court orders or conduct that embarrass the court, can be taken suo moto cognizance by courts.
- **Reopening of Old Cases:** The court may reopen a closed case by taking suo moto cognizance if fresh, substantial evidence is discovered.
- **Order Probes for New Cases:** Based on information from affected parties or media reports, courts may launch inquiries or order investigations in cases where there is an apparent injustice being done to a person or a group of society.
- **Protection of Fundamental Rights:** Suo moto cognizance may be exercised in situations when a citizen's fundamental rights have been violated.
- **Matters of Public Interest:** The court may get involved in situations that affect a broad segment of the community or have a significant amount of public interest.

President Murmu Prorogues Parliament After Adjournment Sine Die

Prorogation

Prorogation means the termination of a session of the House by an order made by the President **under article 85(2)(a) of the Constitution**. Prorogation terminates both the sitting and session of the House. Usually, within a few days after the House is adjourned sine die by the presiding officer, the President issues a notification for the prorogation of the session. However, the President can also prorogue the House while in session.

- The President in exercising the power to prorogue the House acts on the advice of the Prime Minister.
- The time-lag between the adjournment of a House sine die and its prorogation is generally two to four days, although there are instances when a House was prorogued on the same day on which it was adjourned sine die.
- It is not necessary that both the Houses should be prorogued simultaneously.

Effects of prorogation

- **Article 107(3) of the Constitution of India** expressly provides that a Bill pending in Parliament shall not lapse by reason of the prorogation of the House. This also covers Bills pending before a Select or Joint Committee of the House.
- Notices of intention to move for leave to introduce Bills also do not lapse on prorogation and no fresh notice is necessary in the next session for that purpose except where any sanction or recommendation granted under the Constitution in respect of a Bill has ceased to be operative.
- On the prorogation, all pending notices of Motions and Resolutions except those relating to introduction of Bills as mentioned above, lapse and fresh notices must be given for the next session.
- Any business pending before a committee **shall not lapse** by reason only of the

prorogation of the House and the committee shall continue to function notwithstanding such prorogation.

- On prorogation of either House of Parliament, the President has the power to issue **Ordinances under article 123**.

Adjournment Sine Die

Adjournment sine die means terminating a sitting of Parliament for an indefinite period. In other words, when the House is adjourned **without naming a day for reassembly**, it is called adjournment sine die. The power of adjournment sine die lies with the presiding officer of the House.

- It implies that when the House is adjourned without naming a day for reassembly, it is called adjournment sine die.
- The presiding officer can also call a sitting of the House before the date or time to which it has been adjourned or at any time after the House has been adjourned sine die.
- The **presiding officer** (Speaker or Chairman) declares the House adjourned sine die, when the business of a session is completed.

Kolkata rape-murder case LIVE: SC to resume hearing shortly; CBI to file status report

CBI

The Central Bureau of Investigation (CBI) is a multidisciplinary investigation agency of the Government of India that investigates corruption-related cases, economic offences, and cases of conventional crime. As India's foremost investigative agency, it provides a centralized mechanism for high-quality investigations.

- The CBI was **established by a resolution of the Ministry of Home Affairs**

and later transferred to the Ministry of Personnel, Public Grievances and Pensions, currently functioning as an **attached office**.

- Its establishment was **recommended by the Santhanam Committee** on Prevention of Corruption.
- The CBI operates **under the DSPE Act, 1946**. It is **neither a constitutional nor a statutory body**.
- It investigates **cases related to bribery, governmental corruption, breaches of central laws, multi-state organized crime, and multi-agency** or international cases.

The functions of the Central Bureau of Investigation (CBI) are:

- To investigate the cases of corruption, bribery, and misconduct of Central Government employees.
- To investigate the cases relating to infringement of fiscal and economic laws, that is, breach of laws concerning export and import control, customs and central excise, income tax, foreign exchange regulations and so on.
- To investigate serious crimes, having national and international ramifications, committed by organized gangs of 'professional criminals'.
- To coordinate the activities of the anti-corruption agencies and the various State Police Forces.
- To take up any case of public importance for investigation at the request of a State Government.
- To maintain crime statistics and disseminate criminal information.

Challenges faced by the CBI-

- **Political Interference:** The Supreme Court of India has criticised the CBI by calling it a "caged parrot speaking in its master"s voice", due to **excessive political interference** in its functioning.
- It has often been used by the government of the day to cover up wrongdoing,

keep coalition allies in line and political opponents at bay.

- **Delayed Investigations:** It has been accused of **enormous delays in concluding investigations** - For example, the inertia in its probe against the high dignitaries in Jain hawala diaries case [of the 1990s].
- **Loss of Credibility:** Improving the image of the agency is one of the biggest challenges till now as the agency has been criticised for its mismanagement of several cases involving prominent politicians and mishandling of several sensitive cases like **Bofors scandal, Hawala scandal, Sant Singh Chatwal case, Bhopal gas tragedy, 2008 Noida double murder case (Aarushi Talwar)**.
- **Lack of Accountability:** CBI is exempted from the provisions of the Right to Information Act, thus, lacking public accountability.
- **Acute shortage of personnel:** A major cause of the shortfall is the government's sheer mismanagement of CBI's workforce, through a system of inefficient, and inexplicably biased, recruitment policies - used to bring in favoured officers, possibly to the detriment of the organisation.
- **Limited Powers:** The powers and jurisdiction of members of the CBI for investigation are subject to the consent of the State Govt., thus limiting the extent of investigation by CBI.
- **Restricted Access :** Prior approval of Central Government to conduct inquiry or investigation on the employees of the Central Government, of the level of Joint Secretary and above is a big obstacle in combating corruption at higher levels of bureaucracy.

Suggested Measures to Enhance Autonomy of CBI

- **Increasing Staff Strength**– The staff strength of the CBI should be increased to provide it with more human resources.
- **Increasing Resources**– Increasing the financial resources of the CBI and improving the agency's infrastructure can help it function more effectively.
- **Increasing Jurisdiction**– The CBI's investigative powers across Union, State,

and Concurrent lists could be enhanced to give it more teeth.

- **Other Measures**– administrative empowerment, increased accountability, etc.

Siddaramaiah slams Governor for not granting permission to prosecute former BJP ministers and Kumaraswamy

Governor-

The Governor of State is **the highest office of the State** under the constitutional framework of India. The office of the **Governor of State** has been envisaged as having dual roles:

- The **Nominal Executive Head** or **Titular or Constitutional Head** of the **State Executive**, as well as
- An **agent of the Central Government**.

Constitutional Provisions Related to Governor of State

- **Articles 153-167 in Part VI of the Indian Constitution deal with the State Executive.** They also contain some key provisions related to the Governor of State.
- The constitutional provisions mentioned under these articles deal with matters related to the **appointment, qualifications, powers, functions, and other aspects** related to the office of the **Governor of State**.

Appointment of Governor of State

The **Governor of State** is appointed by **the President** of India by warrant under his hand and seal. Thus, the Governor is **neither directly elected by the people nor indirectly elected** by a specially constituted electoral college as is the case with **the President of India**.

Powers and Functions of the Governor

Executive Powers

1. Appointment Powers

- **Chief Minister:** Appoints the Chief Minister who must be the leader of the majority party or coalition in the state legislature.
- **Council of Ministers:** Appoints other ministers based on the advice of the Chief Minister.
- **State Officials:** Appoints key state officials, such as:
 - State Election Commissioner
 - Vice-Chancellors of State Universities
 - Advocate General of the State

2. Law and Order

- Responsible for ensuring the maintenance of law and order in the state.
- May recommend President's Rule (Article 356) if there is a breakdown of constitutional machinery in the state.

3. Administration

- Oversees the administration and implementation of state laws.
- Can dissolve the State Legislative Assembly (Article 174).

Legislative Powers

1. Summoning and Proroguing

- **Summoning:** Summons the state legislature (both Legislative Assembly and Legislative Council, if applicable) to meet.
- **Proroguing:** Postpones the sessions of the state legislature.

2. Addressing the Legislature

- Delivers the annual address at the commencement of the first session of the state legislature each year. This address outlines the government's policies, programs, and priorities.

3. Assent to Bills

- **Assent:** Must give assent to bills passed by the state legislature for them to become law.
- **Withholding Assent:** Can withhold assent, or return the bill with a request for reconsideration.
- **Reserving Bills:** Can reserve certain bills for the President's consideration if they are of national importance or affect the relations between the center and the state (Article 200).

Judicial Powers

1. Pardoning Powers

- Can grant pardons, reprieves, respites, or commutations of sentences under Article 161. This power is used to show clemency and to reduce the severity of a punishment.

Emergency Powers

1. State Emergency (Article 356)

- Can recommend the imposition of President's Rule in the state if the state government cannot function according to the Constitution.
- This can occur if there is a breakdown of law and order or if the government is not able to function effectively.

2. Financial Emergency (Article 360)

- Though primarily a central responsibility, the Governor plays a role in the financial management and can advise on economic matters.

Issues

- There are numerous examples of the Governor's position being abused, usually at the behest of the ruling party at the Centre. The process of appointment has generally been the cause behind it.

- In several cases, politicians and former bureaucrats identifying with a particular political ideology have been appointed as the Governors by the Governments. This goes against the constitutionally mandated neutral seat and has resulted in bias, as appears to have happened in Karnataka and Goa.
- Recently, the Governor of Rajasthan has been charged with the violation of the model code of conduct. His support of the ruling party is against the **spirit of non-partisanship that** is expected from the person sitting on constitutional posts.
- Due to such incidents, negative terms like an **agent of the Centre, Puppet and rubber stamps are** used to describe a governor of the state.
- Governor's **discretionary powers to invite the leader of the largest party/alliance, post-election, to form the government** has often been misused to favour a particular political party.
- **The Governors Committee (1971)** laid down the responsibility on the governor to see that the administration of the State does not breakdown due to political instability and he must send a regular report about the political situation of the State.
- However, the **imposition of President's rule (Article 356)** in case of breakdown of constitutional machinery in a State has been frequently misused by the central government.
- Governor's work is bound by the aid and advice of his council of ministers, this has brought down the significance of the office to **a mere rubber stamp**.
- This is reflected in TB. **Pattabhi Sitaramayya** (a former Governor of Madhya Pradesh) observation that he had no public function to perform except making the fortnightly report to the President.
- **The arbitrary removal of the Governor** before the expiration of his tenure has also been an important issue in the recent past.
- The Governor cannot be removed on the ground that he is out of sync with the

policies and ideologies of the Union government or the party in power at the Centre. Nor can he be removed on the ground that the Union government has lost confidence in him.

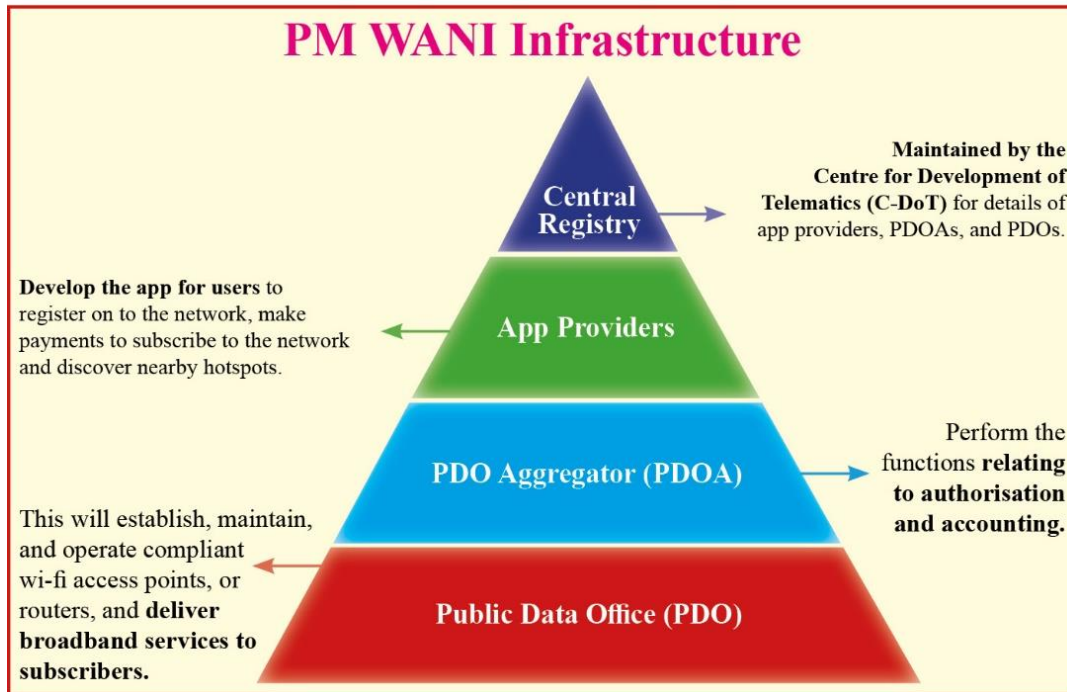
TRAI releases Telecommunication Tariff draft amendment order on regulatory framework for PM-WANI scheme

Key Points of TRAI's Draft Telecommunication Tariff (70th Amendment) Order, 2024:

- **Objective:** Address high costs hindering PM-WANI scheme expansion.
- **Background:** NDCP 2018 and Bharat 6G Vision target 10 million public Wi-Fi hotspots by 2022; current numbers are low.
- **Issue:** High costs of backhaul internet (ILL) for PDOs, compared to affordable FTTH broadband.
- **Proposal:** Align tariff for PM-WANI PDOs with retail FTTH broadband rates.
- **Consultation:** Comments by 6th September 2024; counter-comments by 13th September 2024.

PM WANI

- The Prime Minister **Wi-Fi Access Network Interface** (PM-WANI) is a government initiative launched in December 2020 by the Department of Telecommunications (DoT).
- It establishes a framework for setting up a vast network of Wi-Fi hotspots throughout the country, particularly in underserved rural areas. This initiative aligns with the **National Digital Communications Policy**, 2018 (NDCP)'s goal of creating a robust digital infrastructure.



Benefits of PM-WANI

Affordable Connectivity

- **Reduced Reliance on Expensive Data Packs:** PM-WANI provides public Wi-Fi hotspots, particularly in rural areas where mobile data plans can be costly. This allows users to access the internet without incurring high charges, especially for occasional use.
- **Pay-Per-Use Model for Rural PDOs:** The scheme allows for setting up PDOs (Public Data Offices) in rural areas. These PDOs offer Wi-Fi at minimal charges, following a pay-per-use model. This caters to users who might not need a full-fledged data plan but require occasional internet access.

Digital Inclusion

- **Bridging the Digital Divide:** A significant portion of India's population, particularly in rural regions, lacks access to reliable internet. PM-WANI

hotspots bridge this gap by offering internet connectivity in public places like railway stations and through PDOs. This enables them to access government services, educational resources, and online opportunities.

- **Improved Access to Information & Services:** With PM-WANI, people can access information and services online, regardless of their socioeconomic background. This empowers them to participate in the digital economy, avail of government schemes, and stay informed.

Empowerment of Citizens

- **Entrepreneurship Opportunities:** PM-WANI allows individuals to become PDO operators, setting up Wi-Fi hotspots in rural areas. This creates income-generation opportunities and promotes local entrepreneurship.
- **Enhanced Skill Development & Education:** Increased internet access empowers citizens to access online educational resources and skill development programs. This fosters personal and professional growth, improving employability and career prospects.

Potential Challenges and Way Forward

Cybersecurity:

- **Public Awareness Campaigns:** Educating users about safe browsing practices and the importance of strong passwords can minimize vulnerabilities.
- **Promoting VPN Use:** Encouraging users to employ Virtual Private Networks (VPNs) when accessing sensitive information on public Wi-Fi can provide an additional layer of security.
- **Network Security Measures:** Implementing strong encryption protocols and user authentication mechanisms on PM-WANI hotspots can further enhance security.

Sustainability of PDOs:

- **Microloans or Subsidies:** Government or financial institutions could offer financial assistance to help PDOs with initial setup costs and infrastructure investment.
- **Value-Added Services:** PDOs could explore offering additional services like basic printing or device charging for a small fee to supplement their income.

Union Government issues Comprehensive Guidelines for Handling Public Grievances

The key highlights of the **Comprehensive Guidelines for Handling Public Grievances** are as follows:

- **Unified Platform:** CPGRAMS for a single window grievance filing.
- **Nodal Officers:** Appointed in each Ministry/Department for efficient grievance handling.
- **Timelines:** Reduced grievance redressal time from **30 days to 21 days**.
- **Escalation:** Appellate and sub-nodal officers for unresolved grievances.
- **Feedback:** Citizens receive feedback requests via SMS/email; appeals can be made if dissatisfied.
- **AI Analytics:** Use of AI tools for analyzing feedback and improving processes.
- **Assessment Index:** Monthly ranking of Ministries/Departments based on grievance redressal performance.
- **Training:** Grievance officers trained through Administrative Training Institutes.
- **Performance:** CPGRAMS addressed nearly 6 million grievances (2022-2024).

Public grievances refer to the complaints or concerns raised by individuals or groups regarding inefficiencies, malpractices, or failures in public services or government functions. These grievances can relate to a wide range of issues, from administrative delays to corruption and inadequate service delivery.

Importance of Addressing Public Grievances

- **Enhancement of Accountability:** Addressing grievances helps ensure that public officials and institutions remain accountable for their actions and decisions.
- **Improvement in Service Delivery:** Effective handling of grievances leads to better public services and can help in identifying systemic issues that need to be addressed.
- **Trust in Government:** Transparent and responsive mechanisms for handling grievances can enhance public trust in government institutions.
- **Democratic Engagement:** Addressing grievances reflects the government's commitment to participatory governance and citizen engagement.

Mechanisms for Addressing Public Grievances

- **Grievance Redressal Systems:** These include formal systems like complaint cells, grievance redressal committees, and online portals. For example, the **Centralized Public Grievance Redress and Monitoring System (CPGRAMS)** in India.
- **Ombudsman:** An independent official appointed to investigate complaints against maladministration or violations by public authorities.
- **Judicial Remedies:** Citizens can approach courts, including public interest litigation (PIL), to seek redressal for grievances related to violations of fundamental rights or systemic issues.
- **Legislative Committees:** Parliamentary or legislative committees that review public complaints and issues related to government functioning.

Challenges in Addressing Public Grievances

- **Bureaucratic Inefficiencies:** Delays and inefficiencies within the bureaucracy can hinder effective grievance redressal.

- **Corruption:** Corruption within public institutions can lead to mishandling or dismissal of grievances.
- **Lack of Awareness:** Citizens may not be aware of grievance redressal mechanisms or may lack the knowledge to effectively use them.
- **Resource Constraints:** Limited resources and manpower can affect the ability of institutions to address grievances promptly.

Case Studies and Examples

- **CPGRAMS:** The Centralized Public Grievance Redress and Monitoring System (CPGRAMS) is a significant initiative by the Indian government aimed at addressing public grievances related to central government departments and organizations.
- **RTI Act, 2005:** The Right to Information Act allows citizens to request information from public authorities, which can indirectly help in addressing grievances by promoting transparency.

Recent Reforms and Innovations

- **Digital Platforms:** Introduction of digital platforms and mobile applications for lodging and tracking grievances, such as the **MyGov platform**.
- **Citizen Charters:** Many government departments have adopted Citizen Charters, which outline the standards of service delivery and grievance redressal mechanisms.
- **Integration with E-Governance:** Grievance redressal mechanisms are increasingly being integrated with broader e-governance initiatives to enhance accessibility and efficiency.

Protection of Women from Sexual Harassment Act (POSH Act)

The POSH Act is a legislation enacted by the Government of India in 2013 to address the issue of sexual harassment faced by women in the workplace. The Act aims to create a safe and conducive work environment for women and provide protection against sexual harassment.

Key Provisions of the PoSH Act:

- **Defines sexual harassment:** To include **unwelcome acts** such as physical, verbal/non-verbal conduct - a demand or request for sexual favours, making sexually coloured remarks, showing pornography, etc.

Lists down five circumstances that would constitute sexual harassment:

1. Implied or explicit promise of preferential treatment in employment
 2. Implied or explicit threat of detrimental treatment in employment
 3. Implied or explicit threat about present or future employment status
 4. Interference with work or creating an intimidating or offensive or hostile work environment and
 5. Humiliating treatment is likely to affect health or safety.
- **Defines an employee (not just in accordance with the company law):** All women employees, whether employed regularly, temporarily, contractually, on an ad hoc or daily wage basis, as apprentices or interns, can seek redressal to sexual harassment in the workplace.
 - **Expands the definition of 'workplace':** Beyond traditional offices to include all kinds of organisations across sectors, even non-traditional workplaces (for example, telecommuting) and places visited by employees for work.

DEFENCE AND SPACE

Tarang Shakti-2024: Indian Air Force's First Multinational Air Exercise

- India will host its **first multinational air exercise** called **Tarang Shakti-2024** in August 2024, with the participation of 10 countries and some others as observers.
- It is inspired by the **Red Flag exercise** hosted by the US.

This air exercise will be conducted in two different phases:

- **First round Phase:** The Indian Air Force's first multinational air exercise, Tarang Shakti – 2024, will be conducted in South India during the first two weeks of August under the first phase in India.
- **Second phase:** Air Exercise Tarang Shakti 2024 will be conducted in the Western Region of India under Phase II from late August to mid-September.

Participating Nations

- Ten countries will be participating in the exercise. In addition to this, few others would be acting as observers.
- Australia, France, Germany, Japan, Spain, the United Arab Emirates, the United Kingdom, and the United States will be sending contingents.
- Germany will showcase the **A-400M aircraft**, which will be displayed for the **Indian Air Force (IAF)** as it is being considered as a potential option for the current open tender seeking medium transport aircraft.

Significance of the Exercise

- The exercise provides a platform to **showcase advanced military technologies**

and capabilities, including fighter jets, transport aircraft, and aerial refuelling systems.

- This enables participants to demonstrate their **equipment's effectiveness and interoperability** in multinational settings.
- It would enhance regional stability and promote **collective security in the Indo-Pacific region**.
- It reinforces **India's role as a key partner in global security initiatives** and strengthens diplomatic relations with participating countries.

Red Flag Exercise

- **Hosted by USAF:** The recently concluded Red Flag exercise at Eielson Air Force Base, Alaska, involved diverse international participation.
- **IAF Deployment:** Deployed eight Rafale fighters, supported by IL-78 mid-air refuellers and C-17 Globemaster aircraft.
- **Combat Simulations:** Included scenarios for air combat, with Red and Blue Forces simulating defensive and offensive roles respectively.

Working Mechanism for Consultation and Coordination on India-China Border Affairs

India and China held the 30th meeting of the **Working Mechanism for Consultation and Coordination** on India- China Border Affairs (WMCC) in New Delhi.

WMCC:

- The WMCC was established in **2012** as an institutional mechanism for consultation and coordination for management of India – China border areas,

as well as to exchange views on strengthening communication and cooperation, including between the border security personnel of the two sides.

- It is headed by **joint secretary**-level officials from both sides.
- They are entrusted to help the special representative for boundary talks, a position currently held by NSA Ajit Doval.

Key highlights of 30th meeting:

- The two countries are making efforts to resolve the standoff along the Line of Actual Control (LAC) in eastern Ladakh.
- Both sides agreed on the need to jointly uphold peace and tranquillity on the ground in the border areas in accordance with bilateral agreements and protocols reached between the two governments.

Major friction points along the India-China border

- **Depsang Plains:** This area is located in the northernmost part of Ladakh and has seen incursions by Chinese troops in the past.
- **Demchok:** This area is located in eastern Ladakh and has seen disputes over the boundary between India and China.
- **Pangong Lake:** This area has been a major flashpoint between the two countries, with Chinese troops attempting to change the status quo on the Line of Actual Control (LAC) in the region.
- **Gogra and Hot Springs:** These two areas are located in eastern Ladakh and have seen standoffs between Indian and Chinese troops in recent years.
- **Arunachal Pradesh:** This north-eastern Indian state is claimed by China as part of its territory and has been a major point of contention between the two countries.

Challenges of India-China peace process:

- **Border Disputes:** Despite several rounds of talks, the two sides have not been able to reach a lasting solution to the border dispute especially along the Line of Actual Control (LAC).
- **Strategic Competition:** India and China are both major regional powers and have competing interests in the region which has led to strategic competition in areas such as trade, infrastructure development, and influence in neighbouring countries.
- **Differences in Political Systems:** India is a democracy, while China is a one-party state this difference in political systems have led to a lack of mutual trust and understanding.
- **Military Build-up:** The military build-up by both countries along the border has increased tensions and made the peace process more challenging.
- **Historical Issues:** Historical issues, including the 1962 Sino-Indian War, continue to affect relations between the two countries.
- **Geopolitical Factors:** Geopolitical factors, such as the increasing role of the United States in the region, have also added to the complexity of the India-China peace process.

India selects 2 crew members for Axiom-4 mission to ISS- Axiom-4 mission.

Axiom-4 Mission:

- Axiom Mission 4 (or Ax-4) is a **private spaceflight** to the International Space Station.
- It is operated by Axiom Space and uses a **SpaceX** Crew Dragon spacecraft.
- The flight is in collaboration with **NASA and** will be the fourth flight of Axiom

Space after **Axiom Mission 1**, **Axiom Mission 2** and **Axiom Mission 3**.

- Scheduled to launch in 2024, Axiom-4 will continue the company's pioneering efforts to establish a sustainable human presence in **Low Earth Orbit (LEO)**.

Key Features

Spacecraft and Crew:

- The mission will use a SpaceX Dragon spacecraft, launched atop a **Falcon 9 rocket**.
- The crew will consist of professional astronauts and private individuals, including researchers and potentially tourists, who have undergone rigorous training for the mission.

Duration and Activities:

- Axiom-4 is expected to be a short-duration mission, **lasting approximately 14 days**.
- During their time aboard the International Space Station (ISS), the crew will conduct scientific experiments, perform technology demonstrations, and engage in educational outreach.

Commercial Space Station Development:

- Axiom Space's long-term vision includes **building the world's first commercial space station**.
- The Axiom-4 mission is part of the company's broader plan to eventually transition from the ISS to their own independent orbital outpost.

The Significance of Axiom-4:

- The Axiom-4 mission is not just a technical achievement; it represents a broader vision of international cooperation and the democratization of space access.
- By participating in this mission, India is positioning itself as a significant player in the global space community. The experience and knowledge gained from this mission will be invaluable for future space endeavors and collaborations.

International Space Station (ISS)

- The ISS is a large, permanently crewed laboratory that orbits Earth, 400 kilometres above its surface. It is home to astronauts and cosmonauts, and serves as a unique science laboratory.
- Its research is expected to lead to advancements in many areas, including medicine, technology, science, and understanding the Earth and universe.
- It's a collaboration between 15 countries and five space agencies namely NASA (United States), Roscosmos (Russia), ESA (European Space Agency), JAXA (Japan Aerospace Exploration Agency), and CSA (Canadian Space Agency).

India to Host First Multinational Air Exercise 'Tarang Shakti 2024' in Tamil Nadu

Tarang Shakti is an international air exercise hosted by India, involving air forces from multiple countries. It is designed to enhance strategic relations, improve interoperability, and showcase India's indigenous defence technologies. **Indian Air Force (IAF) Vice Chief Air Marshal AP Singh** announced that **Tarang Shakti** will be the largest international air exercise ever conducted in India, with **invitations extended to 51 countries**. The exercise will occur in two phases, with participation from various countries and their military assets.

Phases and Locations:

- **Phase One:** August 6-14, 2024, in **Sulur, Tamil Nadu**. This phase will involve participation from **France, Germany, Spain, and the United Kingdom**, showcasing a mix of advanced aircraft and defense strategies.
- **Phase Two:** September 1-14, 2024, in **Jodhpur, Rajasthan**. This phase will include participants from **Australia, Bangladesh, Greece, Singapore, UAE, and the USA**, highlighting a wide array of military technologies and operational tactics.

Aircraft and Assets:

- **Foreign Assets:** F-18, A-18, C-130, F-16, A-10, KC-130, KC-135, Eurofighter Typhoon, Rafale
- **Indian Assets:** Tejas, Prachand, Dhruv, Rudra, MiG-29K (Indian Navy)

Objectives

- **Strengthen Strategic Relations:** Enhance relationships with international community members.
- **Mutual Understanding:** Improve mutual understanding of air operations through complex missions.

- **Showcase Indigenous Defence:** Highlight India's defence ecosystem and indigenous products.
- **Interoperability and Expertise Sharing:** Foster professional exchanges and share best practices among participating air forces.

NIA secures extradition of 'pro-Khalistan' terror accused

The Khalistan movement is a fight for a separate, sovereign Sikh state in present day Punjab (both India and Pakistan). The movement was crushed in India following **Operation Blue Star** (1984) and **Operation Black Thunder** (1986 and 1988). Operation Blue Star began on June 1, 1984 to flush out militants from the Golden Temple and neutralise Bhindranwale. However, it continues to evoke sympathy and support among sections of the Sikh population, especially in the Sikh diaspora in countries such as Canada, the UK, and Australia.

Historical Background

- **Operation Blue Star (1984):** A major turning point in the Khalistan movement was the Indian government's military operation to remove Sikh militants from the Golden Temple complex in Amritsar, Punjab, in 1984. This operation, known as "Operation Blue Star," resulted in significant casualties and damage to the holiest Sikh shrine and inflamed Sikh sentiments.
- **Assassination of Prime Minister Indira Gandhi (1984):** In retaliation for Operation Blue Star, Prime Minister Indira Gandhi was assassinated by her Sikh bodyguards in October 1984. This event triggered anti-Sikh riots in which thousands of Sikhs were killed in Delhi and other parts of India.
- **Punjab Insurgency (1980s):** The 1980s saw the rise of Sikh militant groups, such as the **Khalistan Commando Force (KCF)**, **Babbar Khalsa**, and others,

which launched an armed insurgency in Punjab, seeking to establish Khalistan as an independent state.

- **The bombing of Air India (1985):** Sikh militants were also blamed for the **1985 bombing of an Air India Boeing 747** flying from Canada to India in which all 329 people on board were killed off the Irish coast.
- **Operation Black Thunder (1986-88):** Operation Black Thunder-I was conducted by the **National Security Guard** in April 1986 to flush out extremists and terrorists from Golden Temple Complex, Amritsar. The second part of the operation was code-named Operation Black Thunder-II and was conducted from 10 May to 19 May 1988.

Implications of the Khalistan issue-

- **India's Territorial Integrity:** The Khalistan issue challenges India's territorial integrity and sovereignty. It is a secessionist movement that seeks to carve out a separate state from Indian territory. The Indian government considers this a threat to its unity and national integrity.
- **Relations with Pakistan:** Historically, Pakistan has been accused of supporting and sheltering Sikh militants advocating for Khalistan. This has led to tensions and conflicts in India-Pakistan relations. The Khalistan issue has the potential to strain these relations further.
- **India-Canada relations:** The issue has been a bone of contention in the bilateral ties. India has been upset about frequent demonstrations and vandalism by Sikh separatists and their supporters at Indian diplomatic missions in Canada. As of recently, the issue has put a hold on the trade treaty between the countries.
- **Security Concerns:** The Khalistan movement has led to security concerns within India, with periodic outbreaks of violence and terrorism. Addressing

these concerns can strain India's resources and attention.

- **Human Rights Concerns:** The handling of the Khalistan issue by Indian authorities has raised human rights concerns. International human rights organizations may engage with the issue, potentially affecting India's international image.
- **Domestic Politics:** In India, the Khalistan issue has domestic political implications. It can be used as a political tool by different parties to gain support or criticize the government's handling of the situation.

INDIAN NAVAL SHIP TABAR REACHES LONDON, UK FOR A FOUR DAY VISIT

Key highlights:

- **Arrival:** INS Tabar, a stealth frigate of the Indian Navy, docked at London Harbour on August 7, 2024, for a four-day visit.
- **Maritime Ties:** The visit underscores the strong historical and ongoing maritime relationship between India and the UK, including their annual bilateral naval exercise, Konkan.
- **Activities:** During its stay, INS Tabar will engage in professional interactions with the Royal Navy and participate in community service at an Old Age Home, reflecting the **Vasudhaiva Kutumbkam** ideology of PM Narendra Modi.
- **Ship Details:** INS Tabar is commanded by Captain MR Harish, has a complement of approximately 280 personnel, and is one of the Indian Navy's early stealth frigates, built in Russia.

INS Tabar:

- It is a **stealth frigate built for the Indian Navy in Russia.**

- It is the **third of the Talwar-class frigate** of the Indian Navy.
- The frigate was commissioned on 19 April 2004 in Kaliningrad, Russia.
- INS Tabar has the ability to **handle air/surface/sub-surface missions or** defending herself, operating either independently on maritime missions or supporting a larger naval task force.
- The ship is **part of the Indian Navy's Western Fleet, which is based in Mumbai** under the **Western Naval Command**.

Features:

- Fully loaded, INS Tabar has a displacement of 4,035 tons.
- Speed: 30 knots (56 km/h; 35 mph)
- Maximum range is 4,850 nautical miles (8,980 km; 5,580 mi) at 14 knots (26 km/h; 16 mph), while at 30 knots (56 km/h; 35 mph), the range lessens to 1,600 nautical miles (3,000 km; 1,800 mi).
- The ship is equipped with a versatile range of weapons and sensors.
- It is the first vessel in the Talwar class frigate to be armed with **supersonic Brahmos (anti-ship cruise missiles)**.
- **It is also equipped with Barak-1 missiles.**

The Indian Air Force (IAF) contingent returned to India after successfully participating in Exercise Udara Shakti 2024 in Malaysia's Kuantan

- The joint air exercise was conducted in collaboration with the Royal Malaysian Air Force (RMAF) from 05 to 09 August 2024 at Kuantan, Malaysia.

About:

- The Indian Air Force participated in the air exercise with **Su-30 MKI** and **C-17** aircraft while Malaysian Air Force will be flying **Su 30 MKM** aircraft.
- The four days of exercise witness the conduct of various aerial combat drills between the two Air Forces.

Background:

- The first bilateral Air Force exercise that staged frontline Sukhoi-30 combat aircraft was conducted in 2018.
- From 2008 to 2010, the Indian Air Force Training Team was deployed in Malaysia to give training to Malaysian pilots on the **SU-30SKM** aircraft.

Features of the Exercise Udara Shakti 2024

- The Exercise **Udara Shakti 2024** was based on Training Exercises and Subject Matter Expert Exchange concepts. The Training Exercises included air combat exercises involving the Su-30 planes of both countries.
- The Subject Matter Expert Exchange focused on sharing expertise, insights, and skills in aviation and engineering related to the Sukhoi-30 aircraft.
- Exercise Udara Shakti 2024 also featured the **HOP Exercise**, during which the pilots of both the Air Force flew and exchanged their Sukhoi fighter planes. The Indian pilot flew the Malaysian Su-30, while the Malaysian pilot flew the Indian SU-30MKI.
- The main goals of the HOP EX were to test fighter aircraft, exchange ideas and

experiences regarding combat tactics, and explore differences in aircraft equipment functionality.

India Celebrates First National Space Day on August 23

Key Highlights:

- **National Space Day:** Prime Minister Narendra Modi had declared August 23 as "National Space Day".
- **Theme of Celebration:** The theme for the first National Space Day is "Touching Lives while Touching the Moon: India's Space Saga."
- **Events and Celebrations:** A range of events will be held leading up to National Space Day, showcasing India's space achievements and their societal impacts. These events will culminate in a main celebration in New Delhi on August 22-23.
- **ISRO's Contribution:** M Sankaran, Director of the U R Rao Satellite Centre, highlighted the significance of the space program in advancing technology and improving lives, emphasizing the ongoing relevance and future potential of India's space endeavours.

History of National Space Day

To commemorate the successful launch of the Chandrayaan-3 Mission and the soft landing of the Vikram Lander, along with the deployment of the Pragyaan Rover on the Moon on August 23, 2023, the Government of India has declared August 23rd as "National Space Day" to be observed annually. This achievement places India among the elite group of spacefaring nations, becoming the fourth country to land on the Moon and the first to land near the lunar south pole.

Chandrayaan-3 Programme

About:

- **Chandrayaan-3** is India's third lunar mission and second attempt at achieving a soft landing on the moon's surface.
- On July 14, 2023, Chandrayaan-3 took off from the Satish Dhawan Space Centre in Sriharikota. The spacecraft seamlessly entered lunar orbit on August 5, 2023. The historic moment unfolded when the lander made a successful touchdown near the Lunar south pole on Aug 23, 2023.

Components:

- The Propulsion Module: It will carry the lander and rover configuration till 100 km lunar orbit. This propulsion module has Spectro-polarimetry of Habitable Planet Earth (SHAPE) payload to study the spectral and Polarimetric measurements of Earth from the lunar orbit.
- The Lander Module: The Lander Module (Vikram) is carrying a scientific payload that includes a suite of instruments to study the lunar surface and atmosphere. Chandrayaan-3's Surface Thermophysical Experiment (ChaSTE) to measure the thermal conductivity and temperature; Instrument for Lunar Seismic Activity (ILSA) for measuring the seismicity around the landing site; Langmuir Probe (LP) to estimate the plasma density and its variations. A passive Laser Retroreflector Array from NASA is accommodated for lunar laser ranging studies.
- The Rover Module: The Rover Module (Pragyan) is carrying a suite of instruments to study the lunar surface and subsurface which includes Alpha Particle X-ray Spectrometer (APXS) and Laser Induced Breakdown Spectroscopy (LIBS) for deriving the elemental composition in the vicinity of landing site.

DRDO successfully carries out maiden test flight of Long-Range Glide Bomb GAURAV from Sukhoi-30 MK-I

Long-Range Glide Bomb GAURAV

- LRGB Gaurav is a **1,000 kg class long-range glide bomb developed** by the **DRDO**.
- It is **air-launched from a Su-30 MK-I fighter jet** of the Indian Air Force.
- The bomb is **designed and developed indigenously** by the **Research Centre Imarat (RCI), Hyderabad**.
- **Adani Defence** and **Bharat Forge** participated as Development cum **Production Partners** in the Gaurav project.

Key capabilities

- **1. Long-Range Target Engagement:** GAURAV is capable of striking targets at extended distances, providing a significant tactical advantage.
- **2. High Precision:** The bomb is equipped with a hybrid navigation system that integrates Inertial Navigation System (INS) and GPS, ensuring pinpoint accuracy.
- **3. Indigenous Development:** GAURAV is designed and developed entirely in India showcasing the country's growing self-reliance in advanced defence technology.
- **4. Large Payload:** Weighing 1,000 kg, it can deliver a substantial payload to its target, enhancing its effectiveness in a variety of combat scenarios.
- **5. Air-Launched Platform:** The bomb is launched from a Su-30 MK-I fighter jet, allowing it to be deployed from a significant altitude and distance from the target, enhancing its reach and survivability.

ISRO launches Earth Observation Satellite EOS-08

ISRO EOS-08 Satellite Mission Highlights

- **Launch Date & Time:** August 17, 2024, at 09:17 hrs IST
- **Rocket:** SSLV-D3
- **Launch Site:** Satish Dhawan Space Centre, Shriharikota
- **Orbit:** Circular Low Earth Orbit (LEO), 475 km altitude
- **Mission Life:** 1 year
- **Satellite Mass:** ~175.5 kg
- **Power Generation:** ~420 W

Payloads:

- **EOIR:** Imaging in MIR and LWIR for surveillance, disaster, and environmental monitoring.
- **GNSS-R:** Ocean wind, soil moisture, cryosphere, and waterbody detection.
- **SiC UV Dosimeter:** Monitors UV and gamma radiation for Gaganyaan Mission.

Mission Objectives:

- Design and develop a microsatellite.
- Develop payload instruments compatible with the microsatellite bus.
- Incorporate new technologies for future satellites.

EOS-08 Mission

- The main goals of the EOS-08 mission are to design and develop a microsatellite, as well as to incorporate new technologies needed for operational satellites in the future and create payload instruments that are compatible with the microsatellite bus.

- The spacecraft mission configuration is set to operate in a Circular Low Earth Orbit (LEO).
- It is set at an altitude of 475 km with an inclination of 37.4°.
- It interfaces with the SSLV-D3/IBL-358 launch vehicle.
- EOS-08 marks a significant advancement in satellite mainframe systems such as an Integrated Avionics system which combines multiple functions into a single, efficient unit.
- This system is designed with cold redundant systems using commercial off-the-shelf (COTS) components and evaluation boards, supporting up to 400 Gb of data storage.

Small Satellite Launch Vehicle (SSLV)-D3

- SSLV-D3 is the third developmental flight of SSLV.
- SSLV is capable of launching Mini, Micro or Nano satellites (10 to 500 kg mass) into 500km planar orbit.
- It uses three solid fuel-based stages and a final liquid-fuel based stage.

Benefits:

- Low cost, low turn-around time, flexibility in accommodating multiple satellites, launch on demand feasibility, minimal launch infrastructure requirements, etc.

Navy Chief Reaffirms Support for Gaganyaan & Samudrayan Missions in Meeting with Jitendra Singh

Gaganyaan mission

The primary goal of the Gaganyaan mission is to send Indian astronauts, known as "**Vyomanauts**," into space and bring them back safely. This mission aims to demonstrate ISRO's capability to undertake human spaceflight and contribute to the advancement of space technology.

Mission Components

1. Crew Module:

- **Design:** The crew module is designed to accommodate a crew of two astronauts. It includes life support systems, navigation, and communication equipment to ensure the safety and well-being of the astronauts.
- **Landing:** The module is equipped with heat shields and parachutes to ensure a safe re-entry and landing on Earth.

2. Launch Vehicle:

- **GSLV Mk III:** The mission will use the GSLV Mk III rocket, ISRO's most powerful launch vehicle, capable of lifting heavy payloads. It has been specifically modified to carry the crew module and necessary systems.

3. Spacecraft Systems:

- **Life Support:** Advanced life support systems will be included to provide oxygen, manage waste, and maintain appropriate pressure and temperature.
- **Navigation and Communication:** Systems for precise navigation and reliable communication with ground control will be integral to the mission's success.

Mission Phases

1. Pre-Launch Preparations:

- **Astronaut Training:** Selected astronauts undergo extensive training, including simulations of spaceflight, survival training, and physical conditioning.
- **Test Flights:** Uncrewed test flights and simulations will be conducted to validate the spacecraft systems and safety measures before the actual crewed mission.

2. Launch:

- **Spacecraft Deployment:** The crew module will be launched aboard the GSLV Mk III rocket. The rocket will place the module into a low Earth orbit (LEO) or a similar trajectory.

3. Mission Operations:

- **Orbital Operations:** The spacecraft will remain in space for a planned duration, during which astronauts will conduct experiments and monitor systems.
- **Re-entry and Landing:** After the mission, the crew module will re-enter Earth's atmosphere and land safely, with recovery operations in place.

Gaganyaan Mission



Significance

1. Technological Advancement:

- **Capability Development:** The mission will showcase ISRO's advanced space technologies and its ability to undertake complex human spaceflight missions.
- **Technology Demonstration:** It will demonstrate various technologies essential for future space missions, including human space exploration.

2. National Pride and International Prestige:

- **Milestone Achievement:** Successfully sending humans into space would mark a significant milestone for India, enhancing its status in the global space community.

- **International Collaboration:** The mission may foster opportunities for international collaboration in space exploration and technology development.

Challenges

1. Technical Complexity:

- **Safety and Reliability:** Ensuring the safety and reliability of all systems is critical, given the complexity and risks associated with human spaceflight.

2. Cost and Resource Management:

- **Budget Constraints:** Managing the budget and resources effectively to achieve mission goals within financial constraints is a key challenge.

Samudrayan Missions

The mission is aimed at **sending three personnel to 6000-metre depth in a vehicle called 'MATSYA 6000'** for the exploration of deep-sea resources like minerals. 'MATSYA 6000' vehicle is being **designed and developed by National Institute of Ocean Technology (NIOT)**, Chennai under **Ministry of Earth Sciences**. It has an endurance of 12 hours under normal operation and 96 hours in case of emergency for human safety. It is **India's first unique manned ocean mission** and is a part of the Rs 6000-crores **Deep Ocean Mission**.

Significance

1. Scientific Advancement:

- **Understanding Marine Life:** Provides valuable information about deep-sea ecosystems and species, contributing to the broader understanding of marine biodiversity.
- **Geological Insights:** Enhances knowledge of underwater geological processes and formations, which can have implications for natural

hazard assessment and resource management.

2. Technological Innovation:

- **Advanced Engineering:** Develops and tests new technologies for deep-sea exploration, potentially leading to advancements in other fields.

3. Economic and Strategic Value:

- **Resource Potential:** Identifies and assesses potential underwater resources, which can have economic implications for resource management and extraction.
- **National Prestige:** Demonstrates India's capabilities in high-tech exploration and positions the country as a leader in marine research.

Challenges

1. Technical Complexity:

- **Extreme Conditions:** Designing and building submersibles that can withstand the high pressure, low temperatures, and corrosive environment of deep-sea conditions is a significant technical challenge.

2. Cost and Funding:

- **Resource Intensive:** Deep-sea exploration requires substantial financial investment, which needs careful management and allocation.

3. Data Management:

- **Large Volumes:** Handling and analyzing large volumes of data collected from deep-sea missions can be complex and requires sophisticated tools and expertise.

A look at ongoing Indian space missions

Highlights in the last year:

Chandrayaan-3:

- **Date:** August 23, 2023
- **Achievement:** Successful lunar landing.
- **Significance:** India's National Space Day declared by PM Modi.

Aditya-L1:

- **Launch Date:** September 2, 2023
- **Objective:** Solar science mission to study the Sun's outer layer and solar storms.
- **Notable Event:** First orbit around the L1 point on January 6, 2024.

Gaganyaan TV-D1:

- **Date:** October 21, 2023
- **Achievement:** Successful **Crew Escape System** test, crucial for human spaceflight.
- **Recovery:** Crew module recovered by **INS Shakthi**.

XPoSat:

- **Launch Date:** January 1, 2024
- **Objective:** Study X-ray polarization of celestial objects.
- **Instruments:** XSPECT and POLIX.

INSAT-3DS:

- **Launch Date:** February 17, 2024
- **Objective:** Meteorological satellite, proving the GSLV's capability before NASA-

ISRO mission.

RLV-TD:

- **Tests:** LEX-02 and LEX-03 in March and June 2024.
- **Objective:** Validate landing conditions for a reusable launch vehicle.

SSLV:

- **Date:** August 16, 2024
- **Achievement:** Successful third and final development flight of the Small Satellite Launch Vehicle (SSLV).

ISRO Roadmaps:

Gaganyaan Mission:

- **Upcoming:** Uncrewed mission in late 2024, crewed mission with Axiom Space in 2025.
- **Future:** Indian space station '**Bharatiya Antariksh Station**' (BAS) by 2035.

Lunar Exploration:

- **Target:** Indian lunar landing by 2040.
- **Plans:** Include crewed missions, sample-return, long-duration stays, docking with Lunar Gateway, and habitat construction.

Next Generation Launch Vehicle (NGLV):

- **Objective:** Develop a more capable launch vehicle for heavier payloads.
- **Configuration:** Three-stage vehicle with semi-cryogenic and cryogenic engines.
- **Current Status:** Project report submitted; GSLV phased out post-NGLV development.

NSIL Missions-

Commercial Activities:

- **Transferred:** Remote sensing satellite data to NSIL.
- **Agreements:** SpaceX for GSAT-20/GSAT-N2 launch; public-private partnerships for LVM-3 production.

Private Space Missions:

- **Agnikul Cosmos:** Launched SoRTeD-01 with a semi-cryogenic engine on March 21, 2024.
- **Skyroot Aerospace:** Progress towards Vikram 1 rocket, with successful Vikram S test on November 18, 2022.
- **Dhruva Space and Bellatrix Aerospace:** Experiments on PSLV-C58 mission.

IN-SPACe Policy Updates:

Regulations:

- **Released:** Guidelines for authorizing space activities on May 3, 2023.
- **Licenses:** First satellite broadband license to **Eutelsat OneWeb** and ground station license to **Dhruva Space**.
- **FDI Policy:** 100% direct FDI in space sectors except 74% in satellite manufacturing and 49% in launch infrastructure.

INS Mumbai arrives in Colombo for three-day visit

- **Arrival and Reception:** INS Mumbai arrived in Colombo on August 26, 2024. The Sri Lankan Navy ceremonially received the warship, marking its first visit to a Sri Lankan port.
- **Operational Turn-Around:** The visit is categorized as an Operational Turn-Around, which involves replenishing fuel and provisions for the ship.
- **Support and Cooperation:** INS Mumbai will deliver essential spare parts for

the Dornier maritime patrol aircraft of the Sri Lanka Air Force, highlighting the support for Sri Lanka's maritime capabilities.

INS Mumbai:

- INS Mumbai is the third of the **Delhi-class guided missile** destroyers, indigenously built and commissioned into the Indian Navy on 22 January 2001.
- It was constructed at **Mazagon Dock Limited** in Mumbai.
- She was adjudged the 'Best Ship' thrice and the '**Most Spirited Ship**' twice, which is a rare feat for any warship.
- The ship has been at the forefront of major Naval Operations like **Op Parakram (2002)**, **Op Sukoon (2006: evacuation of Indian, Nepalese, and Sri Lankan citizens from Lebanon)**, and **Op Rahat (2015: evacuation of Indian and foreign nationals from Yemen)**.
- The ship completed its mid-life upgrade and joined the Eastern Naval Command in Visakhapatnam on 8 December 2023.

Features:

- With a displacement of over 6500 tons, the ship is manned by 350 sailors and 40 officers.
- The ship, spanning 163 metres in length and 17 metres at the beam, propelled by four gas turbines, is capable of achieving speeds in excess of 32 knots.
- Fitted with an enviable, state-of-the-art weapons suite, which includes Surface to Surface Missiles, Surface to Air Missiles, Anti-Submarine rockets, and torpedoes, the ship can unleash lethal firepower upon the enemy.
- The ship also operates all kinds of helicopters in the naval inventory, which are its extended eyes and ears.

India commissions its second nuclear-submarine INS Arighaat

- The second Arihant-Class submarine 'INS Arighaat' was commissioned into the Indian Navy at Visakhapatnam

About INS Arighaat:

- It is India's **second indigenously built nuclear-powered ballistic missile submarine (SSBN)**, following India's first nuclear submarine, INS Arihant, commissioned in 2018.
- It was constructed at the Indian Navy's Ship Building Centre (SBC) in **Visakhapatnam**.
- It represents a critical component of India's nuclear triad, enabling the nation to launch nuclear missiles from land, air, and sea.

Features:

- It measures 111.6 meters in length, has a beam of 11 meters, a draught of 9.5 meters, and a displacement of 6,000 tonnes.
- It will have one **seven-blade propeller** powered by a pressurised water reactor.
- It can achieve a maximum speed of 12–15 knots (22–28 km/h) when on surface and 24 knots (44 km/h) when submerged.
- It can carry up to four **nuclear-capable K-4 SLBMs (Submarine Launched ballistic Missile)** with a range of over 3500 kilometers or twelve conventional warhead K-15 SLBMs with a range of about 750 kilometers.
- The K-15 can also carry a strategic nuclear warhead.
- It also carries torpedoes and mines.
- Additional safety measures include two standby auxiliary engines and a retractable thruster for emergency power and mobility.

Strategic Importance:

- **Deterrence:** The submarine enhances India's **second-strike capability**, which is crucial for maintaining a credible nuclear deterrent. A second-strike capability ensures that India can respond to a nuclear attack even after suffering a first strike.
- **Stealth and Mobility:** The submarine's nuclear propulsion allows it to stay submerged for extended periods, making it harder to detect and increasing its operational effectiveness.

Development and Indigenous Capability:

- The Arihant-class submarines are developed under the **Advanced Technology Vessel (ATV) program**, which is part of India's efforts to bolster its indigenous defense capabilities. This program marks a significant achievement in India's defense research and production.

Arihant-Class Submarines

- The Arihant-class is India's first series of nuclear-powered submarines, developed under the **Advanced Technology Vessel (ATV) program**. The project aims to bolster India's nuclear deterrence by providing a credible sea-based leg to its nuclear triad.
- The name Arihant translates to "**Destroyer of Enemies**" in Sanskrit, reflecting the strategic importance of these submarines.

Capabilities:

- **Nuclear Propulsion:** Provides significant operational advantages, including long-duration submerged patrols and the ability to avoid detection.
- **Missile Launch System:** Vertical launch system for ballistic missiles, designed for strategic deterrence.
- **Stealth:** Advanced design and technology aimed at reducing noise and

improving stealth to avoid detection.

Strategic Importance:

- **Sea-Based Deterrent:** The Arihant-class submarines form a critical part of India's nuclear triad, which also includes land-based missiles and air-delivered nuclear weapons. They provide a reliable second-strike capability, enhancing India's strategic deterrence.
- **Survivability:** Submarines are less vulnerable to preemptive strikes compared to land-based assets, ensuring that India can retaliate even after a nuclear attack.

INTERNATIONAL RELATIONS

India elected as Vice-Chair of the Supply Chain Council

India has been elected as the Vice-Chair of the Supply Chain Council under the Indo-Pacific Economic Framework for Prosperity (IPEF). This appointment highlights India's critical role in developing a resilient supply chain in the Indo-Pacific region. The election, part of a larger agreement on supply chain resilience, establishes India alongside 13 other IPEF partners in shaping regional supply chain policies.

- The **14-member countries** of the IPEF elected a Chair and Vice Chair of these three supply chain bodies. The Chair and Vice Chair will serve a two-year term.
 - **Supply Chain Council:** Chair-USA, **Vice-Chair - India.**
 - **Crisis Response Network:** Chair- South Korea, Vice-Chair - Japan.
 - **Labor Rights Advisory Board:** Chair- USA, Vice-Chair - Fiji.

Indo-Pacific Economic Framework for Prosperity (IPEF)

The Indo-Pacific Economic Framework for Prosperity (IPEF) is a United States of America (USA) led initiative which was launched by the American President Joe Biden on 23 May 2022 in Tokyo, Japan.

The IPEF aims to promote economic interaction and cooperation among partner countries, advancing growth, economic stability, and regional prosperity.

The IPEF seeks to achieve its objective through four pillars relating to

Pillar I- Fair and resilient trade

Pillar II- Supply chain resilience;

Pillar III-Infrastructure, decarbonisation and clean energy; and

Pillar IV- Tax and anti-corruption.

India has **not joined the Pillar I** and has an observer status.

The 14 Member countries of IPEF are India, Japan, Australia, Brunei, Fiji, Indonesia, the Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, Vietnam, and the USA.

India and Vietnam Relations

India and Vietnam, with historical roots in the common struggle for liberation from colonial rule and the national struggle for independence, share traditionally close and cordial bilateral relations. Mahatma Gandhi and Ho Chi Minh, regarded as the Father of Nation in India and Vietnam respectively, led people in their heroic struggle against colonialism in the two countries.

- India had established the Consul General's office in **Hanoi** as early as **1956**.
- Vietnam established its diplomatic mission in 1972.
- In 1992, They established extensive economic ties, including oil exploration, agriculture and manufacturing.
- In July 2007, relations between the two countries were elevated to the level of **'Strategic Partnership'**.
- In 2016, bilateral relations were further elevated to a **"Comprehensive Strategic Partnership"**

Economic Cooperation:

- As members of **Mekong Ganga cooperation**, India and Vietnam have been working to enhance ties between India and Southeast Asian nations and promote development cooperation.
- Trade and Investment: In financial year 2021-22, bilateral trade between India and Vietnam posted a growth of 27% and reached USD 14.14 billion.
- India one of the top **8th trading partners of Vietnam**. While Vietnam is the 15th largest trading partner of India and the fourth in Southeast Asia.

Defence Cooperation

- The defence relations include capacity building, dealing with common security concerns, training of personnel, and cooperation in defence R&D.
- Indian Naval Ship INS Kiltan undertook a visit to Ho Chi Minh City in 2020 to

deliver flood relief materials for the people of Central Vietnam (Mission Sagar III).

- It also participated in the **PASSEX** Exercise with the Vietnam People's Navy.

Political Backing

- India and Vietnam have supported each other in various international forums and organizations, demonstrating their commitment to global cooperation.
- Vietnam has backed India's bid to become a permanent member of the UNSC and join the APEC.

Recent developments in India-Vietnam relations

- **India-Vietnam Defence Partnership towards 2030:** The Defence Ministers signed the 'Joint Vision Statement on India-Vietnam Defence Partnership towards 2030' to bolster bilateral defence cooperation.
- A USD 500 million Defence Line of Credit has been extended to Vietnam with the implementation of the projects under it adding substantially to Vietnam's defence capabilities and furthering the government's vision of 'Make in India, Make for the World.'
- A Memorandum of Understanding (MoU) on Mutual Logistics Support has been signed.

India assures Taiwan of policy stability in semiconductor sector

- Tata Electronics is collaborating with Taiwanese chipmaker **Power chip Semiconductor Manufacturing Company (PSMC)** for India's first commercial semiconductor fab.
- PSMC's role is limited to providing technology support, with no equity stake in the project.
- Taiwan is a major player in the global semiconductor industry, with leading

firms such as Taiwan Semiconductor Manufacturing Company (TSMC) and United Microelectronics Corporation (UMC).

- **Taiwan produces over 90% of the world's advanced chips** used in electronics, including smartphones, data centers, and AI technologies.

India's Semiconductor Incentive Plans

- India's strategy includes boosting various aspects of the semiconductor ecosystem: packaging, assembly, testing (ATMP and OSAT units), and full-scale foundries.
- Aims to create a robust semiconductor manufacturing base within the country.

Challenges and Concerns:

- Taiwanese firms are cautious due to perceived gaps in India's policy support and investment incentives.
- Despite incentives, Taiwanese firms have yet to commit to significant investments in India's semiconductor sector.

Key Details on Semiconductor Chips-

- It is a tiny electronic device made of semiconductor material (usually **silicon or germanium**) which serves as the **basic building block** of most electronic circuits.
- These chips can contain billions of microscopic switches on a chip smaller than a fingernail.
- The basic component of a semiconductor chip is a **silicon wafer** etched with tiny transistors that control the flow of electricity according to various computational instructions.
- It performs various functions, such as **processing data**, storing information, or controlling electronic devices.
- They are a **critical part** of almost every modern electronic device, including smartphones, computers, and integrated circuits.

How Sheikh Hasina's resignation will impact India-Bangladesh ties

- **Uncertain Interim Government:** With Sheikh Hasina's resignation and the Bangladesh army chief Waker-uz-Zaman assuming control, the nature of the interim government and its electoral timetable remain unclear. This uncertainty impacts future political alignment in Bangladesh, which could affect India-Bangladesh relations. India needs to engage swiftly with the new regime to secure its interests.
- **Impact of Past Support for Hasina:** India's strong support for Hasina over the past decade has led to limited interaction with opposition groups. This has created a challenge in addressing the current anti-India sentiment in Bangladesh. India will need to undertake substantial diplomatic efforts to rebuild relations and address this sentiment.
- **Transit and Trade Arrangements:** Bangladesh's new interim government may revise existing transit and trans-shipment arrangements crucial for **India's logistics to the Northeast**. India must negotiate with the interim regime to ensure continuity and stability in these arrangements.
- **Jamaat-e-Islami and Pakistan Factor:** The influence of Jamaat-e-Islami on the interim government could complicate relations. Jamaat's presence might reopen avenues for Pakistani influence in Bangladeshi politics, potentially affecting India's border security and regional stability.
- **China's Growing Influence:** China's aggressive push for influence in Bangladesh, with its substantial financial resources, presents a strategic challenge for India. A stronger Chinese presence in Bangladesh could encircle India with unfriendly or ambivalent neighbours, impacting India's security and strategic positioning.

India-Bangladesh Relations

- The foundation **of India's relationship with Bangladesh was laid in 1971**. India provided critical military and material support to assist Bangladesh in its fight for independence from Pakistan.
- Despite this, relations soured within a few years as military regimes took control. There was a rise in anti-India sentiment in the mid-1970s over issues ranging from boundary disputes and insurgency to the sharing of water.
- The instability continued for a few decades until **Sheikh Hasina** came to power in **1996** and scripted a new chapter in bilateral ties with a **treaty on the sharing of Ganga waters**.
- Since then, India and Bangladesh have built **cooperation in Trade, Energy, Infrastructure, Connectivity and Defence**.

Significance of Bangladesh to India

- **Geopolitical:** Bangladesh is India's neighbour and shares a long land, riverine and maritime boundary. This makes it important for India's security and foreign policy. For example, India needs cooperation from Bangladesh to counter the Chinese '**String of Pearls**'.
- **Economic:** India-Bangladesh have close economic ties, with India being one of Bangladesh's largest trading partners. For example, **the bilateral trade in 2021-2022 was USD 18.2 billion**.
- **Cultural:** India and Bangladesh have a shared history, culture, and heritage. The people of the two countries are linked by strong cultural and familial ties, and there is a large population of Indian-origin people living in Bangladesh.
- **Strategic:** Bangladesh is located at the crossroads of South Asia and Southeast

Asia and is important for India's Act East Policy, which aims to build closer ties with the countries of **Southeast Asia**.

- **Environmental concerns:** Bangladesh and India share trans-boundary rivers and ecological systems, making it important for the two countries to cooperate on issues such as water management and flood control. For example, coordinated efforts are needed for the conservation of **Sunder bans**.

Issues and Concern-

- **Teesta dispute:** The issue revolves around the sharing of Teesta's waters, with Bangladesh seeking an equitable distribution.
- **Border disputes:** Tensions along the border between Bangladesh and India are nothing new. A **4,096 km** long land border and a 180 km long marine border separate India from Bangladesh. The **Comilla-Tripura** land border, which stretches for 6.5 kilometres, has not been demarcated, leaving the border dispute unresolved.
- The issue of **illegal migration from Bangladesh** to India, encompassing both refugees and economic migrants, continues to be a significant concern.
- There have been many incidences of **cross border drug smuggling & trafficking. Humans are trafficked and various animal and bird species are poached through these borders.**
- **China factor:** China has been increasing its investments in Bangladesh, particularly in the areas of infrastructure development, energy, and telecommunications. For example, **BRI** and investment in **Chittagong port**.

EAM S Jaishankar reaches Maldives on three-day visit

Historical Background:

Geographical Proximity: The Maldives, a small island nation in the Indian Ocean, is located southwest of India, making it a key partner in India's maritime neighborhood.

Cultural and Historical Ties: Both nations share historical ties through trade, cultural exchanges, and religious connections. The diplomatic and political relationship between India and the **Maldives dates back to 1965 when the British relinquished** control of the islands.

Political Relations

- **Bilateral Cooperation:** Relations have generally been friendly, characterized by mutual cooperation and dialogue.
- **High-Level Visits: Prime Minister Narendra Modi** made two state visits to the Maldives, in June 2019 and August 2020, highlighting the importance of the relationship.

Economic Cooperation

- **Development Assistance:**
 - **Greater Male Connectivity Project:** India is funding and constructing a major bridge connecting Male with nearby islands, which is expected to enhance connectivity and economic development.
 - **Economic Aid:** India provided a \$100 million line of credit in 2020 to support infrastructure projects in the Maldives.
- **Trade and Investment:**
 - **Trade:** India is one of the Maldives' largest trading partners. In 2021, bilateral trade was valued at approximately \$300 million, with India being a significant supplier of goods including petroleum products,

medicines, and construction materials.

- **Investment:** Indian companies are involved in various sectors, including tourism, infrastructure, and health. For example, the Indian company GMR Group was involved in the development of the Male International Airport.

Strategic and Security Cooperation

- **Maritime Security:**
 - **Cooperation:** India provides assistance in maritime security, including patrolling and training. The Indian Navy has conducted several joint exercises with the Maldives National Defence Force (MNDF).
- **Counter-Terrorism:**
 - **Collaboration:** Both nations collaborate on counter-terrorism measures and intelligence sharing to combat regional security threats.

Major Agreements and Initiatives

- **Infrastructure Projects:**
 - **Greater Male Connectivity Project:** A \$400 million project, funded largely by India, aims to improve connectivity in the Maldives by linking Male with nearby islands. It includes a bridge, causeways, and a road network.
- **Humanitarian Assistance:**
 - **Disaster Relief:** India provided significant aid during the 2004 Indian Ocean tsunami, which affected the Maldives. During the COVID-19 pandemic, India supplied vaccines and medical aid to the Maldives as part of its "**Vaccine Maitri**" initiative.

Challenges Related to India Maldives Relations

India-Out Campaign: In recent years, Maldivian politics has witnessed a campaign

centered on an **"India Out" platform**, branding Indian presence as a threat to Maldivian sovereignty.

- Key campaign points include the demand for the withdrawal of Indian military personnel.
- Current Maldives' President has set a deadline of 15th March, 2024, for the withdrawal of Indian troops.

Tourism Strain: The tourism scenario in the Maldives has gained significant focus due to a diplomatic dispute arising from **disparaging comments directed at the Indian Prime Minister** after his promotional visit to the Lakshadweep islands.

- Consequently, a **boycott Maldives** trend has been floating social media as a response to the controversy.

Chinese Influence on Economic and infrastructure investments: China's growing economic presence in the Maldives, evidenced by investments in infrastructure projects and debt-trap diplomacy, can be perceived as a challenge to India's strategic interests in the region.

- **Military ambitions:** Chinese naval expansion and potential military ambitions in the Indian Ocean with the active support from Maldives can raise concerns for India.

Security Concerns:

- **Non-traditional threats:** Piracy, terrorism, and drug trafficking remain concerns in the region, requiring continuous collaboration and intelligence sharing between India and the Maldives.
- **Extremism and radicalization:** The Maldives' vulnerability to religious extremism and radicalization poses a security threat that necessitates joint efforts in countering such ideologies.

Maldives is key partner for India and two countries aspire to turn their cooperation into modern partnership: EAM Dr Jaishankar

Strategic Partnership:

- **India-Maldives Cooperation:** The cooperation between India and the Maldives has evolved beyond traditional roles, with Maldives emerging as a significant partner in the Indian Ocean region.

Projects Inaugurated:

- **Addu Reclamation Project:** Aimed at enhancing tourism and economic development in the **Addu region**.
- **Addu Shore Protection Project:** Focuses on safeguarding the shoreline, crucial for environmental and infrastructural stability.

Investment and Objectives:

- **Investment Amount:** India has invested approximately 80 million USD in the Addu Reclamation and Shore Protection Projects.
- **Economic Impact:** The projects are designed to stimulate regional growth, create employment opportunities, foster entrepreneurship, and boost trade.
- **Total Investment:** India has invested around 220 million USD in Addu over recent years, reflecting the significant importance India places on regional development in the Maldives.

Strategic and Developmental Goals:

- **Sustainability and Regional Hub:** The aim is to develop Addu as a sustainable regional hub, integrating economic and tourism growth for long-term benefits.

The Major Points Related to India and Maldives Relations

- The diplomatic and political relationship between India and the Maldives dates back to **1965** when the British relinquished control of the islands.
- Since the democratic transition in 2008, India has invested years in building deep relationships with various stakeholders in the Maldives, including political, military, business, and civil society figures.

Significance of Maldives for India -

- **Trade Route:** Situated along crucial maritime trade routes between the **Gulf of Aden and the Strait of Malacca**, the Maldives acts as a “toll gate” for nearly half of India’s external trade and 80% of its energy imports.
- **Counterbalancing China:** Maldives presents an opportunity for India to counterbalance China’s growing influence in the Indian Ocean, fostering regional balance of power.
- **Economic partnership:** India is one of the biggest investors and tourism markets for the Maldives, with significant trade and infrastructure projects underway.
- **Defence and Security Cooperation:** Since 1988, defence and security has been a major area of cooperation between India and Maldives. Estimates suggest that almost 70 per cent of Maldives’ defence training is done by India — either on the islands or in India’s elite military academies.

Significance of India for Maldives -

- **Essential Commodities:** India supplies Maldives with its everyday essentials: rice, spices, fruits, vegetables, poultry, medicines and life-saving drugs.
- **Education:** Every year, Maldivian students come to Indian higher educational institutions.
- **Economic dependence:** Of the Rs 50 crore total trade between India and Maldives in 2022, Rs 49 crore was India’s exports to Maldives. India emerged as Maldives’ second largest trade partner in 2022.

- **Disaster Relief Assistance:**

1. When a tsunami struck the islands in 2004, India was the first to send in help.
2. In 2014 Male had a drinking water crisis as the major desalination plant broke down, India overnight airlifted drinking water to the islands.
3. During the Covid-19 pandemic, India sent essential medicines, masks, gloves, PPE kits and vaccines for the island country.

Major Challenges Related to India Maldives Relations

- **India-Out Campaign:** In recent years, Maldivian politics has witnessed a campaign centered on an "**India Out**" platform, branding Indian presence as a threat to Maldivian sovereignty.
 - Key campaign points include the demand for the withdrawal of Indian military personnel.
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- **Tourism Strain:** The tourism scenario in the Maldives has gained significant focus due to a diplomatic dispute arising from **disparaging comments directed at the Indian Prime Minister** after his promotional visit to the Lakshadweep islands.
 - Consequently, a **boycott Maldives** trend has been floating social media as a response to the controversy.
- **China's Rising Influence in Maldives:** Chinese is becoming increasingly visible in the Maldives. The Maldives' proximity to key shipping lanes and India makes it **strategically important for China**, potentially fueling its interest in deeper engagement.
 - It has caused unease in India and could lead to a regional geopolitical contest.

India, Brazil to discuss defence, Agri at Joint Commission meet

Key highlights:

1. **India-Brazil Joint Commission:** Ninth meeting scheduled for 27 August in New Delhi.
2. **Agenda:** Focus on energy, defence, agriculture, climate change, critical minerals, biofuels, and oil.
3. **Key Issues:**
 - **India:** Seeks Brazilian expertise in energy, climate change, and critical minerals.
 - **Brazil:** Focuses on market access for its agricultural products and strengthening defence cooperation.
4. **Previous Discussions:** Security cooperation was a significant topic at the G20 Summit in September 2023.
5. **Delegation:** Brazilian Foreign Minister Mauro Vieira will meet with Indian External Affairs Minister S. Jaishankar.
6. **Agriculture:** Technical cooperation and market access for Brazilian products like citrus fruits and Amazon products are expected topics.
7. **Technical Work:** Working groups on animal husbandry and agriculture have been preparing materials for the meeting.

Relationship between India and Brazil

- Diplomatic relations were established in **1948**, with both countries opening embassies in the same year.
- Both share a very close and multifaceted relationship both at the bilateral level as well as in plurilateral fora such as **BRICS, BASIC, G-20, G-4, IBSA**, International Solar Alliance, as well as in the larger multilateral bodies such as the **UN, WTO, UNESCO, and WIPO**.
- The momentum in India-Brazil relations was further created during President

Bolsonaro's historic visit to India in January 2020 as the Chief Guest during the Republic Day celebrations.

Areas of cooperation between India and Brazil

1. Defence & Security Cooperation

- India and Brazil signed an agreement in 2003 for cooperation in defence. **Joint Defence Committee (JDC)** meetings are held as an institutionalized mechanism for defence cooperation.
- India and Brazil established a **strategic dialogue mechanism** in 2006 to cover regional and global issues of mutual concern. This dialogue is led by NSA from the Indian side.
- An MoU on cooperation in the area of **Cyber Security** between CERT-In and its counterpart agency was signed during the State Visit of President Bolsonaro in January 2020.

2. Trade and Investment

- **Bilateral Trade:**
 - India became the **5th largest trading partner** of Brazil in 2021. The bilateral trade exceeded US\$ 11 billion, an increase of 63% compared to 2020.
 - Major Indian exports to Brazil include **agrochemicals, synthetic yarns, auto components and parts**, and imports include **crude oil, gold, vegetable oil, sugar, and bulk mineral and ores**.
- **Bilateral Investments:**
 - A plethora of sectors have witnessed investments between India and Brazil in sectors such as automobiles, IT, mining, energy, biofuels, and footwear sectors.
 - In **2018**, the total Indian investment in Brazil was estimated at **USD 6 billion**, and the total Brazilian investment in India was estimated at **USD**

1 billion.

- **India-MERCOSUR PTA:**
 - Brazil played a crucial role in the India-**MERCOSUR Preferential Trade Agreement (PTA)** that improves India's access to the large South American market.

Challenges in the bilateral relationship between India and Brazil-

- **Trade competition:** Both India and Brazil are major exporters of agricultural products such as sugar and meat, which can create competition and trade friction between the two countries.
- **Sugarcane subsidy:** Brazil's complaint to the World Trade Organization about India's subsidies to sugarcane farmers. This has led to tensions between the two countries due to Brazil's concerns over India's agricultural policies that could negatively impact its economic interests.
- **Limited people-to-people contact:** India and Brazil have a limited number of people-to-people contacts, including business, cultural, and educational exchanges.
- **Role of China:** Furthermore, there are concerns as China, which is Brazil's largest trading partner, can have an impact on relations between India and Brazil.
- **Differences in strategic priorities:** India and Brazil are both emerging powers that seek to enhance their global influence, but their approaches to regional and global issues may differ.

Australia, U.S. and U.K. sign nuclear transfer deal for AUKUS submarine

AUKUS is a new **trilateral security partnership** for the Indo-Pacific, between Australia, the UK and the US (AUKUS). Under the pact, the **US and the UK** will help **Australia to acquire conventionally armed nuclear-powered submarines**. The pact also includes cooperation on **advanced cyber, artificial intelligence and autonomy, quantum technologies, undersea capabilities, hypersonic and counter-hypersonic, electronic warfare, innovation and information sharing**.

Submarine Component:

- It is designed to equip **Australia with nuclear-powered attack submarines(SSNs)**.
- In total, Australia will end up with eight of the new nuclear submarines, called **SSN-AUKUS**.
- These submarines will be based on a British design but have American technology or an American combat system.
- AUKUS will make Australia the seventh country in the world to be armed with nuclear-powered submarines and the second, after the United Kingdom, with whom the United States has shared this technology.
- These countries, however, made it clear that their aim is not to arm the new submarines with nuclear weapons. This is because **Australia is a signatory to the Nuclear Non-proliferation Treaty (NPT)**, which bans it from acquiring or deploying nuclear weapons.

Significance:

- AUKUS aims for **freedom and openness in the Indo-Pacific** region, including the South China Sea.
- AUKUS partnership is signed to bolster Australia's naval power in the Indo-Pacific region as a **challenge to the regional hegemonic ambitions of China**.
- The operationalisation of this security partnership will lead to **closer military**

coordination among the **participating nations** in the region.

- China's encirclement of India can be partially **mitigated by AUKUS**.
- India may **derive secondary benefits** from having top of the class military know-how in the region.

Challenges-

- Many of its regional partners such as Indonesia oppose **Australian operating nuclear attack submarines**.
- Virginia class submarines are world's most potent in terms of capabilities many U.S. policymakers are sceptical about the sale.
- Integration of three different systems will prove difficult.
- The **S.'s stringent export control and protocol regime** could spoil the technology transfer agreement, particularly in areas related to undersea capabilities and electronic warfare.

AUKUS and India

- India takes a balanced approach toward AUKUS, considering its role as a vital Indo-Pacific and European partner.
- AUKUS scrutinises India's ties with the U.S., France and Russia.
- It also allows India to strengthen relations with the **European Union when NATO is facing issues**.
- India is concerned **that AUKUS will increase the number of nuclear submarines** operating in the Indian Ocean region starting in the 2030s.
- India has an indigenous nuclear submarine program with two operational boats. It also has a long-term lease with Russia for a nuclear submarine.
- India would welcome the strengthening of Quad partner Australia, a critical ally sharing information on Chinese forces.
- AUKUS highlights some dilemmas for India in the Quad.

President Droupadi Murmu honoured with Timor-Leste's highest civilian award; PM says, proud moment for country

East Timor

Timor-Leste is a **Southeast Asian nation occupying half the island of Timor** and is ringed by coral reefs teeming with marine life. It comprises the **eastern half of the island of Timor**, of which the **western half is administered by Indonesia**, the enclave of Oecusse on the island's north-western half, and the minor islands of Atauro and Jaco. Australia is the country's southern neighbour, separated by the Timor Sea.

- **Timor-Leste was a Portuguese colony until 1975, followed** by Indonesian rule after the conflict.
- In a **1999 UN-supervised referendum, East Timorese voted for independence**, which led to further violence until peace-keeping forces intervened, and the **country was officially recognized by the UN in 2002**.
- East Timor has applied for ASEAN membership and currently holds observer status.

Challenges and Opportunities:

Timor-Leste plays a significant and evolving role in India's Act East Policy, which is a strategic initiative aimed at strengthening India's ties with countries in the Asia-Pacific region. Here's a discussion on the **role of Timor-Leste in India's Act East Policy**



Strategic Geopolitical Location:

- Timor-Leste's geographical location in Southeast Asia makes it strategically important for India's outreach in the region.
- It provides India with an entry point to engage with the ASEAN countries and reinforces India's presence in the Indo-Pacific region.

Economic Engagement:

- Timor-Leste offers economic opportunities for India, particularly in sectors like oil and gas exploration.
- Strengthening economic ties aligns with the economic objectives of India's Act East Policy, promoting trade, investment, and technology exchange.

Diplomatic Cooperation:

- Diplomatically, Timor-Leste adds to India's network of friends in the region.
- By building diplomatic ties with Timor-Leste, India enhances its influence in international forums and reinforces its commitment to fostering peaceful and cooperative relations in the Indo-Pacific.

ASEAN Connectivity:

- Timor-Leste's potential membership in ASEAN can further enhance India's connectivity with the ASEAN community. This aligns with India's efforts to deepen its engagement with regional organizations, a key pillar of the Act East Policy.

Philippines President condemns China's actions in disputed South China Sea

South China Sea-

It is one of the most strategically and economically important waterways in the world, extending from the Strait of Malacca in the southwest, to the Strait of Taiwan in the northeast. It is a crucial **maritime gateway** and junction for shipping **between the Pacific and Indian Oceans**.

- It is surrounded by several nations, including China, Taiwan, the Philippines, Malaysia, Brunei, Indonesia, Singapore, Cambodia, Thailand, and Vietnam.
- The region is rich in natural resources, including oil, gas, and fisheries, and serves as a crucial trade route for various economies.

Importance:

- This sea holds tremendous strategic importance for its location as it is the connecting link between the **Indian Ocean** and the **Pacific Ocean**, through Strait of Malacca.
- According to the **United Nations Conference on Trade And Development (UNCTAD)** one-third of the global shipping passes through it, carrying trillions of trade which makes it a significant geopolitical water body.

- According to the Department of Environment and Natural Resources, Philippines, this sea has one-third of the entire world's marine biodiversity and contains lucrative fisheries providing food security to the Southeast Asian nations.
- The SCS is believed to have huge oil and gas reserves beneath its seabed.
- It is one of the world's most heavily trafficked waterways. An estimated USD 3.4 trillion in ship-borne commerce transits the sea each year, including energy supplies to U.S., Japan and South Korea.

Territorial Disputes

- The territorial disputes in the South China Sea primarily involve China and several Association of Southeast Asian Nations (ASEAN) countries.
- **China claims sovereignty** over virtually the entire South China Sea, putting it at odds with the **Philippines, Vietnam, Malaysia, Taiwan, and Brunei**, who all maintain claims over islands, reefs, and undersea resources in the region.
- The major island and reef formations in the South China Sea are the **Spratly Islands, Paracel Islands, Pratas, the Natuna Islands and Scarborough Shoal**.
- As many as **70 disputed reefs and islets are under contention**, with **China, Vietnam, the Philippines, Malaysia, and Taiwan** all building more than 90 outposts on these disputed features.
- China claims up to **90% of the sea with its "nine-dash line" map** and has physically expanded islands and constructed military installations to assert control.
- China has been particularly active in the **Paracel and Spratly Islands**, engaging in extensive dredging and artificial island-building, creating 3,200 acres of new land since 2013.
- China also controls the **Scarborough Shoal through a constant Coast Guard**

presence.

India and the South China Sea

- India remained acutely conscious of its official position of neither being party to the disputes nor taking sides for many years. But with increasing ties with East Asian countries (Act East Policy), India indirectly started raising concerns about Chinese illegitimate claims in the South China Sea. India believes that the disputes in the Southeast Asian littorals are a litmus test for the international maritime law.
- In the aftermath of the Hague Tribunal's verdict on the South China Sea, India obligated to take a principled stand on the issue of freedom of navigation and commercial access enshrined in the UNCLOS.
- Despite China's protests, India continues its oil exploration in **Vietnam's exclusive economic zone (EEZ) in the South China Sea from where ONGC Videsh Limited supplies oil to Vietnam.**
- India also supports a negotiated settlement of Brunei's maritime dispute with China and has **inked defence cooperation agreement** that would provide an institutional foundation for more collaborative work on maritime security and secure India's energy lanes to Brunei.



Third Voice of the Global South Summit (VOGS) hosted by India in virtual format

Objective of the Summit:

- Prime Minister Narendra Modi urged developing countries to unite their voice for a more equitable global governance system.
- Emphasized the need for **“just and inclusive”** global governance.

Global Development Compact:

- India announced a \$3.5 million (₹29 crore) fund for a **“Global Development Compact.”**
- The compact focuses on trade, capacity building, technology sharing, and trade negotiation training for developing countries.

Key Concerns Addressed:

- Tensions and conflicts, notably the ongoing Gaza conflict.
- Call for addressing disparities between the Global North and South.

Participants:

- Leaders from Bangladesh, Bhutan, Nepal, Sri Lanka, Mauritius, Vietnam, Lao PDR, Timor-Leste, Chile, El Salvador, Mongolia, Oman, and Belarus.
- Notably, China and Pakistan were not invited.

UN Reform:

- Emphasis on the need to reform multilateral institutions like the UN for greater credibility and effectiveness.

What is the Voice of Global South Summit?

- The VoGS Summit is a Indian initiative that has been designed to provide a

common platform for the countries of the Global South to share their perspectives and priorities on several major issues.

- It aims to find out solutions for common challenges faced by developing countries through talks.
- Inspired by PM's vision, '**Sabka Saath Sabka Vikas Sabka Vishwas aur Sabka Prayas**', the summit follows India's philosophy of Vasudhaiva Kutumbakam.

Global South:

- **Global South** refers to countries in Asia, Africa, and South America, while **Global North** includes countries like the US, Canada, Europe, Russia, Australia, and New Zealand.
- It's a term used to categorize countries based on economic development and historical factors.

Malaysian PM arriving today; trade, people-to-people links on agenda

Visit Overview:

- During the visit, he will meet with Indian Prime Minister Narendra Modi.
- The two leaders are expected to sign various agreements and outline a “**multi-sectoral cooperation agenda**” aimed at enhancing trade, strategic ties, and people-to-people links between India and Malaysia.

Key Areas of Cooperation:

- The focus will be on improving trade relations, strategic partnerships, and fostering stronger people-to-people connections between the two nations.

India and Malaysia Relations-

- India established diplomatic relations with the Federation of Malaya (predecessor state of Malaysia) in **1957**. India is represented in Malaysia through the High Commission of India based in Kuala Lumpur. Malaysia is represented in India through their High Commission in New Delhi and Consulates General in Mumbai and Chennai.
- The two countries enjoyed a strong relationship in the 1960s as a result of the personal friendship between Prime Ministers Nehru and **Tunku Abdul Rahman** Putra.
- Malaysia is one of the important countries for India's Look East Policy and Act East Policy. The two countries have close political, economic and socio-cultural relations.

Diplomatic Relations:

- India and Malaysia established diplomatic relations shortly after Malaysia gained independence from British rule in 1957.

- Both countries are participants of various international businesses, consisting of the United Nations, ASEAN (Association of Southeast Asian Nations), and the Non-Aligned Movement.

Trade and Economic Relations:

- Malaysia is the 13th biggest trading partner for India even as India stands between the ten largest trading partners globally.
- Furthermore, Malaysia has emerged as the third biggest trading companion for India from the ASEAN region and India is the most important trading partner for Malaysia in most of the countries of the Southeast Asian region.
- Malaysia stands as both nations have engaged in numerous financial agreements consisting of the **India-Malaysia Comprehensive Economic Cooperation Agreement (CECA)**.
- Both nations have agreed to conduct trade agreements in Indian rupees, reflecting an aim to bolster trade relations.

Defence and Security:

- The defence ties have progressively multiplied, marked by the signing of a defense cooperation memorandum in 1993, everyday security cooperation conferences, joint military exercises, and Malaysia's interest in acquiring 18 new Indian light fighter jets, indicating potential growth in arms trade between the two nations.

Strategic Partnership:

- India and Malaysia have aimed to strengthen their strategic partnership by diverse initiatives, which include high-level visits, joint commissions, and dialogues.
- Both countries have expressed pursuits in enhancing cooperation in regions which includes security, counter-terrorism, maritime security, and cultural

trade.

Tourism and diaspora:

- Over the last two decades, tourism has been a cornerstone in fostering relations between India and Malaysia.
- Various agreements, including the India-Malaysia visa waiver for diplomatic and professional passport holders, a tourism-focused memorandum of understanding in 2010, a bilateral agreement on employment and people's welfare in 2009, and a revised air services agreement in 2017, have significantly contributed to the growth of tourism between the countries.

Cultural Ties:

- Indian impact in Malaysia can be seen in numerous factors of Malaysian way of life, along with language, religion (Hinduism and Buddhism), structure, delicacies, and fairs.

Challenges-

- **Trade Disputes and Imbalances:** Trade disputes and imbalances were a significant challenge in India-Malaysia relations.

Issues associated with tariffs, non-tariff limitations, and trade restrictions have occasionally strained economic ties between the two countries.

- **Geopolitical Considerations:** Both countries have diverse foreign coverage priorities and engagements with different countries, that may result in differences in strategic views.

India, Malaysia upgrade strategic partnership, discuss entry to BRICS

BRICS

BRICS is an acronym for an association of five major emerging economies:

- **Brazil**
- **Russia**
- **India**
- **China**
- **South Africa** (joined in 2010)

Historical Background:

- **2001:** The concept of BRICS was first introduced by economist Jim O'Neill, who suggested the grouping as "BRIC" to reflect the growing influence of these economies.
- **2009:** The first official BRIC summit was held in Yekaterinburg, Russia.
- **2010:** South Africa was invited to join, transforming BRIC into BRICS.

It comprises of (According to **World Bank data** of 2019):

- *41% of the world population,*
- having **24% of the world GDP** and
- over 16% share in the world trade

Key Areas of Cooperation:

- **Economic Policy Coordination:** Regular meetings of finance ministers and central bank governors.
- **Trade and Investment:** Promotion of trade and investment flows between member countries.
- **Political Dialogue:** Coordination on political issues and shared interests in international forums.

- **Cultural Exchange:** Encouraging cultural and people-to-people exchanges.

Key Institutions:

- **New Development Bank (NDB):** Established in 2014 to finance infrastructure and sustainable development projects in BRICS and other emerging economies.
- **Contingent Reserve Arrangement (CRA):** A framework for providing financial support to member countries in times of crisis.

Economic Impact:

- **Growing Economies:** BRICS countries are significant contributors to global GDP growth and have large, fast-growing markets.
- **Investment Opportunities:** Offer considerable investment opportunities due to their emerging market status.

Challenges and Criticisms:

- **Diverse Economies:** Different political systems, economic models, and development levels among members can lead to divergent interests.
- **Geopolitical Tensions:** Conflicts between some members, such as India and China, can impact collective goals.
- **Implementation Issues:** Achieving consensus on policies and projects can be challenging.

Latest development

- Five new members, **Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates** have confirmed the invitation to join BRICS.
- Argentina has decided to not join.
- The last expansion of the BRICS occurred in 2010 when South Africa joined the group.

India and BRICS

India is an important member of the BRICS group, and its participation in the organisation has been beneficial in many ways. Some of the key reasons why BRICS is important for India are:

- **Strategic cooperation:** BRICS offers India a key platform for global engagement on security, terrorism, climate, and trade.
- **Economic benefits:** As a BRICS member, India gains access to a large market of 3+ billion people, offering vast business opportunities. NDB funding supports India's development projects.
- **Reform of multilateral institutions: As a member of BRICS, India has been able to work with other member countries to promote a more inclusive and equitable global order by promoting multilateral reforms.**
- **South-south cooperation:** India, as a leading member of BRICS, has been able to use the platform to promote south-south cooperation in areas such as trade, investment, and technology transfer.
- **Pillar of the New World Order:** In the fifteenth BRICS Summit, after its expansion, the leaders called BRICS the pillar of the New World Order.
- **Dilemma:** However, the challenge before India is to **choose between a China-centric or a West-centric world order** or balance the two.

Prime Minister presents BHISHM Cubes to Ukraine

The gesture underscores India's continued commitment to provide humanitarian assistance to Ukraine.

Project BHISHM

1) Project BHISHM, which stands for **Bharat Health Initiative for Sahyog, Hita and Maitri**, is a revolutionary initiative that aims to bolster medical readiness and

response capabilities.

2) It involves the deployment of mobile hospitals known as **Arogya Maitri Disaster Management Cube-BHISHM**.

3) The portable hospital 'Project BHISHMA,' includes: Fully equipped operation theatre, Mini-ICUs and ventilators, Blood-testing equipment and X-ray machine, Cooking station for self-sufficiency and Capabilities to handle various injuries, including bullet, burn, head, spinal, and chest injuries, fractures, and major bleeding.

Benefits of the initiative:

- This project will effectively bridge the crucial time gap from primary care to definitive care, potentially saving numerous lives in the golden hour of emergencies.
- These cubes are robust, waterproof, and light, designed for various configurations, making them ideal for diverse emergency scenarios.



Aarogya Maitri Health Cube-

It is the **world's first portable hospital.**

Design:

- The 'Aarogya Maitri Cube Cage' includes three frames, each accommodating 12 mini-cubes.
- The cage can fit in 36 mini-cubes, including almost everything that can be packed for survival for a period of 48 hours for 100 survivors.
- The design allows joining two cages—master cube one and master cube two, including 72 cubes in total—with damage control capabilities for 200 survivors.
- Mini cubes are durable and waterproof and are designed to open “in different configurations”.
- These cubes are light and portable and can be carried by a single person—a messenger bag, as a strolley or as a briefcase—or even transported through a drone.
- The cubes can handle several severe injuries, including 40 bullet injuries, 25 major bleeds, 25 major burns, around 10 head injuries, long limb fractures, spinal injuries, chest injuries, and spinal fractures.
- The structure will also contain a tablet-based application which can operate all 72 cubes.
- The system also integrates AI and data analytics.

India-Ukraine Joint Statement on the Visit of Prime Minister of India to Ukraine

Key Highlights of Prime Minister Narendra Modi's Visit to Ukraine

Political Relations

- **Historic Visit:** First visit by an Indian Prime Minister to Ukraine since

diplomatic relations were established in 1992.

- **Strategic Partnership:** Leaders expressed mutual interest in elevating bilateral relations to a strategic partnership.
- **Commitment to Diplomacy:** Both sides reaffirmed commitment to international law, territorial integrity, and peaceful resolution of conflicts.

Peace and Security

- **Peace Framework:** Joint Communiqué on Peace Framework endorsed as a basis for dialogue and diplomacy.
- **Global Food Security:** Emphasis on uninterrupted supply of agricultural products and support for humanitarian grain initiatives.
- **International Participation:** India's participation in the Summit on Peace in Ukraine welcomed, with a call for continued high-level engagement.

Economic, Scientific, and Technical Cooperation

- **Economic Partnership:** Emphasis on restoring and expanding bilateral trade and investment; importance of the Indian-Ukrainian Intergovernmental Commission (IGC) highlighted.
- **Pharmaceutical Cooperation:** Reaffirmed commitment to market access and joint ventures in pharmaceuticals; MoU signed for drug control.
- **Scientific Collaboration:** Encouragement of joint research and technological cooperation, including in ICT, AI, and green energy.

Defence Cooperation

- **Defence Ties:** Agreement to strengthen defence cooperation through joint collaborations and partnerships; 2nd meeting of the Indian-Ukrainian Joint Working Group on Military-Technical Cooperation planned.

Cultural and People-to-People Ties

- **Cultural Exchange:** Conclusion of the bilateral Programme of Cultural Cooperation; exploration of opening branches of higher education institutions.
- **Support for Indian Nationals:** Gratitude expressed for Ukrainian support in evacuating Indian students; call for easier visa facilities for Indian nationals.

Joint Statements and Future Directions-

- **Counter-Terrorism:** Unwavering condemnation of terrorism and extremism; call for enhanced cooperation based on international law.
- **UN Security Council Reform:** Support for comprehensive reform and India's permanent membership in a reformed UNSC.
- **International Solar Alliance (ISA):** Anticipation of Ukraine joining the ISA.

Challenges in India-Ukraine Relations-

- **Declining bilateral Trade-**The volume of India-Ukraine trade has dropped from \$3.39 billion in 2021-22 to \$0.71 billion in 2023-24, due to the ongoing Russia-Ukraine Crisis.
- **Impact on India's import-**The decline in trade has impacted India's import of agricultural, machine-building and military goods from Ukraine. **For ex-** Impact on the supply chain of sunflower oil, has led to rising inflation in the country.
- **India's relation with Russia-**India's continued engagement with Russia, and its decision to avoid all public criticism of Moscow, has led to a little dampening of the spirit of India-Ukraine geopolitical cooperation.
- **Ukraine's criticism of India's Policies in the past-**Ukraine's criticism of India's Nuclear Test and India's Kashmir policy has also been an irritant in India's full steamed engagement with Ukraine.

Way Forward

- **Tightrope Diplomatic Balancing Act-** India must continue to diplomatically balance its relations with Russia and Ukraine, and with China and the US.

India should not let its engagement with Ukraine change its equations with Russia, as Russia's engagement with China does not impact its relationship with India.

- **Take centre stage for delivering peace-** India should take centre stage as a peaceable yet principled global player, and take the lead in negotiations of the Ukrainian peace formula. This will help in restoring the global food supply chains and prevent millions of starvation related deaths in the World.
- **Demonstrate new definition of non-alignment-** India must demonstrate the changed definition of non-alignment in India's foreign policy by deepening its relationship with Ukraine while maintaining its close cooperation with Russia. Non-Alignment's definition in Indian foreign policy has changed from maintaining equal distance from all countries to maintain close ties with all countries.

10th Round of India-Australia CECA Negotiations held on five tracks in Sydney

Key Highlights:

- **Negotiation Areas:** The discussions focused on Goods, Services, Digital Trade, Government Procurement, Rules of Origin, and Agri-tech.

Outcomes:

- Intensive discussions aimed at narrowing differences and achieving convergence on proposals.
- Action plans for further negotiations to be developed through virtual meetings before the next round.
- **Future Plans:**
 - The next round of negotiations is anticipated in India, likely in November 2024.

- Australia proposed the first meeting of the **India-Australia Agri Tech Forum (IAATF)** in New Delhi on 23 September 2024, focusing on agricultural technology and knowledge sharing.
- **Economic Partnership:** Emphasis on enhancing the bilateral economic relationship, building on the India-Australia ECTA (Effective 29 December 2022).
- **Broader Context:** Both nations are part of the **Indo-Pacific Economic Forum (IPEF)** and **Trilateral Supply Chain Resilience Initiative (SCRI)** to strengthen regional supply chains.

CECA

- CECA is a comprehensive trade agreement between India and Australia.
- It is more comprehensive than earlier **India-Australia Economic Cooperation and Trade Agreement (ECTA)**.
- CECA negotiations were launched in May 2011, which were suspended in 2016 and again re-launched in 2021 with the intention of quickly concluding an ECTA to liberalise and deepen bilateral trade in goods and services, and to then use this foundation to resume negotiations on the more ambitious
- The CECA is intended to cover 5 main tracks i.e. goods, services, digital trade, government procurement and Rules of Origin/Product Specific Rules
- New areas of interest include competition policy, MSMEs, innovation, agri-tech, critical minerals and sports.

India – Australia Bilateral Relationship

- The historical ties between India and Australia started immediately following European settlement in Australia from **1788**.
- All trade to and fro, from the penal colony of **New South Wales** was controlled

by the **British East India Company through Kolkata.**

- India and Australia established diplomatic relations in the pre-Independence period, with the establishment of India Trade Office in Sydney in 1941.
- Australia and India upgraded their bilateral relationship from 'Strategic Partnership' in 2009 to a **Comprehensive Strategic Partnership (CSP)** in 2020.
- Over the years, an array of institutional mechanism has been put in place to promote bilateral co-operation.

Bilateral mechanisms include:

- High level visits, Annual Meetings of Prime Ministers, Foreign Ministers' Framework Dialogue, **2+2 Defence and Foreign Ministers' Dialogue**, Joint Trade & Commerce Ministerial Commission, Defence Policy Talks, **Australia-India Education Council**, Defence Services Staff Talks, Energy Dialogue, JWGs on different issues etc.

Bilateral trade:

- Australia is the 17th largest trading partner of India and India is Australia's 9th largest trading partner.
- Bilateral trade between India and Australia was US \$ 27.5 billion in 2021, there is potential for it to reach around US \$ 50 billion in five years.

Multilateral Cooperation:

- Both are members of the **Quad, Commonwealth, Indian Ocean Rim Association (IORA), ASEAN Regional Forum, Asia Pacific Partnership on Climate and Clean Development**, and have participated in the East Asia Summits.
- Both countries have also been cooperating as members of the **Five Interested Parties (FIP)** in the World Trade Organization

- Australia is an important player in Asia Pacific Economic Cooperation (APEC) and supports India's membership of the organisation.

Challenges in India-Australia Relations

Adani coal mine controversy:

- There was controversy over the Adani coal mine project in Australia, with some activists protesting against it, which created a strain in the relationship between the two countries.

Visa issues:

- There have been concerns over visa restrictions for Indian students and professionals seeking to work in Australia.

Violence with Indian Diaspora:

- Attacks on Indian Diaspora and temples in the recent past by Khalistan supporters have been an issue of strain.

Way Forward

- The India-Australia relations have strengthened in recent years due to shared values, interests, geography, and objectives.
- Both countries envision a free, open, inclusive, and rules-based Indo-Pacific region, unilateral or coercive actions are not preferred and are to be avoided in resolving any disagreements or conflicts.
- Renewed relationship between India- Australia through initiatives such as India Australia bilateral Summits give an opportunity to further strengthen the ties between the two countries to play an active role in ensuring rule-based order in the Indo-Pacific.

Union Minister Dr. Jitendra Singh chaired bilateral meeting on US-India Civil Nuclear Commerce

- **Bilateral Cooperation:** Dr. Jitendra Singh chaired a pivotal meeting on US-India Civil Nuclear Commerce, focusing on deepening collaboration in science, technology, and clean energy.
- **Space Collaboration:** An Indian astronaut from the Gaganyaan Mission is set to join the International Space Station, marking a significant milestone in Indo-US space cooperation.
- **Green Hydrogen Mission:** Dr. Singh emphasized the Green Hydrogen Mission as crucial for decarbonizing industries, transportation, and power generation, and achieving global climate goals.
- **Small Modular Reactors (SMRs):** India is exploring international partnerships and regulatory frameworks to support the deployment of SMRs, aiming for energy self-reliance and climate commitment fulfilment.
- **Research Foundations:** Drawing parallels between India's National Research Foundation (NRF) and the US National Science Foundation (NSF), both are seen as vital for advancing scientific research and innovation.
- **Climate Goals:** India reaffirms its commitment to the "**Panchamrit**" climate action plan, which includes increasing non-fossil energy capacity to **500 GW**, reducing carbon emissions by **1 billion tons**, and achieving net-zero emissions by **2070**.
- **Technological Advancements:** Discussions included progress in ocean energy, Carbon Capture, Utilisation, and Storage (CCUS), biomass to energy conversion, and advancements in Lithium-Ion Battery development.
- **US Delegation:** The high-level US delegation was led by John Podesta and David Turk, focusing on enhancing cooperation in emerging technologies for mutual economic growth and global leadership.

Overview of India and US Bilateral Relations

Bilateral Trade:

- The bilateral trade between the two countries has risen by 72 percent between 2017-18 and 2022-23.
- The US accounted for 18% of the gross FDI inflows into India during 2021-22, ranking second behind Singapore.

Defence and Security:

- India and the US have signed a troika of “foundational pacts” for deep military cooperation, beginning with the Logistics Exchange Memorandum of Agreement (**LEMOA**) in 2016, followed by the Communications Compatibility and Security Agreement (**COMCASA**) after the first 2+2 dialogue in 2018, and then the Basic Exchange and Cooperation Agreement (**BECA**) in 2020.
- In 2016, the United States elevated India to a major defence partner.

Space:

- **Artemis Accords** signed by India established a common vision for the future of space exploration for the benefit of all humankind.

Multilateral Cooperation:

- India and the United States cooperate closely in multilateral organisations and forums, including the United Nations, G20, International Monetary Fund, World Bank, and World Trade Organization.
- Together with Australia and Japan, the United States and India convene as the Quad, a diplomatic network, to promote a free and open Indo-Pacific.

Nuclear Cooperation:

- **Civil Nuclear Deal** was signed in 2005, under the agreement, India agreed to separate its civil and military nuclear facilities and place all its civil resources

under **International Atomic Energy Agency (IAEA)**

- In exchange, the United States agrees to work toward full civil nuclear cooperation with India.

New initiatives:

- Several new initiatives have been announced like **GE-HAL deal** to manufacture jet engines in India and the initiative on **Critical and Emerging Technology (iCET)**, to bring revolution between the relations of the two nations.

Concerns for India-

Strategic Trust and China:

- India and the U.S. have made significant strides in strategic cooperation, particularly in countering China's aggression in the Indo-Pacific. However, concerns persist about India's reliance on Russian military imports and its perceived reluctance to unequivocally condemn Russia's actions in Ukraine.
- Balancing these interests remains a challenge.

Dependency on China:

- US aid in the Russia-Ukraine war strengthens Ukraine's defence and counter offensives, forcing Russia to rely more on China for support.
- It diminishes Russian autonomy and potentially its ability to honour defence agreements with India in an India-China conflict.

Democratic Values and Friction:

- While the partnership is anchored in shared democratic values, there are areas of friction. The U.S. expresses concerns about India's treatment of minorities, especially Muslims, and its illiberal policies. The revocation of Jammu and Kashmir's special status, the Citizenship Amendment Act, and religious freedom issues have raised eyebrows.

Trade and Structural Agreements:

- Despite steady growth in trade, disagreements over critical issues and the lack of structural trade agreements have hindered realising the full potential of the relationship.
- Addressing trade challenges and enhancing economic ties is crucial.

Securing Interests and Promoting Values:

- The U.S. and India must balance securing their interests with promoting democratic values. India's trajectory as a secular and tolerant nation is closely watched, especially given recent developments.

Conclusion and Way Forward-

1. Multilateral Cooperation:

- While bilateral engagement thrives, multilateral cooperation on global conflicts remains a challenge.

2. Complexities and Priorities:

- The future path of U.S.-India relations depends on navigating complexities, fostering trust, and prioritising mutual interests for a stable and prosperous partnership.
- India-U.S. relationship is at a crucial juncture, with significant potential for growth but also substantial challenges to overcome. As leaders engage once again, they must chart a course that balances ambition with pragmatism, ensuring a robust and enduring partnership.
- The strategic convergence of India and the US is because of the common threat posed by China. The more the US focuses on Russia or any other adversary and India focuses on Pakistan, the more their strategic convergence weakens.

India & Singapore Strengthen Ties at Second Ministerial Roundtable

Key highlights:

Focus Areas:

- **Emerging and Futuristic Areas:** Digitalisation, skill development, sustainability, healthcare and medicine, advanced manufacturing, and connectivity.
- **Ongoing Cooperation:** Discussion on the outcomes from the first ISMR, including MoUs on healthcare, education, skill development, digital cooperation, and semiconductor ecosystem cooperation.

Anniversary and Regional Cooperation:

- Discussions included plans for the 60th anniversary of diplomatic relations between India and Singapore.
- Topics of regional and global cooperation were covered, including ASEAN and G20 developments.

Bilateral Relations:

- **Trade:** India-Singapore bilateral trade grew from \$6.7 billion (FY 2004-05) to \$30.11 billion (2021-22). Singapore is India's sixth largest trade partner and largest source of FDI into India.
- **ISMR Establishment:** The ISMR was established to enhance bilateral relations with an initial focus on digital connectivity, Fintech, Green Economy, Green Hydrogen, Skill Development, and Food Security.

India-Singapore relations-

Background:

- The close ties between India and Singapore have a history rooted in strong commercial, cultural and people-to-people links across a millennium.

- The more modern relationship is attributed to **Sir Stamford Raffles** who, in 1819, established a trading station in Singapore on the route of the Straits of Malacca which later became a crown colony and **governed from Kolkata till 1867**.
- After independence, India was one of the first countries to recognize Singapore in 1965.

Economic Relations

1. **Trade:**

- **Volume:** Singapore is one of India's largest trading partners in Southeast Asia. In 2023, bilateral trade was valued at approximately \$20 billion.
- **Exports and Imports:** India exports machinery, chemicals, and textiles to Singapore, while it imports electronics, machinery, and petroleum products.

2. **Investment:**

- **FDI:** Singapore is one of the top sources of Foreign Direct Investment (FDI) into India. Key sectors include technology, financial services, and infrastructure.
- **Projects:** Notable Singaporean investments include ventures in smart city projects and digital infrastructure in India.

3. **Economic Agreements:**

- **CECA:** The Comprehensive Economic Cooperation Agreement (CECA), in place since 2005, has been updated multiple times to enhance trade and investment.

Strategic and Defense Cooperation-

1. **Defense Collaboration:**

- **Maritime Exercises:** The **Singapore-India Maritime Bilateral Exercise (SIMBEX)** involves joint naval exercises focusing on maritime security and anti-

submarine warfare.

- **Strategic Dialogue:** Regular defense and security dialogues enhance cooperation on counter-terrorism and maritime security.
2. **Strategic Partnership:**
- **Regional Security:** Both countries collaborate on regional security issues and support a rules-based international order.
 - **ASEAN Engagement:** Singapore and India work closely within the ASEAN framework, addressing regional challenges and promoting economic integration.

Cultural and Educational Exchanges

1. **Cultural Ties:**
- **Indian Diaspora:** Singapore is home to a significant Indian diaspora, which contributes to cultural and economic ties.
 - **Exchange Programs:** Various cultural festivals, art exhibitions, and events highlight the rich cultural exchange between the two nations.
2. **Educational Collaboration:**
- **Academic Partnerships:** Indian and Singaporean universities collaborate on research and student exchange programs. Initiatives in technology, business, and sciences are prominent.
 - **Skill Development:** Programs aimed at enhancing skills in technology and innovation sectors are also a focus.

Recent Developments

1. **Digital and Technological Cooperation:**
- **Fintech and Innovation:** Joint initiatives in fintech, smart cities, and

digital transformation are expanding. Singapore's expertise in these areas complements India's technological growth.

- **Smart Cities:** Collaborative projects in smart city development are ongoing, focusing on infrastructure and urban management.

2. Regional and Global Issues:

- **South China Sea:** Both countries advocate for freedom of navigation and a rules-based approach in the South China Sea.
- **ASEAN Relations:** India and Singapore work together on enhancing ASEAN integration and addressing regional security issues.

3. Environmental Initiatives:

- **Sustainability Projects:** Collaborative efforts on sustainability, including green technology and climate change initiatives, reflect a commitment to environmental responsibility.

India-Brazil co-chair 9th Joint Commission Meeting; Discuss ways to advance key G20 outcomes

- **9th India-Brazil Joint Commission Meeting:** Co-chaired by Dr. S. Jaishankar (India) and Mauro Vieira (Brazil) in New Delhi.
- **Key Discussion Areas:** Bilateral cooperation in trade, defence, energy, health, agriculture, space, and technology; global geopolitical developments; engagement in **BRICS, IBSA, and G20**.
- **Support for G20 Presidency:** India supports Brazil's G20 presidency; G20 summit scheduled for November 18-19, 2024, in Rio de Janeiro.
- **Strategic Partnership:** The partnership, established in 2006, has diversified;

India values Brazil's increasing appreciation of Indian culture.

India-Brazil Relations

- India and Brazil established diplomatic relations between India and Brazil in 1948. The long bilateral strategic partnership is based on a common global vision, shared democratic values, and a commitment to foster economic growth with social inclusion for the welfare of the people of both countries.

Areas of cooperation between India and Brazil-

Defence & Security Cooperation:

- India and Brazil signed an agreement in 2003 for cooperation in defense. **Joint Defence Committee (JDC)** meetings are held as an institutionalized mechanism for defense cooperation.
- India and Brazil established a strategic dialogue mechanism in 2006 to cover regional and global issues of mutual concern. This dialogue is led by NSA from the Indian side.
- An MoU on cooperation in the area of Cyber Security between **CERT-In** and its counterpart agency was signed during the State Visit of President Bolsonaro in January 2020.

Trade and Investment:

- India-Brazil trade accounts for nearly one-fourth of India-Latin America trade in the 21st century, and Indian investment in Brazil, estimated at US \$6 billion in 2018 is by far the largest in the region.

Bilateral Trade:

- India became the 5th largest trading partner of Brazil in 2021. The bilateral trade exceeded US\$ 11 billion, an increase of 63% compared to 2020.
- Major Indian exports to Brazil include agrochemicals, synthetic yarns, auto components and parts, and imports include crude oil, gold, vegetable oil, sugar, and bulk mineral and ores.

Bilateral Investments:

- A plethora of sectors have witnessed investments between India and Brazil in sectors such as automobiles, IT, mining, energy, biofuels, and footwear sectors.
- In **2018**, the total Indian investment in Brazil was estimated at **USD 6 billion**, and the total Brazilian investment in India was estimated at **USD 1 billion**.

India-MERCOSUR PTA:

- Brazil played a crucial role in the **India-MERCOSUR Preferential Trade Agreement (PTA)** that improves India's access to the large South American market.

Science and Technology

- **Space cooperation:** Both countries have been collaborating in Data sharing and satellite tracking of Indian satellites.
- **Cooperation in Science and Technology (S&T):** A Programme of Scientific and Technological Cooperation (PoC S&T) for the period 2020-2023 was signed

during the recent State Visit of President Bolsonaro to India.

- **Cooperation in agriculture, food processing, and animal husbandry:** Indian cattle like **Gir and Kankrej**, which were exported centuries back, have been suitably modified to yield large quantities of milk in Brazil. Both sides are working on training and capacity building, including **technology transfer**.

Cultural relations

- In Brazil, there is a lot of interest in India's culture, religion, performing arts and philosophy
- **Cultural exchanges:** A Cultural Exchange Programme (CEP) for the years 2020-2024 was signed during the State Visit of President Bolsonaro to India in January 2020.
- **AYUSH:** Brazil has a strong community of Yoga and Ayurveda practitioners. The **Brazilian Association of Ayurveda (ABRA)** is a non-profit association with offices in 9 states of Brazil and members all over Brazil.

Challenges in the bilateral relationship between India and Brazil-

- **Trade competition:** Both India and Brazil are major exporters of agricultural products such as sugar and meat, which can create competition and trade friction between the two countries.
- **Sugarcane subsidy:** Brazil's complaint to the World Trade Organization about India's subsidies to sugarcane farmers. This has led to tensions between the two countries due to Brazil's concerns over India's agricultural policies that could negatively impact its economic interests.
- **Limited people-to-people contact:** India and Brazil have a limited number of people-to-people contacts, including business, cultural, and educational exchanges.

- **Role of China:** Furthermore, there are concerns as China, which is Brazil's largest trading partner, can have an impact on relations between India and Brazil.
- **Differences in strategic priorities:** India and Brazil are both emerging powers that seek to enhance their global influence, but their approaches to regional and global issues may differ.

Way Forward

- **Identify new areas of collaboration:** Identifying new areas of collaboration, such as technology, health, and infrastructure, can help the two countries explore new opportunities and deepen their engagement.
- **Address tariff and non-tariff barriers:** This involves identifying the specific trade and investment issues, conducting bilateral negotiations, and providing preferential treatment to each other's exports.
- **Promote people-to-people contacts and cultural ties:** Promoting tourism, organizing cultural events, facilitating educational exchanges, and encouraging mutual understanding and respect for each other's culture.
- **Energy cooperation:** India and Brazil are both major consumers and producers of energy. According to a report by the International Energy Agency (IEA), India and Brazil are among the fastest-growing energy markets in the world.

ECONOMICS

Centre aims to reduce debt-GDP ratio by 1 percentage point annually till it reaches 50%

Debt-to-GDP Ratio: The Indian government's debt-to-GDP ratio is projected to reach 56.8% in FY25, up from 49.3% in FY19. The increase is attributed to heightened government spending on infrastructure, social schemes, and pandemic relief measures, which have significantly escalated the national debt.

Reduction Strategy

- **Target Reduction:** The Union government plans to reduce the debt-to-GDP ratio by 1 percentage point annually until it reaches a target of 50%. Post this threshold, the reduction rate will be moderated to 0.5 percentage points per year.
- **Objective:** The goal is to achieve a more sustainable level of debt that balances fiscal responsibility with economic growth, ensuring that fiscal space remains available for potential future crises.

Fiscal Policy and Growth

- **Trade-offs:** Reducing the fiscal deficit aggressively could potentially affect economic growth. The government aims to balance fiscal consolidation with growth imperatives, ensuring that reductions in debt do not unduly constrain economic expansion.
- **Investment Needs:** India's high growth potential necessitates continued investment. A reduced debt-to-GDP ratio will help sustain higher levels of

investment without leading to excessive debt burden.

Impact on Credit Ratings

- **Ratings:** India's sovereign credit ratings are currently **BBB-** (S&P and Fitch) and **Baa3** (Moody's). A sustained reduction in the debt-to-GDP ratio could lead to an upgrade in credit ratings, which would lower borrowing costs and enhance fiscal stability.
- **Agency Reports:** Fitch has indicated that sustained fiscal consolidation could positively influence India's credit rating outlook. S&P Global recently revised India's outlook to positive, raising hopes for a potential upgrade.

State Fiscal Responsibilities

- **State Debt:** States are expected to maintain a fiscal deficit target of 3% of GDP. The combined debt-to-GDP ratio for the Centre and states is projected to stabilize around 70%.
- **Investment Constraints:** High government debt could limit investible surplus, potentially crowding out private sector investments. This scenario necessitates careful management to avoid negative impacts on private investment and economic growth.

Minister Rajeev Ranjan Singh Highlights Growth in Fisheries Sector Due to Pradhan Mantri Matsya Sampada Yojana

Pradhan Mantri Matsya Sampada Yojana launched in 2020, by the Department of Fisheries; **Ministry of Fisheries, Animal Husbandry, and Dairying**; to bring about ecologically healthy, economically viable, and socially inclusive development of the **fisheries sector of India**. PMMSY is a comprehensive scheme aimed at transforming the Indian fisheries sector by enhancing production, improving infrastructure, and creating employment opportunities.

Objectives

- **Increase Fish Production:** Achieve a target of 22 million tonnes of fish production by 2024-25.
- **Enhance Productivity:** Improve the productivity of aquaculture and capture fisheries.
- **Infrastructure Development:** Develop infrastructure for post-harvest management, cold storage, and transportation.
- **Sustainable Practices:** Promote sustainable and climate-resilient fisheries practices.
- **Employment Generation:** Create 55 lakh direct and indirect jobs in the fisheries sector.

Components

- **Component A: Enhancement of Production and Productivity**
 - **Fish Seed Production: Establish** hatcheries and nurseries.
 - **Aquaculture Development: Support** for technology and infrastructure.
 - **Capture Fisheries Management: Improve** fishing practices and technology.
- **Component B: Infrastructure and Post-Harvest Management**

- **Cold Chain Infrastructure: Establish** cold storage and transportation facilities.
- **Processing Units: Set** up fish processing and value addition units.
- **Market Linkages: Develop** and strengthen market linkages for fish products.
- **Component C: Institutional Strengthening and Capacity Building**
 - **Training Programs: Capacity** building and skill development for fishers and stakeholders.
 - **Research and Development: Promote** research in fisheries science and technology.
 - **Regulatory Framework: Strengthen** fisheries management and regulatory frameworks.

Significance:

- **Economic Impact:** Boosts rural economies and livelihoods of fishermen and fish farmers.
- **Nutritional Security:** Increases availability of fish as a source of protein.
- **Sustainable Development:** Promotes sustainable practices and helps in conserving aquatic resources.

Challenges and Considerations

- **Implementation Issues:** Effective execution at the state level and ensuring proper utilization of funds.
- **Climate Change:** Adapting to the impacts of climate change on fisheries.
- **Market Dynamics:** Managing market fluctuations and price volatility of fish products.

Union Minister of Labour and Employment directed the implementation of the Employment-Linked Incentive-ELI Scheme in a mission mode

Definition:

- **Employment Linked Incentive (ELI)** is a proposed policy framework aimed at directly incentivizing companies based on the number of new jobs they create.
- Unlike traditional incentive schemes like **Production Linked Incentives (PLI)**, which reward companies based on their production output, ELI focuses purely on employment.
- The idea is to provide financial incentives to companies for each new payroll job they add, irrespective of the industry they belong to or the nature of their production.

The Centre will implement **three schemes** for “employment-linked incentive” as part of the Prime Minister’s package, focusing on enrolment in the **Employees’ Provident Fund Organisation (EPFO)**.

- **First Scheme-** This scheme will provide **one-month wage** to all persons newly entering the workforce in all formal sectors. The direct benefit transfer of one-month salary in 3 instalments to first-time employees, as registered in the EPFO, will be up to Rs. 15,000. The eligibility limit will be a salary of Rs. 1 lakh per month. The scheme is expected to benefit 210 lakh youth.
- **Second scheme-** An incentive will be provided at specified scale directly both to the employee and the employer with respect to their EPFO contribution in the first 4 years of employment. The scheme is expected to benefit 30 lakh youth entering employment, and their employers.
- **Third scheme-** This employer-focussed scheme will cover additional employment in all sectors. All additional employment within a salary of Rs. 1 lakh per month will be counted. The government will reimburse to employers

up to Rs. 3,000 per month for 2 years towards their EPFO contribution for each additional employee. The scheme is expected to incentivize additional employment of 50 lakh persons.

Skilling Programme and Upgradation of Industrial Training Institutes:

Under this policy, the central government (Rs. 30,000 crore) in collaboration with the state government (Rs. 20,000 crore) and companies (Rs. 10,000 crores from CSR funds) will deploy Rs. 60,000 crores to upgrade 1000 Industrial Training Institutes (ITIs). It will cover 200 hubs and 800 spoke (ITIs), redesign existing courses, launch new courses, and augment the capacity of 5 national institutes. It is expected to benefit 20 lakh students.

Internship Policy:

The government aims to place 1 crore interns across the top 500 companies with a stipend subsidy of Rs. 5,000 per month and one-time assistance of Rs. 6,000, while the rest of the training cost is expected to be borne from the company's CSR funds.

Concerns

- **Undermining Productivity and Global Competitiveness:** Critics argue that ELI might undermine productivity and global competitiveness by prioritising labour over technological advancements. However, the current emphasis on capital and GDP growth has not sufficiently addressed job creation and economic inequality, making a shift towards labour incentives potentially necessary.
- **Impact on Employment and Political Proposals:** The shortage of jobs has led to extreme measures, such as proposals to reserve jobs for locals, driven by political pressures. Merely criticizing such measures without offering concrete solutions is unproductive. Addressing the jobs deficit requires innovative ideas beyond traditional reforms.

Employees Provident Fund Organisation (EPFO)

- It is a statutory body that came into existence under the Employees' Provident Fund and Miscellaneous Provisions Act, of 1952.
- The administration of this Act and its associated schemes falls under the purview of a tripartite body known as the **Central Board of Trustees, Employees' Provident Fund.**

The CBT comprises representatives from various sectors, including the government (both central and state), employers, and employees.

RBI can't ignore food inflation Governor Shaktikanta Das

Key highlights:

- RBI Governor Shaktikanta Das highlighted the need to address food inflation in monetary policy due to its significant impact on overall inflation and policy credibility.
- Food inflation accounts for about **46% of the CPI basket** and contributed over **75% to the headline inflation** in May and June.
- **Current Trends:** While core inflation is softening, high food prices persist. Food price momentum likely continued in July, though base effects may have reduced headline inflation.
- **Policy Impact:** The MPC must stay alert to prevent spill overs from food inflation and preserve monetary policy credibility.
- **Economic Survey:** There's debate on whether to exclude food inflation from the inflation-targeting framework; the NSO is conducting a survey to inform future decisions.

What is Inflation?

- Inflation refers to the **overall increase** in the prices of goods and services,

coupled with a **decrease in people's purchasing power**.

- This means that when **inflation rises** (without an equivalent rise in your income), you are able to buy fewer things than you could buy previously, or you have to pay more money for the same stuff now.

The Different Indices through Which Food Inflation is Measured in India

Consumer Price Index (CPI):

- CPI inflation, also known as **retail inflation**, is the rate at which the prices of goods and services that consumers buy for personal use increase over time.
- It measures the change in the cost of a basket of goods and services that are typically purchased by households, including food, clothing, housing, transportation, and medical care, and are of four types:
 1. CPI for Industrial Workers (IW).
 2. CPI for Agricultural Labourer (AL).
 3. CPI for Rural Labourer (RL).
 4. CPI for Urban Non-Manual Employees (UNME).

Consumer Food Price Inflation (CFPI):

- It is a component of the broader **Consumer Price Index (CPI)**, where the Reserve Bank of India (RBI) utilises the CPI-Combined or this purpose.
- CFPI monitors the price **fluctuations** of a particular selection of food items commonly consumed by households, including cereals, vegetables, fruits, dairy products, meat, and other essential food staples.
- CFPI is a component of the broader **Consumer Price Index (CPI)**, where the Reserve Bank of India (RBI) utilises the **CPI-Combined (CPI-C)** for this purpose.

The Wholesale Price Index (WPI):

- It tracks changes in the prices of goods sold and traded in bulk by wholesale businesses to other businesses and it specifically focuses on goods, services are

not part of it.

- The WPI is utilized to monitor supply and demand dynamics in industries, manufacturing, and construction sectors.
- Released monthly by the **Economic Advisor in the Ministry of Commerce and Industry**, the index measures the level of wholesale inflation in the economy based on the month-to-month increase in WPI, and it comprises various **component**
- **Primary articles, constituting** 22.62% of the Wholesale Price Index (WPI), are divided into Food Articles and Non-Food Articles:
 1. **Food Articles** encompass items like Cereals, Paddy, Wheat, Pulses, Vegetables, Fruits, Milk, Eggs, Meat, and Fish.
 2. **Non-Food Articles** include Oil Seeds, Minerals, and Crude Petroleum.

Various Government Initiatives to Control Food Inflation

- **Subsidized Commodities:** The government is increasing the distribution of subsidized vegetables like onions and tomatoes through its network and releasing stocks of wheat and sugar to stabilize prices.
- **Reduction in Import Duty:** To enhance domestic production, the government is incentivizing pulse cultivation among farmers and reducing import duties on certain pulses to boost local availability.
- **Export Bans:** Bans on wheat exports since May 2022 and on broken rice exports since September 2022 aim to maintain ample domestic supply and lower prices.
- **Ban on Stockpiling:** Regulations limit wheat stocks to 3,000 tonnes for traders, millers, wholesalers, and retail chains, and 10 tonnes for smaller retailers and shops to prevent excessive stockpiling.

RBI holds repo rate at 6.5% for ninth time

RBI Monetary Policy Committee (MPC) Meeting Summary

Repo Rate Decision:

- Policy Repo Rate: Kept unchanged at 6.50% for the ninth consecutive time.
- Standing Deposit Facility Rate: 25%
- Marginal Standing Facility Rate and Bank Rate: 75%

Rationale for Decision:

- **Inflation Status:**
 - Headline Inflation: Increased to 5.1% in June from 4.8% in April and May, driven mainly by food inflation.
 - Core Inflation: Moderated; fuel group remained in deflation.
 - Inflation Trajectory: Moderation is uneven, with expected changes in Q3 2024-25.

Monetary Policy Stance:

- Focus: Withdrawal of accommodation to progressively align inflation with the target while supporting economic growth.

Growth Projections for 2024-25:

- **Real GDP Growth:2%**
 - **Q1:1%**
 - **Q2:2%**
 - **Q3:3%**
 - **Q4:2%**

Monetary Policy Committee (MPC):

- The Reserve Bank of India Act, 1934 (**RBI Act**) **has been amended** by the Finance Act, 2016 to provide for a statutory and institutionalized **framework for an MPC**.
- **Under** Section 45ZB of the amended RBI Act, 1934, the central government is empowered to constitute a six-member MPC.

Function: The MPC is entrusted with the task of fixing the benchmark policy rate (repo rate) required to contain inflation within the specified target level.

Composition:

- MPC will have **six members** - the **RBI Governor (Chairperson)**, the RBI Deputy Governor in charge of monetary policy, one official nominated by the RBI Board, and the remaining three members would represent the Government of India.
- The external members hold office for a period of four years.
- The quorum for a meeting shall be **four Members**, at least one of whom shall be the Governor and, in his absence, the Deputy Governor, who is the Member of the MPC.
- The MPC takes decisions based on a majority vote. In case of a tie, the RBI governor will have the second or casting vote.
- The decision of the MPC would be binding on the RBI.

Ministry of Coal Unveils Ambitious Plan to Boost Coal Production Through Global Mining Operators

Key Highlights:

Objective: Boost coal production, reduce import reliance, and introduce advanced

technology through Mining Developers cum Operators (MDOs).

Project Scope:

- Initially 15 projects (~168 MT capacity).
- Expanded to 28 projects (~257 MT capacity).

Current Status: 18 mines awarded to private parties.

MDO Responsibilities:

- Manage excavation, extraction, and delivery.
- Handle Rehabilitation and Resettlement (R&R), land acquisitions, and environmental clearances.

Contract Duration: 25 years or life of the mine.

Impact: Enhanced production, operational efficiency, and energy security.

Scenario of India's Mining Sector:

- Indian mining industry is characterized by a large number of small operational mines.
- The number of mines which reported mineral production (excluding minor minerals, fuel minerals and atomic minerals) in India was 1319 in 2021-22 as against 1375 in the previous year.
- Out of 1319 reporting mines, 263 were located in Madhya Pradesh followed by Gujarat (147), Karnataka (132), Odisha (128), Chhattisgarh (114), Andhra Pradesh (108), Rajasthan (90), Tamil Nadu (88), Maharashtra (73), Jharkhand (45), and Telangana (39).
- These 11 States together accounted for 93% of total number of mines in the country in the year 2021 -22.

India's Scope in Mining Sector:

- India ranks 4th globally in terms of iron ore production and is the world's 2nd

largest coal producer as of 2021.

- **Combined Aluminium production** (primary and secondary) in India stood at 4.1 MT per annum in FY21 becoming the **2nd largest in the world**.
- In 2023, the **mineral's demand is likely to increase by 3%**, driven by **expanded electrification and overall economic growth** in India.
- India holds a **fair advantage in production and conversion costs in steel and alumina**. Its strategic location enables **export opportunities** to develop as well as fast-developing Asian markets.

Status of some of the major mined minerals in India are the following:

- **Coal Production:** India is the second largest producer of coal. The All India production of coal stood at 777.31 MT (P) in 2021-22. Coal India Limited, a PSU engaged in the extraction of coal, is the world's largest coal producer today.
- **Iron Ore Production:** India is among one of the largest iron ore producers in the world. National Mineral Development Corporation (NMDC) is among one of the largest iron ore producers in India.
- **Major Minerals Extraction:** India is one of the largest producers of chromium, bauxite, zinc, manganese, lead

Major Challenges in Exploring India's Mining Potential:

- **Regulatory Hurdles:**
 - **Indian law does not let a miner own a mining lease beyond 10 km²** in area for a mineral in a state.
 - Although that limit has been expanded by some states, at the Union level, this limit **restricts major companies from participating in auctions**.
- **Inadequate Mineral Exploration:**
 - Another crucial obstacle is the lack of adequate mineral exploration. India's **expenditure on exploration**, particularly for deep-seated

minerals like copper, zinc, lead, gold, silver, etc, has been abysmally low.

- **Highly Import Dependent:**
- **Lack of exploration and a weak focus on mining has** seen India's import bill for minerals and metals touch **\$157 billion in 2021-22**, about 1/4th of the total imports.
- **Double Taxation:**
 - Minerals like iron ore and bauxite also face a problem of double taxation in the **form of royalty on royalty**.
 - As royalty is payable on the **average sale price (ASP)** and the **law does not allow any deduction of royalty from it**, mineral users end up paying royalty on royalty, which **dents their cost competitiveness**.

Way forward:

- **Increase Exploration**-Expand exploration beyond the current 10% of India's landmass to uncover more mineral resources.
- **Strengthen Mining Regulations and strict implementation**-There is a need for robust environmental, labour, and land laws to regulate mining and prevent exploitation. Stringent implementation of mining-related rules is needed especially regarding the ban on Rat-Hole and unscientific mining to prevent mine-related accidents.
- **Transparency in allocations:** Transparency in block allocations and rule-based order should be established. Technology should be used for a better way of mineral exploration and surveillance systems.
- **Ensure minimal damage to society and environment:** Proper environmental impact assessment (EIA) and social impact assessment (SIA) must be conducted before allocating the projects. Proper rehabilitation of the displaced population, the tribal rights need to be respected in accordance with the law.

India & US Sign MoU to Promote Cooperation on Small & Medium Enterprises

Key Highlights of the MoU:

- **Parties Involved:** Ministry of MSME (India) and SBA (USA).
- **Purpose:** Promote cooperation and dialogue on MSME issues.

Key Areas:

1. Exchange of expertise on improving MSME global participation.
2. Joint programs for women entrepreneurs.
3. Facilitate trade partnerships between women-owned small businesses.

India's MSME Sector

- MSME stands for **Micro, Small and Medium Enterprises**. MSMEs are businesses that produce, process, and preserve goods and commodities.
- These are broadly classified based on their investment in plant and machinery for manufacturing or equipment for service enterprises, as well as their annual turnover.

MSME Regulation in India:

- In 2007, the Ministry of Small-Scale Industries and the Ministry of Agro and Rural Industries merged to form the Ministry of Micro, Small, and Medium Enterprises.
- This ministry develops policies, facilitates programs, and monitors implementation to support MSMEs and aid in their growth.

Significance of MSMEs

- **Contribution to GDP and Exports:** In 2020-21, MSMEs accounted for 26.8% of Gross Value Added (GVA). The contribution of MSMEs in exports stood at

42.6% (April 2022-August 2022). The contribution of Manufacturing MSME Gross Value Added (GVA) contributed 38.4% of India's total Manufacturing GVA (2020–21).

As Indian economy is poised to reach US\$ 5 trillion status, the Ministry of MSME has set a goal of increasing its contribution to GDP to 50% by 2025.

- **Rural Development:** 51% of MSMEs are located in rural areas. In contrast to large corporations, MSMEs have aided in the industrialization of rural areas at a low capital cost. The sector has made significant contributions to the rural socioeconomic growth while also supplementing major industries.
- **Creation of Employment:** MSMEs are India's largest employer outside of agriculture. They employ over 11.1 crore people, or 45% of all workers, and have low capital and technology requirements. MSMEs are key to the Make in India mission.
- **Simple Structure:** Given India's middle-class economy, MSMEs offers the flexibility of starting with limited resources under the owner's control. As a result, making decisions becomes easier and more efficient. A large corporation, on the other hand, requires a specialist for every departmental function due to its complex organisational structure.
- **Innovation Promotion:** They support local resource mobilisation, capacity building, industrial development in rural areas, and give aspiring entrepreneurs a chance to develop innovative products. It has enormous potential for connecting India's MSME base with large corporations. Multinational corporations are increasingly purchasing semi-finished and auxiliary products from small businesses.
- **Social Inclusion:** According to the Annual Report of The Ministry of MSMEs (2021-22), the socially backward groups owned almost 66.27% of MSMEs. In rural areas, almost 73.67% of MSMEs were owned by socially backward groups.

Challenges in MSME

- **Financial Constraint:** Smaller firms and businesses in the Indian economy have always faced financial challenges, which poses a significant hurdle for both businesses and the MSME sector. However, it is even more concerning that only 16% of SMEs can obtain timely finance, leaving small and medium firms reliant on their resources.
- **Lack of Innovation:** Indian MSMEs lack innovation, with many products relying on outdated technologies. The sector lacks sufficient entrepreneurs, hindering the adoption of new technologies and tools. Consequently, MSMEs struggle with outdated technology and lower productivity levels compared to larger firms.
- **The dominance of Small Firms:** Micro and small businesses make up over 80% of MSMEs, making it difficult to access government initiatives such as emergency lines of credit, stressed asset relief, equity participation, and fund of funds operations due to communication gaps and limited awareness.
- **Lack of Formalization Among MSMEs:** Many MSMEs lack formal registration, contributing to the credit gap. Approximately 86% of manufacturing MSMEs in the country remain unregistered, and only around 1.1 crore MSMEs are currently registered under the Goods and Services Tax.

Centre launches new AI-based surveillance system to manage pests, connect scientists with farmers

The Centre has launched the AI-based National Pest Surveillance System (NPSS) to help farmers connect with agriculture scientists and experts for pests' control.

National Pest Surveillance System (NPSS)

- The NPSS is an AI-based platform launched by the government on August 15, 2024.

- It is designed to help farmers connect with agricultural scientists and experts for effective pest control using their phones.
- It provides data for selected crops i.e. Rice, Cotton, Maize, Mango and Chilies.

Aim of NPSS:

- The aim of NPSS is to reduce the dependence of farmers on pesticide retailers and inculcate a scientific approach among them towards pest management. NPSS will analyse the latest data on pests using AI tools to help farmers and experts in pest control and management.

Objectives of project:

- Design, development and implementation of National Pest Surveillance System
- Implementation of the system so as to provide regular correct pest management advisories to the farmers
- Promotion of IPM through implementation of the system.

How will farmers use it?

- Farmers can take photos of infested crops or pests using the NPSS platform, which are then analysed by scientists and experts.
- Then they will suggest the correct quantity of the pesticide at the right time, reducing excessive pesticide use.
- Target Groups: Approximately 14 crore farmers across India.

Initiatives for promoting AI in Agriculture

- Kisan e-Mitra': AI-powered chatbot to assist farmers on PM Kisan Samman Nidhi scheme.
- AI for Agriculture Innovation (AI4AI) initiative, launched by the World Economic Forum. Under it, "Saagu-Baagu' initiative was launched to promote innovation in agriculture in Telangana.

- AI based analytics for crop health monitoring using Satellite datasets for rice and wheat crops.

Greening in India gets a boost with Green Tug Transition Program (GTTP) SOP launched by Shri Sarbananda Sonowal

Program Overview:

- Initiative Under: "Panch Karma Sankalp".
- Announced: May 22, 2023, during the 'Chintan Shivir' event.
- Phase 1 Duration: October 1, 2024 – December 31, 2027.

Implementation:

- Ports Involved: Jawaharlal Nehru Port Authority, Deendayal Port Authority, Paradip Port Authority, and V.O. Chidambaranar Port Authority.
- Requirement: Each port to procure or charter at least two green tugs.
- Investment: Approx. INR 1000 Crores.

Green Technologies:

- First Set: Battery-electric tugs.
- Future Options: Hybrid, methanol, and green hydrogen.

Long-Term Goals:

- By 2040: All tugs at Indian Major Ports to be green.

- Post-2033: New tugs must meet ASTDS-GTTP standards.

Employment and Innovation:

- Domestic Impact: Boost to the domestic tug industry, job creation in shipbuilding and design.
- "Make in India" Initiative: All tugs to be built in Indian shipyards.

Alignment with Maritime Vision:

- Maritime India Vision 2030: 60% power from renewable sources, 30% reduction in carbon emissions per ton of cargo.
- Maritime Amrit Kaal Vision 2047: 30% reduction in greenhouse gas emissions from port vessels by 2030.

Green Tug Transition Program (GTTP):

The Green Tug Transition Program (GTTP) aims to modernize India's maritime sector by replacing conventional fuel-based harbour tugs with environmentally friendly alternatives. This initiative is part of India's broader commitment to reducing carbon emissions and enhancing sustainability in its maritime operations.

Tugs

A tug boat or tug are marine vessels that maneuver ships by pushing or pulling them, mostly using tow lines. They tug ships in circumstances where the ships cannot or do not move using their power like in narrow harbors, canals, etc.

Periodic Labour Force Survey (PLFS) – Quarterly Bulletin [April – June 2024]

Key findings

- **Labour Force Participation Rate (LFPR)** in urban areas among persons of age 15 years and above has increased from 48.8% during April – June, 2023 to 50.1% in April – June, 2024.
- LFPR for male of age 15 years and above in urban areas increased from 73.5% during April – June, 2023 to 74.7% during April – June, 2024, reflecting overall increasing trend in male LFPR.
- LFPR among female of age 15 years and above for urban areas increased from 23.2% during April – June, 2023 to 25.2% during April – June, 2024.
- **Worker Population Ratio (WPR)** in urban areas among persons of age 15 years and above has increased from 45.5% during April – June, 2023 to 46.8% in April – June, 2024.
- WPR for male of age 15 years and above for urban areas increased from 69.2% in April – June, 2023 to 70.4% during April – June, 2024 reflecting overall increasing trend in male WPR.
- WPR for female of age 15 years and above for urban areas increased from 21.1% in April – June, 2023 to 23.0% during April – June, 2024 reflecting overall increasing trend in female WPR.
- Unemployment Rate (UR) in urban areas among persons of age 15 years and above was 6.6% during April – June, 2024.
- **UR among males of age 15 years** and above decreased from 5.9% during April – June, 2023 to 5.8% in April – June, 2024. UR among female of age 15 years and above decreased from 9.1% in April – June, 2023 to 9.0% in April – June, 2024.

Periodic Labour Force Survey

- It is a survey conducted by the **NSO** under the **Ministry of Statistics and Programme Implementation (MoSPI)** to measure the **employment and unemployment situation in India**.
- The **NSO** launched the PLFS in April 2017.

Objective of PLFS:

- To estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in the short time interval of three months for the urban areas only in the 'Current Weekly Status' (CWS).
- To estimate employment and unemployment indicators in both 'Usual Status' and CWS in both rural and urban areas annually.

APEDA facilitates first shipment of Fig Juice to Poland

- The Agricultural and Processed Food Products Export Development Authority (APEDA) facilitated the export of India's first ready-to-drink fig juice, made from GI-tagged **Purandar Figs**, to Poland.
- The exported products are made from Purandar figs, renowned for their taste, size, and nutritional value, which have earned a Geographical Indication (GI) tag.
- This follows the successful export of India's first commercial consignment of GI-tagged Purandar figs to Hong Kong in February 2023.

Purandar Fig

- The distinct bell-shaped Purandar Fig with **violet colour** differentiates itself from other varieties. It has a **sweet taste**.
- The size of Purandar Fig is bigger than other varieties of fig. It has more than 80 per cent pulp or edible part. The pulp colour of Purandar Fig is pinkish red and is highly nutritious.
- Pune district is the leading region in **Maharashtra** regarding fig plantation. The fig is cultivated in many villages of Purandar taluk in Pune district.
- The agro-climatic factors such as dry weather, hilly slope, well drained medium land is essential for Purandar Fig cultivation.
- Fig variety cultivated in Pune region is also known as '**Dive Anjir**'.

What is APEDA?

- The Agricultural and Processed Food Products Export Development Authority (APEDA) was established by the government under the **Agricultural and Processed Food Products Export Development Authority Act** passed by Parliament in December 1985. The Act came into effect on February 13, 1986.
 - APEDA, which replaced the **Processed Food Export Promotion Council (PFEPCC)**, has its headquarters in New Delhi.

‘Abandoning inflation targeting could be counterproductive’

Inflation

Inflation is defined as a long-term increase in the general price level of goods and services in a given economy. It considers the pricing of most every day or standard products and services, such as food, clothes, housing, recreation, transportation, consumer staples, etc. Inflation is calculated as the average change in a basket of goods and services price over time. It's calculated on a year-over-year (or monthly/weekly) basis. Point-to-point inflation is the rate of change in a specific month's price level compared to the same month the previous year. Inflation is referred to as a positive when it helps improve consumer demand and consumption, and operate economic growth.

Types of Inflation and Causes of Inflation

Depending on the reason, inflation can be classed as **Demand-Pull Inflation** or **Cost-Push Inflation**.

Demand-Pull Inflation-

- Demand-pull inflation occurs when the total demand for products and services grows faster than the economy's production capability.
- It produces a demand-supply mismatch, with increased demand and lower supply, resulting in higher prices.
- This sort of inflation happens when the money supply expands; government spending grows, indirect taxes fall, and so on.

Cost-Push Inflation-

- Cost-Push Inflation is defined as an increase in the cost of production elements such as labor, raw materials, etc.
- As the cost of production increases, inflation rises due to which companies strive to maintain profit margins by raising prices or offering goods and services

at the same price but in fewer quantities. Cost-push inflation occurs in these situations.

- Increases in the cost of manufacturing, decrease in output (production), increases in indirect taxes, increases in the price of imported commodities, and other factors contribute to this inflation.
- Inflation may be classed into mild inflation, galloping inflation, hyperinflation, and so on, depending on the price increase.

Low Inflation

- Low inflation is a term that refers to a period of time where prices are slowly rising.
- Creeping inflation is another name for this sort of inflation. Crawling inflation occurs when prices rise by less than 3% each year.

Galloping Inflation

- Galloping inflation occurs when the economy's prices of goods and services grow at a double-digit (i.e., 15%, etc.) or **triple-digit** (i.e., 100%, etc.) **pace each year.**
- Inflation that is galloping is also known as **jumping inflation or running inflation.**

Hyperinflation

- Hyperinflation occurs when the pace of growth in the prices of goods and services is remarkably rapid and occurs over a short period of time.
- In other terms, hyperinflation occurs when prices rise at a pace of more than three digits per year.

Impacts of Rising Inflation

Positive Impacts

1. Debt Relief:

- **Reduced Real Value of Debt:** For borrowers with fixed-rate loans, rising inflation can reduce the real value of their debt. This means they repay their loans with money that is worth less than when they borrowed it, which can be beneficial for individuals and businesses with existing debt.

2. Encouragement of Spending and Investment:

- **Incentive to Spend:** Higher inflation can encourage consumers to spend rather than save, as the value of money decreases over time. This can boost economic activity and stimulate growth.
- **Asset Investment:** Investors might put their money into assets that are likely to appreciate in value with inflation, such as real estate or commodities, potentially leading to higher returns.

3. Wage Adjustments:

- **Potential Wage Increases:** Workers might negotiate higher wages to keep up with the cost of living, which can improve their standard of living if wage growth keeps pace with inflation.

4. Nominal Price Adjustment:

- **Price Flexibility:** Inflation can help adjust relative prices and wages in the economy, especially in scenarios where prices are sticky or slow to adjust. This can be particularly useful in situations of economic restructuring or adjustment.

Negative Impacts

1. Erosion of Purchasing Power:

- **Higher Living Costs:** Rising inflation decreases the purchasing power of money, meaning consumers can buy less with the same amount of money, which can reduce their standard of living.

2. Uncertainty and Volatility:

- **Economic Uncertainty:** High inflation can create uncertainty about future costs, which can make planning and budgeting more difficult for both consumers and businesses.
- **Market Volatility:** Inflation can lead to increased volatility in financial markets as investors react to changing economic conditions and adjust their strategies.

3. Interest Rates and Borrowing Costs:

- **Higher Borrowing Costs:** To combat inflation, central banks may raise interest rates, which can increase the cost of borrowing for consumers and businesses. This can slow down economic activity and investment.
- **Impact on Business Investment:** Higher interest rates can deter businesses from investing in new projects or expanding, potentially affecting economic growth.

4. Income Inequality:

- **Disproportionate Impact on Lower-Income Households:** Rising inflation often affects lower-income households more severely, as they spend a larger proportion of their income on essential goods and services. This can widen income inequality and create social challenges.

5. Savings Erosion:

- **Reduced Real Value of Savings:** Inflation can erode the real value of savings if interest rates on savings accounts or investments do not keep pace with inflation. This can undermine long-term financial security for individuals and households.

Measures to control inflation-

Increase Interest Rates: Central banks can raise short-term interest rates to make borrowing more expensive and saving more attractive. Higher interest rates can help cool off an overheated economy by reducing consumer spending and business

investment.

Sell Government Securities: By selling government bonds, central banks can reduce the money supply in the economy. This action can help reduce inflationary pressures by increasing interest rates and lowering the amount of money circulating in the economy.

Increase Reserve Requirements: Central banks can raise the reserve requirements for commercial banks, which reduces the amount of money banks can lend out. This can help control inflation by tightening the money supply.

Reduce Government Spending: The government can cut back on public expenditures to reduce overall demand in the economy. Lower demand can help ease inflationary pressures.

Increase Taxes: Raising taxes can reduce disposable income, leading to decreased consumer spending. This can help cool down inflation by reducing aggregate demand.

Encourage Investment: Policies that promote investment in technology and infrastructure can enhance productivity, which helps to increase supply and reduce inflationary pressures.

Enhance Skills and Training: Improving labour market efficiency through education and training can help to increase productivity and reduce wage-driven inflation.

Implement Temporary Price Controls: In extreme cases, governments may impose price controls or caps on essential goods and services. However, these measures are usually temporary and can lead to shortages or reduced supply if not carefully managed.

Ensure Supply Chain Stability: Addressing issues in supply chains that contribute to rising commodity prices can help control inflation. This can involve improving logistics, reducing trade barriers, or ensuring competitive markets.

Union Minister of Textiles interacted with the beneficiaries of the Production Linked Incentive (PLI) Scheme

- The PLI scheme was conceived to scale up domestic manufacturing capability, accompanied by higher import substitution and employment generation.
- Launched in March 2020, the scheme initially targeted three industries:
 1. Mobile and allied Component Manufacturing
 2. Electrical Component Manufacturing and
 3. Medical Devices.
- Later, it was extended to 14 sectors.
- In the PLI scheme, Domestic and Foreign companies receive financial rewards for manufacturing in India, based on a percentage of their revenue over up to five years.

Targeted Sectors:

- The **14 sectors** are mobile manufacturing, manufacturing of medical devices, automobiles and auto components, pharmaceuticals, drugs, specialty steel, telecom & networking products, electronic products, **white goods (ACs and LEDs)**, food products, textile products, solar PV modules, **advanced chemistry cell (ACC) battery**, and drones and drone components.

Objectives of the Production Linked Incentive (PLI) Scheme

- The main objectives of the PLI scheme are to comply with **World Trade Organisation** obligations and promote fair treatment for domestic sales and exports.
- It aims to attract foreign investments in advanced technology and core sectors, boost exports, and contribute to economic growth.
- The PLI scheme offers various benefits, including concessions on import and export duties, tax rebates, affordable land acquisition, and support for anchor

investors managing new projects.

- The scheme encourages sustainable development and investments in labour-intensive sectors, making it an effective and accessible program.

Benefits of the PLI Scheme

- The PLI system is dependent on overall output.
- The advantages are further increased by their accessibility.
- It aids the anchor investors who are capable of overseeing new or existing projects as well as other investments.
- Beneficiaries of this program receive assistance with affordable land acquisition, tax rebates, and concessions on import and export duties, among other things.
- PLI also offers the advantage of reasonable product prices.

Issues with the PLI Scheme

Assembly vs. Value Addition:

- The subsidy in the scheme for Mobile and allied Component Manufacturing is paid only for finishing the phone in India, not on how much value is added by manufacturing in India, turning out that very little apart from assembly is done in India.
- So, India still imports much of **what goes into the mobile phones**.
- The imports of mobile phone components — including display screens, cameras, batteries, printed circuit boards — shot up between FY21 and FY23.
- Incidentally, these are the same two years when mobile phone exports jumped the most.

WTO Constraints and Limited Value Addition:

- WTO rules prevent India from tying PLI subsidies to domestic value addition.
- Although India's aspiration to make chips is sound, chips are complex components.
- The absence of significant domestic **value addition likely stems from these constraints.**

Vague Disbursal of Incentives:

- While an Empowered Committee has been formed to oversee the scheme and **handle fund disbursement for different sectors**, the process of awarding incentives lacks clarity.
- There are no well-defined criteria or standardized parameters that ministries and departments use to **determine the allocation of these incentives**, raising concerns about the fairness and effectiveness of the scheme.

Lack of a Centralized Database:

- The lack of a centralized database that captures information like increase in production or exports, number of new jobs created etc. make the evaluation process an administrative complexity.
- This information ambiguity impacts transparency and can lead to malfeasance, further widening the fault lines and weakening the policy structure.

Way Forward

- The government must assess PLI's effectiveness, considering job creation, cost per job, and reasons for limited success.
- Extending the scheme to new sectors requires understanding its limitations and addressing underlying issues.

Prime Minister Shri Narendra Modi will give certificates to 11 lakh Lakhpati Didis

- Prime Minister will release a revolving fund - Community Investment Fund of Rs 2500 crore, which will benefit about 48 lakh members of 4.3 lakh Self Help Groups (SHGs).
- The Prime Minister will also release a bank loan of Rs 5000 crore, which will benefit 25.8 lakh members of 2,35,400 Self Help Groups (SHGs).

Lakhpati Didi Scheme

- **The** government's goal is to create two crore "lakhpati didis" (**prosperous sisters**) in villages. This scheme aligns with the broader mission of **poverty alleviation** and **economic empowerment**.
- Under this scheme, women will be provided skill training so that they can earn over Rs 1 lakh per year.

Criteria for identifying potential lakhpati Didi:

- A Self-Help Group member who has completed a minimum of two years and has availed of the **Community Investment Fund (CIF)**.
- A beneficiary of livelihood intervention through **DAY-NRLM** and practising at least two livelihood activities.

Features:

- Drones will be **provided to women SHGs for agricultural activities**.
- This initiative aims to leverage technology to transform the agricultural landscape while empowering women in rural communities.
- Around **15,000 women's SHGs will be given training in operating and repairing drones**.

- This training will not only create new avenues for income generation but also equip women with cutting-edge skills.
- Drones have the potential to revolutionize agriculture by enabling **precision farming, crop monitoring, and pest control**.
- Under the scheme, women will be trained in skills like **LED bulb making, plumbing, among others**.

What are SHGs?

- Self-help groups (SHGs) are **informal associations** of people who choose to come together to find ways to improve their living conditions.
- It can be defined as a self-governed, peer-controlled information group of people with similar socio-economic backgrounds and having a desire to collectively perform a common purpose.
- SHG relies on the notion of “Self Help” to encourage self-employment and poverty alleviation.

Objectives:

- To build the functional capacity of the poor and the marginalized in the field of employment and income-generating activities.
- To resolve conflicts through collective leadership and mutual discussion.
- To provide collateral-free loans with terms decided by the group at market-driven rates.
- To work as a collective guarantee system for members who propose to borrow from organized sources.
- The poor collect their savings and save it in banks. In return, they receive easy access to loans with a small rate of interest to start their micro unit enterprise.

21.67 lakh new workers enrolled under ESI Scheme in the month of June, 2024

- 58 lakh employees amounting to around 49% of the total registrations belong to the age group of upto 25 years.
- Net enrolment of female members has been 4.32 lakh in June, 2024.
- Besides, a total of 55 transgender employees have also got registered under ESI Scheme in the month of June, 2024

Employees State Insurance (ESI) Scheme

- It is a **social security scheme offered** by the Government of India as per the **Employees" State Insurance Act, 1948.**
- It is administered by a **statutory corporate body** called the Employees" State Insurance Corporation (**ESIC**).
- The scheme provides protection to employees against disablement/death due to employment injury, sickness, and maternity.
- The **existing wage limit** for coverage under the Act is Rs.21,000/- per month (Rs.25000/- per month in the case of Persons with Disability).

How are contributions made?

- This is a **self-financing scheme**, where the employees and the employers make regular monthly contributions to the scheme at a certain percentage of their wages.
- As of now, covered employees contribute 0.75% of the wages, whereas the employers contribute 3.25% of the wages, payable to their employees.
- Employees earning less than Rs. 137/- a day as daily wages are exempted from payment of their share of contribution.
- The State Governments, as per provisions of the Act, **contribute 1/8th** of the expenditure of medical benefits within a per capita ceiling of Rs. 1500/- per

Insured Person per annum.

Benefits

- **Medical Benefit** - Full medical care to the insured person and his family members with no ceiling on expenditure of the treatment.
- **Sickness Benefit** - In the form of cash compensation at the rate of 70 per cent of wages.
- **Maternity Benefit** - For confinement/pregnancy is payable for 26 weeks, which is extendable by further one month on medical advice.
- **Disablement Benefit** -
 1. Temporary disablement benefit (TDB)
 2. Permanent disablement benefit (PDB)
- **Dependants Benefit** - Paid in the form of monthly payment to the dependants in cases where death is due to employment injury or occupational hazards.
- **Other Benefits** -
 1. Funeral Expenses
 2. Confinement Expenses
 3. Vocational Rehabilitation
 4. Physical Rehabilitation
 5. Old Age Medical Care

ESIC:

- It is a state-run organization set up under the Employee State Insurance Act of 1948.
- It is responsible for overseeing the ESI plan.
- **Ministry:** The Ministry of Labour & Employment

Union Minister of Civil Aviation launched the guidelines for seaplane operation under RCS-UDAN

- The guidelines ensure seamless and efficient rollout of seaplane operations across the nation. On the occasion, Mr. Naidu said that the guidelines aim to connect remote areas of the country and make travel more accessible for all.
- He added that after the success of RCS-UDAN, the government is considering to propose **RCS-UDAN 2.0** for the next 10 years.

RCS-UDAN:

- UDAN (UdeDeshkaAamNaagrik) is a regional airport development and "**Regional Connectivity Scheme**" (RCS) of the Union Government.
- The scheme UDAN envisages providing connectivity to un-served and under-served airports of the country through revival of existing air-strips and airports.
- **Implementing Ministry:** Ministry of Civil Aviation
- This is first-of-its-kind scheme globally to create economically viable flights on regional routes so that flying becomes affordable to the common man even in small towns.
- It is a key component of the **National Civil Aviation Policy (NCAP)** which was released by the Ministry of Civil Aviation (India) in 2016.
- The scheme is jointly funded by the central government and state governments.

Objectives of the UDAN Scheme

- **To Enhance Regional Connectivity:** By connecting underserved and unserved airports, UDAN aims to provide better connectivity to remote and regional areas.

- **To Make Air Travel Affordable:** By offering subsidized fares, the scheme intends to make air travel accessible to a larger segment of the population, thereby increasing the number of air travellers.
- **To Promote Inclusive Growth:** Ensuring balanced regional development by facilitating the movement of people, goods, and services, which in turn supports tourism, job creation, and economic development.

Various versions of UDAN Scheme

- **UDAN 1.0:** 5 airlines companies were awarded 128 flight routes to 70 airports (including 36 newly made operational airports)
- **UDAN 2.0:** 73 underserved and unserved airports were announced and for the first time, **helipads** were also connected.
- **UDAN 3.0:** In coordination with the Ministry of Tourism, Tourism Routes were included. In addition to **Seaplanes** for connecting Water Aerodromes, several routes in the North-East Region came under the ambit of the scheme.
- **UDAN 4.0:** Gave impetus to North-Eastern Regions, Hilly States, and Islands. The operation of helicopters and seaplanes incorporated.
- **UDAN 5.0:** UDAN 5.0 focuses on **Category-2 (20-80 seats) and Category-3 (>80 seats) aircraft**. There is no restriction on the distance between the origin and destination of the flight, which earlier was 600 Km.

Challenges to the RCS Scheme

Commercial Viability:

- Many of the routes identified under the scheme have been found to be commercially unviable for airlines. The low demand for air travel on certain routes makes it difficult for airlines to operate profitably, even with subsidies

provided under UDAN.

- Airport development under RCS involved launching 479 routes to revive under-utilized airports. However, out of these, 225 routes have ceased operations.

Infrastructural Constraints:

- The lack of adequate airport infrastructure in some of the remote regions poses challenges for airlines.
- Many airports require upgradation and improvements to meet safety standards and handle increased air traffic.

Subsidization of Air Travel:

- The RCS aimed to make air travel affordable by providing subsidies and viability gap funding to airlines operating on selected routes. However, the scheme faced issues as some routes were found to be commercially unviable despite the subsidies.

High Operating Costs:

- Airlines operating in remote areas often face higher operating costs, including increased fuel expenses, maintenance costs, and logistical challenges, which can affect their profitability.

Passenger Awareness:

- Lack of awareness among potential passengers about the availability of air travel options under **UDAN can limit demand and utilization of regional air services.**

Way Forward

- The Regional Connectivity Scheme played a significant role in airport development, but challenges related to commercial viability and airlines' sustainability have hindered its overall success.

- As the aviation sector continues to evolve, addressing these issues will be crucial to achieving sustainable air connectivity for smaller cities and regions across the country.
- Addressing these challenges requires a collaborative effort from the government, aviation industry stakeholders, and local authorities.

Enhancing airport infrastructure, **streamlining subsidy disbursement, addressing operational constraints**, and promoting regional air travel awareness are key areas that need attention to ensure the success and sustainability of India's UDAN Regional Connectivity Scheme.

77th PM GatiShakti meeting evaluates infrastructure projects across Railways, Roads, Aviation, and Ports

- The infrastructure projects include **Hazira-Gothangam New Rail Line** in Gujarat, **Bilasipara-Guwahati Road in Assam**, Multi-Modal Logistics Park in Maharashtra, Development of **New Civil Enclave at Bihta Airport** and **Bagdogra Airport**, and Development of international container transshipment port at **Galathea Bay**.
- **PM Gati Shakti** (launched in 2021) is a National Master Plan for **multi-modal connectivity** that will incorporate the **infrastructure schemes** of various **Ministries** and State Governments like **Bharatmala**, Sagarmala, **inland waterways**, dry/land ports, **UDAN**

PM Gati Shakti is based on six pillars:

- **Comprehensiveness:** It will include all the existing and planned initiatives of various Ministries and Departments with one centralized portal. Each and every Department will now have visibility of each other's activities providing critical data while planning & execution of projects in a comprehensive manner.
- **Prioritization:** Through this, different Departments will be able to prioritize

their projects through cross-sectoral interactions.

- **Optimization:** The National Master Plan will assist different ministries in planning for projects after identification of critical gaps. For the transportation of the goods from one place to another, the plan will help in selecting the most optimum route in terms of time and cost.
- **Synchronization:** Individual Ministries and Departments often work in silos. There is lack of coordination in planning and implementation of the project resulting in delays. PM Gati Shakti will help in synchronizing the activities of each department, as well as of different layers of governance, in a holistic manner by ensuring coordination of work between them.
- **Analytical:** The plan will provide the entire data at one place with **GIS based spatial planning** and analytical tools having 200+ layers, enabling better visibility to the executing agency.
- **Dynamic:** All Ministries and Departments will now be able to visualize, review and monitor the progress of cross-sectoral projects, through the GIS platform, as the satellite imagery will give on-ground progress periodically and progress of the projects will be updated on a regular basis on the portal. It will help in identifying the vital interventions for enhancing and updating the master plan.

Objectives of PM Gati Shakti Master Plan

- Integrated planning and coordinated implementation of infrastructure connectivity projects.
- For example: Centralized portal to include all the updates regarding existing and planned initiatives of various Ministries and Departments.
- Multi-modal seamless connectivity for movement of people, goods and services, facilitating the last mile connectivity.
- For example: 400 Vande Bharat trains are to be manufactured and **100 PM Gati Shakti Cargo Terminals** are to be built.
- Reducing logistics costs by filling critical infrastructure gaps, thus improving

supply chains.

- For example: the Indian government has a vision of bringing down logistics costs from 13% to 7.5% of GDP.
- Making India the Business capital of the world by enhanced multimodal connectivity, reduced logistics cost and providing proper linkages between local industry & and consumers.
- For example: Economic Zones like pharmaceutical clusters, defence corridors, electronic parks, industrial corridors, and agri-zones will be covered to improve connectivity.

Associated Concerns

- **Low Credit Off-take:** Although the government had taken up 'strong' banking sector reforms and the **Insolvency and Bankruptcy Code** had yielded about Rs. 2.4 lakh crore of recoveries on bad loans, there are concerns about declining credit offtake trends.
- **Lack of Demand:** In the post-Covid-19 scenario, there is a lack of private demand and investment demand.
- **Structural Problems:** Due to land acquisition delays and litigation issues, the rate of implementation of projects is very slow on global standards.

Way Forward

- PM Gati Shakti is a step in the right direction. However, it needs to address structural and macroeconomic stability concerns, emanating from high public expenditure.
- Thus, it is imperative that this initiative is underpinned by a stable and predictable regulatory and institutional framework.

Cabinet approves Unified Pension Scheme

Unified Pension Scheme (UPS):

- The Central Government has introduced the **Unified Pension Scheme (UPS)** to address the concerns of government employees regarding pension security.
- The scheme integrates features of both the **Old Pension Scheme (OPS)** and the New Pension Scheme (NPS).
- **Effective Date:** The scheme will be implemented starting from April 1, 2025.

The salient features of the UPS are:

- **Assured pension:** 50% of the average basic pay drawn over the last 12 months prior to superannuation for a minimum qualifying service of 25 years. This pay is to be proportionate for lesser service period upto a minimum of 10 years of service.
- **Assured family pension:** @60% of pension of the employee immediately before her/his demise.
- **Assured minimum pension:** @10,000 per month on superannuation after minimum 10 years of service.
- **Superannuation pay-out:** A lump sum payment in addition to gratuity benefits will be provided at the time of retirement.

Contributions under the UPS:

The scheme is contributory, requiring:

- Employees to contribute 10% of their salary.
- The government is to contribute 5% of the salary.
- The government's contribution may be adjusted based on periodic actuarial assessments to ensure the scheme's sustainability.

Significance of Unified Pension Scheme

- **Inclusivity:** The scheme seeks to cover all segments of the workforce, including unorganized sector workers, who often lack access to formal pension schemes. This is crucial in a country like India, where a significant portion of the workforce is employed in the informal sector.
- **Portability:** One of the key features of the Unified Pension Scheme would be the portability of benefits. This means that workers can carry their pension benefits with them across different jobs and geographical locations, making the system more adaptable to the modern, mobile workforce.
- **Centralized Administration:** The scheme would be administered by a centralized authority, ensuring uniformity in the implementation and management of pension benefits across the country.
- **Enhanced Benefits:** By pooling resources and managing funds more efficiently, the scheme aims to provide enhanced pension benefits to retirees, ensuring a more secure and stable retirement.

Challenges

- **Transition Process:** Merging different schemes with varying rules and benefits into a single system could be complex and requires careful planning to ensure that existing beneficiaries are not disadvantaged.
- **Funding and Sustainability:** Ensuring the financial sustainability of the Unified Pension Scheme is critical. This includes determining contribution rates, government support, and investment strategies to ensure long-term viability.
- **Legal and Regulatory Framework:** The implementation of a unified scheme would require significant changes to the existing legal and regulatory framework governing pension schemes in India.

Comparison with Old Pension Scheme (OPS)

- **Assured Pension:** Like UPS, OPS also provided a fixed pension at 50% of the last drawn basic pay, with **DA adjustments**.
- **No Employee Contribution:** Unlike UPS, OPS did not require any contribution from employees, making it an unfunded scheme.
- **Unfunded Scheme:** OPS was criticized for being fiscally unsustainable due to its unfunded nature.

Comparison with New Pension Scheme (NPS)

- **No Assured Pension:** NPS does not offer a guaranteed pension, as the returns are based on market performance.
- **Employee Contribution:** NPS requires employees to contribute 10% of their basic salary and DA, with a matching contribution from the government.
- **Funded Scheme:** Contributions under NPS are invested in various pension funds, making the pension amount dependent on market risks.

Prime Minister Shri Narendra Modi marks 10 years of Jan Dhan Yojana

Key Highlights of PMJDY

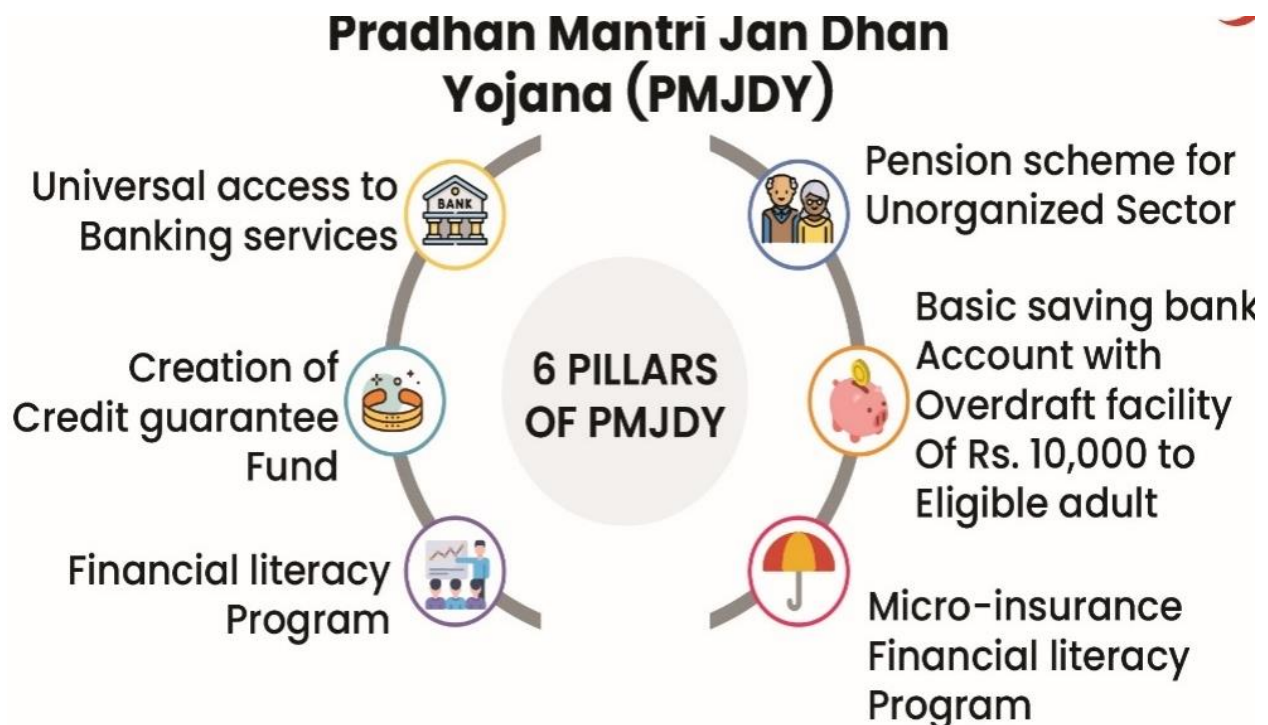
- **Total Accounts Opened:** 13 crore (as of 14th August 2024).
- **Women Account Holders:** 55.6% (29.56 crore).
- **Accounts in Rural/Semi-Urban Areas:** 66.6% (35.37 crore).
- **Total Deposits:** Rs. 2.31 lakh crore.
- **Average Deposit per Account:** Rs. 4,352.
- **RuPay Cards Issued:** 36.14 crore.

Digital Transactions:

- **Total Transactions:** Increased from 2,338 crore in FY 2018-19 to 16,443 crore in FY 2023-24.
- **UPI Transactions:** Increased from 535 crore in FY 2018-19 to 13,113 crore in FY 2023-24.
- **RuPay Card Transactions:** Increased from 67 crore in FY 2017-18 to 96.78 crore in FY 2023-24.

Pradhan Mantri Jan Dhan Yojana

- PMJDY creates a platform for universal access to banking facilities with at least one basic banking account for every household, financial literacy, and access to credit, insurance, and pension facilities.



Eligibility:

- The applicant should be an Indian National.
- The applicant should be aged between 18 and 59 years.
- If minors above ten years apply, they will require support from their legal guardians to administer their PMJDY account.

Basic tenets of the scheme

- **Banking the unbanked** - Opening of basic savings bank deposit (BSBD) account with minimal paperwork, relaxed KYC, e-KYC, account opening in camp mode, zero balance & zero charges
- **Securing the unsecured** - Issuance of Indigenous Debit cards for cash withdrawals & payments at merchant locations, with free accident insurance coverage of Rs. 2 lakhs
- **Funding the unfunded** - Other financial products like micro-insurance, overdraft for consumption, micro-pension & micro-credit

Key features of PMJDY

- BSBD account can be opened in any bank branch or **Business Correspondent (Bank Mitra)** outlet, by persons not having any other account.
- Focus on every unbanked adult.
- Free accidental insurance cover on RuPay cards increased from Rs. 1 lakh to 2 lakhs for PMJDY accounts after 28.8.2018.
- Rs 10,000 Overdraft (OD) facilities and upper age limit for ODis 65 years.
- PMJDY accounts are eligible for Direct Benefit Transfer, Pradhan Mantri Jeevan Jyoti Bima Yojana, Pradhan Mantri Suraksha Bima Yojana, Atal Pension Yojana, Micro Units Development & Refinance Agency Bank scheme.

Significance:

- **Promoting Equitable Growth:** PMJDY fosters **Financial Inclusion (FI)**,

leading to inclusive growth through the provision of affordable financial services to low-income and disadvantaged segments of the population.

- The Jan Dhan–Aadhaar–Mobile (JAM) architecture has enabled seamless transfer of government benefits to common citizens' accounts.
- **Bringing Savings to Formal Systems:** PMJDY has brought the savings of the poor into the formal financial system, freeing them from usurious money lenders.
- **Empowering Women:** Approximately 6% of Jan Dhan accounts belong to women, promoting financial empowerment.
- Overdrafts are available in only one account per household, preferably lady of the household.

Union Minister to inaugurate the 18th Divya Kala Mela - an embodiment of the 'Vocal for Local' movement - in Ranchi

Divya Kala Mela

Historical Context and Evolution:

- **Inception and Evolution:** Launched in 2022, the Divya Kala Mela is a recurring event with the 18th edition marking its continuation. The event has been held in major cities including Delhi, Mumbai, Bhopal, and Guwahati, each contributing to its growth and reach.
- **Growth Trajectory:** Over the years, the Mela has expanded in scope and scale, drawing more participants and a larger audience, reflecting its increasing significance.

Objectives and Purpose:

- **Empowerment of PwDs:** The primary objective is to empower Persons with Disabilities (PwDs) by providing them a platform to display and sell their

products, thus promoting their economic independence.

- **Cultural Promotion:** The event serves to highlight and celebrate India's diverse cultural heritage through the craftsmanship of Divyang artisans.
- **Social Inclusion:** Aims to promote social inclusion by showcasing the talents and skills of PwDs, challenging stereotypes and encouraging greater societal acceptance.

Alignment with Government Initiatives:

- **Vocal for Local Movement:** The event supports the "**Vocal for Local**" initiative, which encourages the promotion of locally made products and supports the growth of local economies.
- **Supportive Policies:** Reflects various government policies aimed at enhancing the livelihoods of PwDs, including the Rights of Persons with Disabilities Act, 2016, and other initiatives aimed at inclusion and empowerment.

Vocal for Local

- It is an initiative of NITI Aayog under its **Aspirational Blocks Programme** to encourage a spirit of self-reliance among the people and propel them towards sustainable growth and prosperity.
- As a part of this initiative, local products from 500 aspirational blocks have been mapped and consolidated under the Aakanksha brand.
- **Aakanksha** is an umbrella brand, which could be supplemented into multiple sub-brands that have the potential to create an international market.
- In order to encourage these products, a dedicated window for the Aspirational Blocks Programme under the brand name Aakanksha has been established on the **Government e-Marketplace (GeM)** portal.
- The partners will also provide technical and operational support for the facilitation of e-commerce onboarding, establishing linkages, financial/digital

literacy, documentation/certification, and skill enhancement, among others.

Benefits of Vocal for Local Initiative

- Encouraging the purchase of locally made products stimulates monetary increase with the aid of helping nearby corporations, artisans, and producers.
- Small and medium-sized firms are the spine of India and the Vocal for Local helps in strengthening these businesses by providing them with improved visibility and market accessibility.
- Local production usually implies less transportation and carbon footprint, contributing to environmental sustainability.
- Many domestically made products in India are deeply rooted in the country's rich cultural history and traditions. The initiative helps maintain indigenous crafts and traditions, safeguarding cultural range.
- Vocal for Local fosters an experience of community empowerment by encouraging people to take part in their local products and organizations.

Challenges and Opportunities for 'Vocal for Local'

- One of the primary challenges is ensuring that locally produced goods meet the quality standards and can compete with imported products. Local businesses may need to invest in research and development, upgrade their production processes, and adopt best practices to enhance the quality and competitiveness of their offerings.
- The second major challenge will be to match the market competitive pricings, if the products have to survive. By showcasing the unique craftsmanship, cultural heritage, and eco-friendly practices associated with local products, businesses can tap into the growing demand for authentic and sustainable goods.

Special Skill Development Project Empowering Adolescent Girls and Women for High-Demand, Non-Traditional Careers

Highlights:

Pilot Project Initiation:

- A collaborative initiative by MSDE and MWCD to empower adolescent girls and women in 27 aspirational districts across nine states.
- This pilot is the first phase of a strategic partnership aiming for a nationwide program.

Training Focus:

- Conducted under **Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0**.
- Targets around 4000 beneficiaries with training in non-traditional and high-demand job roles.
- Emphasis on digital and soft skills development.

Support Services:

- Comprehensive support including counselling, career guidance, financial and digital literacy, and job placement assistance.
- Connections to e-commerce platforms and sensitization on **POSH** (Prevention of Sexual Harassment).
- ₹1,000 per month for transport conveyance to female trainees via **Direct Benefit Transfer (DBT)**.

Goals and Vision:

- Increase women's participation in the formal economy from **37% to 60%**, aligning with developed nations.

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0.

- **Launched:** PMKVY was initially launched in **2015**. PMKVY 4.0 is the latest iteration of this flagship scheme.
- **Objective:** To provide skill development training to the youth, making them more employable and equipped for the job market.
- **Target Group:** Primarily aimed at youth between the ages of 15 and 45.

Key Features of PMKVY 4.0

- **Focus on Industry Needs:** PMKVY 4.0 emphasizes aligning training programs with industry needs, ensuring that the skills imparted are in demand.
- **Enhanced Training Models:** Includes both short-term training and **recognition of prior learning (RPL)** to cater to various needs and backgrounds.
- **Integration with Digital Platforms:** Increased use of digital tools and platforms for training and assessment to improve accessibility and efficiency.
- **Industry Partnerships:** Strengthened collaborations with industry partners for better alignment with market demands and job placement.

Challenges

- **Quality of Training:** Ensuring the consistency and quality of training across different centers.
- **Industry Integration:** Maintaining strong industry linkages to ensure that training remains relevant to market needs.
- **Scalability:** Effectively scaling the program to cover diverse geographic and socio-economic backgrounds.

Cabinet accords approval for progressive expansion of Central Sector Scheme of "Agriculture Infrastructure Fund"

Key highlights of the expanded **Agricultural Infrastructure Fund (AIF) scheme**:

- **Expansion of Scope:** The AIF scheme has been broadened to include new types of projects and beneficiaries to enhance agricultural infrastructure.
- **Viable Farming Assets:** The scheme now covers "viable projects for building community farming assets," aimed at boosting community farming capabilities and sustainability.
- **Integrated Processing Projects:** Includes integrated primary and secondary processing projects. Standalone secondary projects will be covered under MoFPI schemes.
- **Convergence with PM-KUSUM: Component-A** of the PM-KUSUM scheme can now be combined with AIF for farmers, **Farmer Producer Organizations (FPOs)**, cooperatives, and panchayats to promote clean energy solutions in agriculture.
- **Credit Guarantee Expansion:** Credit guarantee coverage for FPOs will be extended through NABSanrakshan Trustee Company Pvt. Ltd., in addition to CGTMSE, to enhance financial security.
- **Achievements and Impact:** Since its launch in 2020, AIF has sanctioned Rs. 47,575 Crore for 74,508 projects, creating infrastructure like warehouses, cold stores, and silos. This has increased storage capacity by 500 LMT and created over 8.19 lakh rural jobs.

Agriculture Infrastructure Fund

- AIF is a financing facility launched in July 2020.
- It aims to provide all-around financial support to the farmers, agri-entrepreneurs, farmer groups like Farmer Producer Organisations (FPOs), Self Help Groups (SHGs), Joint Liability Groups (JLGs) etc. and many others to

create post-harvest management infrastructure and build community farming assets throughout the country.

Features:

- AIF provides support of 3% interest subvention, credit guarantee support through Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for loan of up to Rs. 2 crore and facility of convergence with other Central and State Government schemes.
- AIF is helping in reducing post-harvest losses by creating and modernising agriculture infrastructure, which includes primary processing centres for vegetables, hi-tech hubs for rental of agricultural machinery.

Benefits of AIF Scheme

- **Income Boost for Farmers-** Financial support and investment in agriculture through AIF will lead to increased productivity of farms and boost the income for farmers.
- **Reduction in Post-Harvest Losses-** AIFs if utilized appropriately can improve infrastructure, logistics, and storage, reducing post-harvest losses and it will ensure better returns for farmers.
- **Improve the market infrastructure-** Improved marketing infrastructure enables farmers to sell directly to a larger consumer base, reducing dependency on intermediaries and enhancing market access.
- **Encourage Community Farming-** AIFs supporting community farming assets lead to optimized input utilization and substantial savings for farmers, enhancing overall productivity.

Limitations of AIF Scheme

- **Viability Concerns for FPOs-** Exploring the potential benefits of the scheme for Farmer Producer Organizations (FPOs) and questioning their viability.

- **Data Transparency on Institutional Funding-** Highlighting the absence of reliable data on fund flow from institutions like NABARD, SFAC, and State agencies to FPOs, raising transparency concerns.
- **Lack of Convergence with Existing Schemes-** Examining the absence of a mechanism for convergence with existing schemes, such as the PEG scheme, which has attracted private and corporate capital into agribusiness.
- **eNAM Integration Challenges for APMCs-** Discussing the potential limitations of expanding the scope of Agricultural Produce Market Committees (APMCs) by integrating them into the **electronic National Agricultural Market (eNAM)** structure without a monitoring and evaluation cell in place.

Suggestive Measures for AIF Scheme

- **Enhancing Awareness and Information Dissemination-** The government should intensify efforts to raise awareness about the AIF scheme among its intended beneficiaries.
- Utilizing print and electronic media, social platforms, webinars, workshops, and roadshows can effectively communicate information.
- Leveraging existing networks like Krishi Vigyan Kendras, Common Service Centres, and Agricultural Technology Management Agencies can facilitate grassroots outreach.
- **Improving Coordination and Convergence-** The government should ensure better coordination and convergence among various stakeholders implementing the AIF scheme.
- Regular meetings, consultations, reviews, and feedback mechanisms are essential.
- Establishing a single-window system for project clearances and approvals, along with harmonizing norms and standards for post-harvest infrastructure across states and sectors, is crucial.

Department of Economic Affairs amends Securities Contracts Regulation Rules (SCRR), 1956, facilitating direct listing of securities by public Indian companies on International Exchanges of GIFT IFSC

Amendment Overview:

- **Objective:** Ease listing requirements for Indian companies on international exchanges within **International Financial Service Centres (IFSCs)**.

Regulatory Framework-

Schemes Involved:

- 'Direct Listing of Equity Shares of Companies Incorporated in India on International Exchanges Scheme' under the Foreign Exchange Management (Non-Debt Instruments), 2019.
- Companies (Listing of Equity Shares in Permissible Jurisdictions) Rules, 2024.

Minimum Public Offer Requirements:

- **Threshold:** At least 10% of the post-issue capital must be offered and allotted to the public for companies listing solely on international exchanges in IFSCs.

Continuous Listing Requirements:

- **Requirement:** Set at 10% as per Rules 19 (2)(b) and 19A of the SCRR.

Securities Contracts Regulation Rules (SCRR), 1956

- The Securities Contracts Regulation Act, 1956 (SCRA) is a legislation in India

designed to oversee and control the functioning of securities markets and stock exchanges. Its primary objectives are to ensure fair and ethical trading practices, safeguard the interests of investors, and promote systematic growth within the securities market.

Significance of SCRA, 1956

Recognition of Stock Exchanges

- Section 3 outlines how stock exchanges can get government recognition.
- **SEBI can also grant recognition.**
- The government ensures that stock exchange rules protect investors and ensure fair dealings.

Corporatization of Stock Exchanges

- Amended in 2004, Section 4(B) requires stock exchanges to become corporate entities.
- Ownership and management must be separate from trading rights.
- The public must hold at least 51% of the stock exchange's shares.

Central Government's Control

- Sections 6, 7, and 8 allow the government and SEBI to oversee stock exchanges.
- They can act to support investment growth, trade protection, and public welfare.
- Stock exchanges must submit periodic returns and follow set rules for good governance.

Provisions Related to Listing of Securities

- The SCRA sets rules for listing securities on recognized stock exchanges.
- Section 21 requires compliance with listing conditions.
- Section 21A allows for delisting securities based on specific grounds.

GIFT IFSC

- The Gujarat International Finance Tec-City International Financial Services Centre (**GIFT IFSC**) is an International Financial Services Centre (IFSC) created to serve as a financial centre and hub, supporting major international financial activities including banking, insurance, capital market activities, asset management etc, besides providing world class infrastructure.
- It was established by the Gujarat Government and supported by the Government of India. The GIFT IFSC is the first IFSC in India and it was operationalised in April 2015 when the Reserve Bank of India granted license to operate an International Financial Services Centre (IFSC) within GIFT IFSC.

ENVIRONMENT

The State of the World's Mangroves 2024

- They Grow along coasts in salt marshes, tidal creeks, mud flats and estuaries.
- Salt-tolerant plant communities found in tropical and subtropical intertidal regions characterized by high rainfall (between 1,000-3,000 mm) and temperature (ranging between 260C-350C).
- West Bengal has largest mangrove cover in India. (India State of Forest Report, 2021)
- The latest world map developed by the **GLOBAL MANGROOVE WATCH**, provides a six fold improvement in spatial resolution.
- It maps 147,256 km² of mangroves in 2020, adding data for six new territories.
- **Southeast Asia holds** about **one-third of the world's mangroves**, with Indonesia alone accounting for 21%

Benefits of Mangroves

- Support variety of plants and animals e.g. Over 5,700 plant/animal species have been recorded in Indian mangroves.
- Acts as carbon sinks i.e. store an average of 394 tonnes of carbon per hectare. Protect coastal regions from disasters i.e. Reduce flood depths by 15- 20%, and over 70% in some areas.
- Fish and seafood sourced from mangrove ecosystems are often rich in essential nutrients like protein, omega-3 fatty acids, vitamins (e.g. vitamins D and B12), and minerals (e.g., iron, zinc). Improves water quality through filtering pollutants and trapping sediments.

Mangrove Status in India:

- The report reveals that large swathes of mangrove forests along India's southern coast are **critically endangered**.

- In particular, mangroves in the **Lakshadweep archipelago and along the coast of Tamil Nadu face rising sea levels due to global warming.**
- On India's western seaboard, extending from **Gujarat to Kerala, mangroves are vulnerable to collapse.**
- The GMA attributes these vulnerabilities to a combination of **natural threats, such as tropical storms, and human activities like shrimp aquaculture.**
- According to the India State of Forest Report, 2021, **India's mangrove cover spans approximately 4,992 sq km.**
- **West Bengal leads with the largest mangrove area of 2,114 sq km, followed by Gujarat** with 1,177 sq km, primarily located in the Gulf of Kutch and Gulf of Khambhat.
- The report highlights the **significant impact of shrimp aquaculture, which has expanded rapidly into mangrove areas**, particularly in Andhra Pradesh, West Bengal, and Gujarat, causing widespread destruction of these vital ecosystems.

Eco sensitive areas in Western Ghats

Centre reissues draft notification on Eco sensitive areas in Western Ghats.

Main highlights

- The draft notification proposes to declare 9,993.7 sq. km in Kerala, including 13 villages in two talukas of the landslide-hit district, ecologically sensitive.
- Overall, the notification includes 449 sq. km in Gujarat, 17,340 sq. km in Maharashtra, 1,461 sq. km in Goa, 20,668 sq. km in Karnataka, 6,914 sq. km

in Tamil Nadu, and 9,993.7 sq. km in Kerala in the proposed ESA.

- The draft notification suggests a complete ban on mining, quarrying, and sand mining, with existing mines to be phased out within five years “from the date of issue of the final notification or on the expiry of the existing mining lease, whichever is earlier”.
- It also prohibits new thermal power projects. Existing projects can continue to operate, but expansion is not allowed.
- Large-scale construction projects and townships are also prohibited, except for repairing and renovating existing buildings.

Eco-Sensitive Areas (ESAs)

- Eco-Sensitive Areas (ESAs) are regions that require special protection because of their ecological significance.
- The purpose of designating these areas is to conserve biodiversity, protect environmental values, and regulate activities to prevent ecological damage.
- **Western Ghats:** Spanning **six states** in India: Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu, is an important example of ESA, due to its rich biodiversity, unique ecosystems, and the presence of numerous endemic species.

Related committees-

1. Gadgil Committee (Western Ghats Ecology Expert Panel - WGEEP)

- Established: March 2010

Key Recommendations:

- Division of the Western Ghats into Ecologically Sensitive Zones (ESZ1, ESZ2, ESZ3) with varying levels of restrictions.

Prohibited Activities: No mining, thermal power plants, or large-scale industrial activities in **ESZ1**.

2.Kasturirangan Committee (High-Level Working Group on Western Ghats)

- Established: August 2012

Key Recommendations:

- Identification of **37% of the Western Ghats** as Ecologically Sensitive Area (ESA), divided into natural and cultural landscapes.

Prohibited Activities: Ban on mining, quarrying, and sand mining in the ESA.

- Emphasis on balancing ecological conservation with sustainable development.

Asiatic lions

- Asiatic lion (*Panthera Leo persica*) is a sub-species of lion that is found **only in the Gir Forest National Park** and Wildlife Sanctuary in Gujarat, India.
- The Asiatic lion is one of the most endangered big cats in the world, with a population of less than 700 individuals in the wild.
- The Asiatic lion is found only in the Gir Forest National Park and Wildlife Sanctuary, which is a protected area covering an area of about 1412 sq. km in Gujarat.
- The Asiatic lion is slightly smaller than its African counterpart, with a distinctive fold of skin on its belly and a shorter, less bushy mane.
- **Food Habits:** Asiatic Lions are mainly dependent on **Chital, Nilgai, Sambhar, Buffaloes and Goats** for food. Sometimes they hunt smaller animals and if the

need arises they kill the livestock or camel found in the neighbouring areas of Gir National Park.



Threats:

- Poaching
- Habitat fragmentation
- Lions die by falling into the unguarded wells around the Gir Protected Area.

- The threat of genetic inbreeding arises from a single population in one place.

Conservation Initiatives

- WWF supported barricading of 180 wells with local partners and Gujarat Forest Department.
- This initiative led to doubling the subsidy by the Gujarat government, and many farmers barricaded the wells with government support.
- To strengthen the efforts of Gir Protected Area towards managing conflict and poaching, WWF provided need-based support.
- WWF-India conducted a study to assess habitat change over a period of 20 years.

Gir National Park

- Gir National Park and **Wildlife Sanctuary is located in the Junagadh district of Gujarat.**
- It was declared as a sanctuary in 1965 and a **national park in 1975.**
- The Gir Forests is the largest compact track of dry deciduous forests in the semi-arid western part of India.
- Gir is often linked with "**Maldharis**" (**a traditional pastoral people**) who have survived through the ages by having a symbiotic relationship with the lion.

After 61 years, four-ringed butterfly resurfaces in India

- **Butterfly Species:** The Great Four-Ring (*Ypthima cantliei*), a butterfly belonging to the Satyrinae subfamily, has been rediscovered in India after 61 years.
- **Historical Records:** The species was last recorded in Margherita, Assam, in 1957.
- **Location:** The butterfly was observed in **Namdapha National Park, Arunachal Pradesh**.
- **Publication:** The findings were published by the **Bombay Natural History Society (BNHS)**.
- **Namdapha National Park spans** 1,985 sq. km in the Changlang district of Arunachal Pradesh, **India's easternmost tiger reserve, bordering Myanmar**. It has an elevation range from 298.7 meters to 4,498.8 meters above sea level.
- **Appearance:** The butterfly features dull brown-grey wings with three yellow-ringed eye spots (ocelli) on the hind wing and a large bipupilled apical ocellus with an obscure yellow ring on the forewing.
- **Genus Ypthima:** Part of **the Nymphalidae family**, which includes around 6,000 butterfly species. India has 35 *Ypthima* species, with 23 found in the northeast.
- **Global Diversity: Highest Ypthima diversity is in China** (Yunnan and Sichuan), with significant numbers also in **Nepal, Bhutan, and Myanmar**.



SC panel: Bar pvt vehicles in Sariska reserve, raise tiger protection force.

Sariska Tiger Reserve is located in **Aravalli hills** and forms a part of the Alwar District of Rajasthan. It was declared a wildlife sanctuary in 1955 and was declared a tiger reserve later in 1978, making it a part of India's **Project tiger**.

- It encompasses ruined temples, forts, pavilions and a palace.
- **Kankarwadi Fort** is located in the centre of the reserve. It is said that **Mughal emperor Aurangzeb** had **imprisoned his brother Dara Shikoh** at this fort in the struggle for succession to the throne.
- It also houses a famous **temple of lord Hanuman at Pandupole** related to Pandavas.



Flora:

- Nearly 90% of the area in the sanctuary is covered with **dhok trees**.

- Other species found include salar, kadaya, gol, ber, Banyan, gugal, bamboo, kair, adusta, etc.

Fauna: A variety of other wild animals, like the leopard, sambhar, chital, nilgai, four-horned antelope, wild boar, rhesus macaque, langur, hyena, and jungle cats are found in the reserve apart from the tiger.

Neelakurinji that blooms once in 12 years included in Red List of threatened species

Neelakurinji (***Strobilanthes kunthiana***), has been included on the IUCN (International Union for Conservation of Nature) official Red List of threatened species. This is the first ever Global Red List assessment for this flagship species of the montane grasslands of southwest India.

Neelakurinji Flowers

- In Neelakurinji, '**Neela**' means blue, and '**Kurinji**' refers to the flowers.
- At maturity, the light blue colour of the flower's changes to purple bluish.
- The flowers give the '**Nilgiri Mountain Range**' its name.
- The plant is named after the famous **Kunthi River** which flows through Kerala's Silent Valley National Park, where the plant occurs abundantly
- It usually grows at an elevation of 1,300-2,400m.

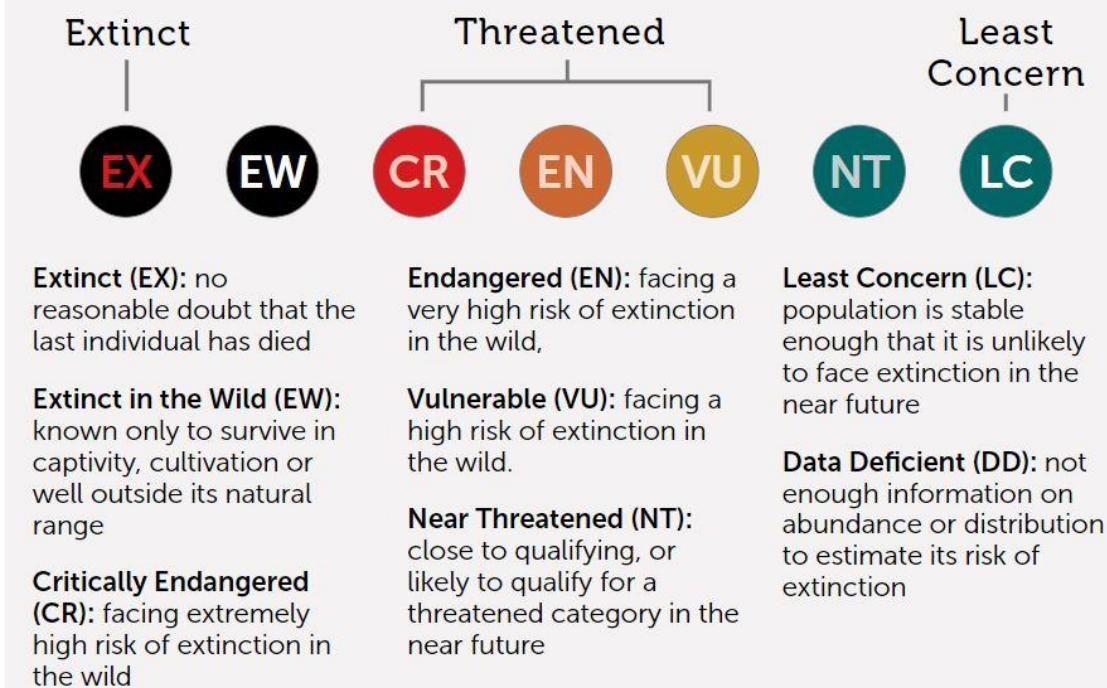
The Habitats of Neelakurinji

- The Neelakurinji is not limited to the Western Ghats but can also be found in the **Eastern Ghats' Shevroys**, the Annamalai hills of Idukki district, Agali hills of Palakkad in Kerala, and **Sandur hills of Bellary** district in Karnataka. In 2021, Neelakurinji flowers were found blooming in the **Biligiri Ranganathaswamy Temple (BRT) Tiger Reserve** in the Chamarajanagar District of Karnataka.

The Conservation Efforts for Kurinji

- The **Kurinjimala Sanctuary** in the Vallavada and Kottakamboor villages of the Idukki district is dedicated to preserving the Kurinji plant. The sanctuary spans 32 square kilometres and conducts various campaigns and events to promote ecosystem conservation.
- The **Kurinji Andavar Temple** situated in Kodaikanal, Tamil Nadu, dedicated to God Murugan, also plays a crucial role in the conservation of these plants.

THE RED LIST CATEGORIES



IUCN Red List

- The IUCN Red List is the foremost global resource for assessing the risk of extinction among animals, fungi, and plant species.
- Accessible to all, it serves as a crucial indicator of global biodiversity health, it offers comprehensive insights into species' characteristics, threats, and conservation measures, playing a pivotal role in shaping informed conservation decisions and policies.
- The IUCN Red List Categories **define the extinction risk of species assessed**. Nine categories extend from NE (Not Evaluated) to EX (Extinct). Critically Endangered (CR), Endangered (EN) and Vulnerable (VU) species are considered to be threatened with extinction.

PM Modi to release 109 climate resilient crop seeds

Key Highlights:

- **Release:** PM Modi will release 109 new crop seed varieties developed by **ICAR**.
- **Key Traits:** High-yielding, climate-resilient, bio-fortified, and water-efficient.
- **Crops:** 34 field crops (e.g., cereals, millets, oilseeds) and 27 horticultural crops (e.g., fruits, vegetables, spices).
- **Event:** Takes place at India Agricultural Research Institute, New Delhi.
- **Objective:** Direct benefits of agricultural research to farmers.

Climate Resilient Farming:

- It means the incorporation of adaptation, mitigation and other practices in agriculture which increases the capacity of the system to respond to various climate related disturbances by resisting damage and recovering quickly.
- It will essentially involve judicious and improved management of natural resources viz., land, water, soil and genetic resources through adoption of best

practices.

Significance:

- Reduces hunger and poverty in the face of climate change for forthcoming generations.
- These practices can alter the current situation and sustain agricultural production from the local to the global level.

Steps taken for Climate resilient farming



National Innovations in Climate Resilient Agriculture (NICRA): It has been launched by Indian Council of Agricultural Research (ICAR).



The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT): aims to improve agri-food systems and tackles environmental degradation.



Paramparagat Krishi Vikas Yojana and Soil Health Card scheme has been launched for Soil Health Management and promotion of organic farming



Per Drop More Crop: It has been launched under **Pradhan Mantri Krishi Sinchayee Yojana** to enhance water use efficiency.



The National Mission for Sustainable Agriculture (NMSA): Under it Rainfed Area Development (RAD) scheme is being implemented.



Food & Agriculture for Sustainable Transformation (FAST) Partnership: launched at **COP27 (Sharm el-Sheikh, Egypt)** to transform agriculture and food systems for people, climate, and nature.

Indian Council of Agricultural Research (ICAR)

- ICAR is an **autonomous** organisation under the **Department of Agricultural Research and Education (DARE)**, Ministry of Agriculture and Farmers Welfare.
- **Earlier Name:** ICAR was formerly known as **Imperial Council of Agricultural Research**.
- **Mandate:** The ICAR has its headquarters in New Delhi. The Council is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country.

Three more Ramsar wetland sites now in India, taking total to 85

New Ramsar Sites:

3. Nanjarayan Bird Sanctuary (Tamil Nadu)
4. Kazhuveli Bird Sanctuary (Tamil Nadu)
5. Tawa Reservoir (Madhya Pradesh)

Total Ramsar Sites in India: 85

Total Area Covered: 13,58,068 hectares

Recent Addition Trend:

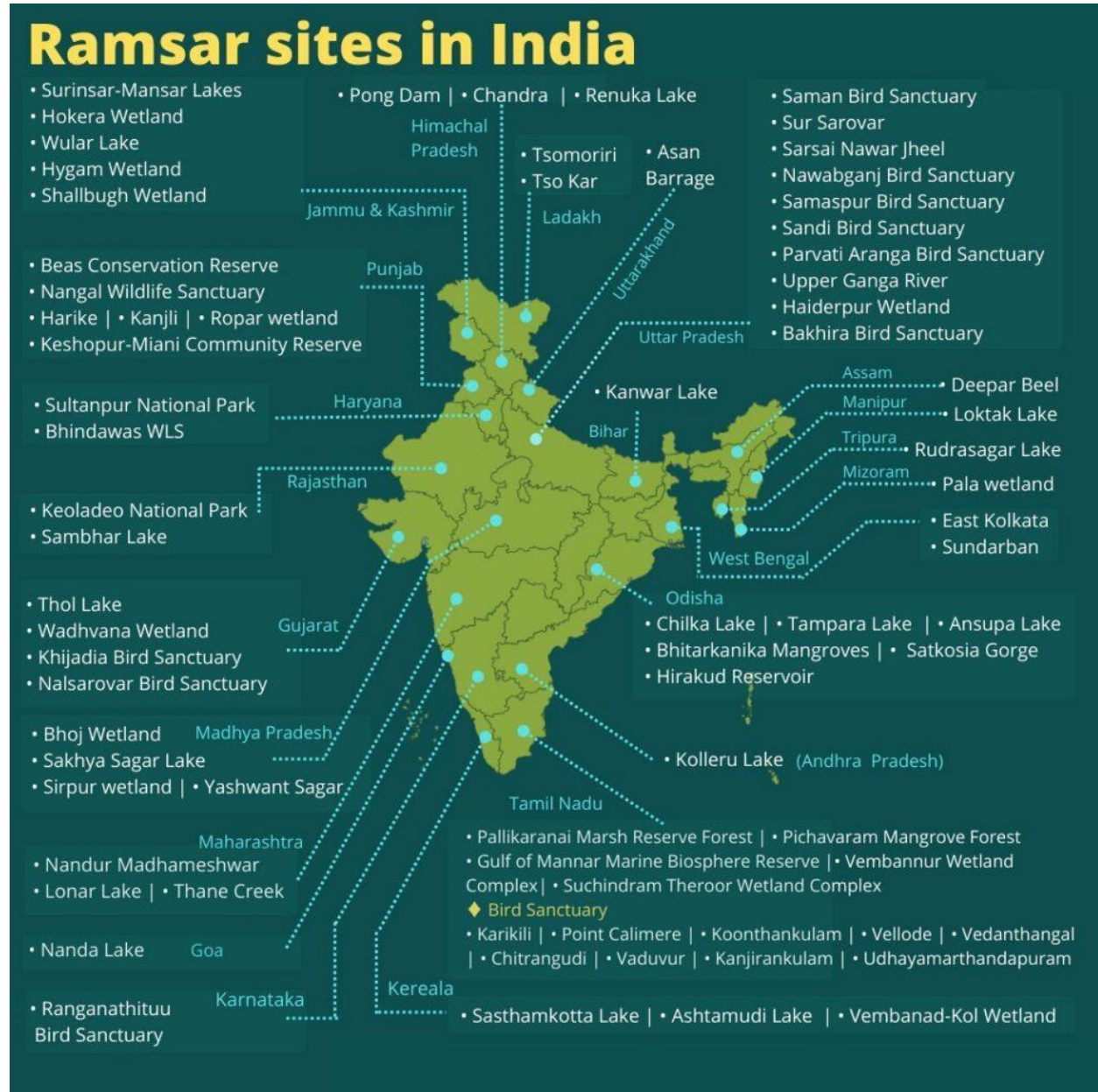
- 26 sites from 1982 to 2013
- 59 sites from 2014 to 2024

States with Most Ramsar Sites:

- Tamil Nadu: 18
- Uttar Pradesh: 10

India's Ramsar Wetlands:

- Cover about 10% of the total wetland area in India
- Spanning 18 states



Ramsar Convention on Wetlands

- The term was coined when the International Treaty for the Conservation and Sustainable use of Wetlands was signed at a city of Iran called Ramsar in 1971.
- It is also known as the Convention on Wetlands.
- The negotiations for the convention started in the 1960s by the different countries and NGOs for the protection of wetland habitats of migratory water birds. Finally, it came into force in 1975.

Ramsar Sites

- Any Wetland site which has been listed under the Ramsar Convention that aims to conserve it and promote sustainable use of its natural resources is called a Ramsar Site.
- At the time of joining the Convention, each Contracting Party undertakes to designate at least one wetland site for inclusion in the List of Wetlands of International Importance.
- The inclusion of a “Ramsar Site” in the List embodies the government’s commitment to take the steps necessary to ensure that its ecological character is maintained.

India's Participation: India became a signatory to the Ramsar Convention in 1982. India has 82 Ramsar Sites, highlighting its commitment to preserving biodiversity and managing water resources.

Significance of Ramsar Sites in India: These wetlands play a critical role in providing water security, supporting agriculture, fisheries, and livelihoods. They control floods and act as habitats for a vast array of flora and fauna, including several endangered species.

Centre plans to start e-waste audit, impose penalty as environment compensation

E-Waste (Electronic Waste) refers to discarded electrical or electronic devices. This includes a wide range of products such as computers, mobile phones, televisions, refrigerators, and other gadgets that are no longer in use or are obsolete.

Concerns Associated with E-Waste:

1. Environmental Impact:

- **Toxic Components: E-waste** contains hazardous materials like lead, mercury, cadmium, and brominated flame retardants. When improperly disposed of, these substances can leach into the soil and water, causing significant environmental damage.
- **Pollution: Burning** e-waste or landfilling can release toxic fumes and pollutants into the air, impacting air quality and contributing to health problems.

2. Health Risks:

- **Exposure to Toxins: Workers** in informal recycling sectors and communities near e-waste disposal sites may face health risks due to exposure to harmful chemicals and heavy metals.
- **Long-term Health Effects:** Chronic exposure to these toxic substances can lead to serious health conditions, including respiratory problems, neurological damage, and cancer.

3. Resource Wastage:

- **Loss of Valuable Materials:** E-waste often contains valuable materials

like gold, silver, and rare earth metals. Improper disposal means these materials are wasted rather than recovered and reused.

4. Informal Recycling:

- **Unregulated Practices:** In many regions, e-waste is processed by informal recyclers who may use unsafe and environmentally damaging methods.

Disposal of E-Waste:

1. Reuse:

- **Refurbishment:** Electronic devices can be repaired or refurbished for reuse. This extends their lifespan and reduces the need for new products.
- **Donation:** Working devices can be donated to charities, educational institutions, or other organizations.

2. Recycle:

- **Material Recovery:** Recycling involves extracting valuable materials from e-waste through processes like shredding, separating, and refining. This helps in recovering metals and reducing the environmental impact.
- **Certified Facilities:** E-waste should be sent to certified e-waste recycling facilities that follow proper environmental and safety standards.

3. Proper Disposal:

- **Take-back Programs:** Many manufacturers and retailers offer take-back

programs for electronic devices, ensuring they are recycled responsibly.

- **E-Waste Collection Events:** Community events and designated drop-off centers help facilitate the proper disposal of e-waste.

Regulations and Rules:

1. National and International Regulations:

- **The Basel Convention:** An international treaty that regulates the movement of hazardous waste, including e-waste, across borders, ensuring environmentally sound management.
- **EU Waste Electrical and Electronic Equipment Directive (WEEE):** Establishes rules for the collection, treatment, and recycling of e-waste in the European Union.

2. Indian Regulations:

- **E-Waste Management Rules (2016):** In India, these rules provide a framework for the handling, disposal, and recycling of e-waste. Key provisions include:
 - **Extended Producer Responsibility (EPR):** Obligates producers to manage the lifecycle of their products, including collection and recycling.
 - **Collection and Recycling:** Establishes norms for setting up collection centers and authorized dismantlers/recyclers.
 - **Penalties:** Provides for penalties for non-compliance with e-waste management practices.

3. Local Regulations:

- **State and Municipal Regulations:** Various states and municipalities may have additional regulations and initiatives to manage e-waste more effectively

FSSAI Launches Project to Address Microplastic Contamination in Indian Food

Key Highlights:

Project Launch: FSSAI launched a project titled “Micro-and Nano-Plastics as Emerging Food Contaminants: Establishing Validated Methodologies and Understanding the Prevalence in Different Food Matrices” in New Delhi.

Objective: The project aims to develop and validate methods for detecting micro and nano-plastics in food, and to assess their prevalence and exposure levels in India.

Key Goals:

- Develop standard protocols for micro/nano-plastic analysis.
- Conduct intra- and inter-laboratory comparisons.
- Generate data on microplastic exposure levels among Indian consumers.

Collaborators: The project involves CSIR-Indian Institute of Toxicology Research (Lucknow), ICAR-Central Institute of Fisheries Technology (Kochi), and Birla Institute of Technology and Science (Pilani).

Context: This initiative addresses the growing concern of microplastic contamination in food highlighted by a recent FAO report, which pointed out their presence in common items like sugar and salt.

Impact: The findings will help in formulating effective regulations and safety standards specific to India, contributing to both national and global efforts to tackle microplastic contamination.

Microplastics:

- They are defined as plastics **less than five millimeters in diameter**—smaller in diameter than the standard pearl used in jewelry. It can be harmful to our ocean and aquatic life.
- Under the influence of solar UV radiation, wind, currents and other natural

factors, plastic fragments into small particles, termed microplastics (particles smaller than 5 mm) or nanoplastics (particles smaller than 100 nm).

Health Risks of Consuming Microplastics:

- **Toxicity:** Microplastics can carry harmful chemicals that may leach into the body.
- **Inflammation:** Potential to trigger inflammatory responses or immune issues.
- **Bioaccumulation:** Possible accumulation in the body and disruption of biological processes.
- **Unknown Long-term Effects:** Ongoing research needed to fully understand long-term health impacts.

Clean Ganga mission head flags slow pace of projects

Key Highlights-

- **Program:** National Mission for Clean Ganga (NMCG)
- **Total Sanctioned Funding:** ₹37,550 crore
- **Amount Spent (as of June 2024):** ₹18,033 crore
- **Sewage Infrastructure Projects Funding:** ₹15,039 crore
- **Expenditure Issue:** Slow pace, especially in Uttar Pradesh
- **Uttar Pradesh Spending:** ₹15.16 crore spent on six projects; ₹25 crore pending

National Mission for Clean Ganga (NMCG):

- It is a registered society under the Ministry of Jal Shakti, Government of India, to take measures for prevention, control, and abatement of environmental pollution in the river Ganga and to ensure continuous adequate flow of water so as to rejuvenate the river Ganga.

- It acted as the implementation arm of the **National Ganga River Basin Authority (NGRBA)**, which was constituted under the provisions of the Environment (Protection) Act (EPA), 1986.
- NGRBA has since been dissolved with effect from 7th October 2016, consequent to the constitution of the National Council for Rejuvenation, Protection, and Management of River Ganga (referred to as National Ganga Council).

Objectives of NMCG:

- To ensure effective abatement of pollution and rejuvenation of the river Ganga by adopting a river basin approach to promote inter-sectoral co-ordination for comprehensive planning and management and
- To maintain minimum ecological flows in the river Ganga with the aim of ensuring water quality and environmentally sustainable development.

Structure:

- NMCG has a two-tier management structure that comprises of Governing Council and Executive Committee. Both of them are headed by Director General, NMCG.
- The Executive Committee has been authorized to accord approval for all projects up to Rs.1000 crores.
- Similar to the structure at national level, State Programme Management Groups (SPMGs) acts as the implementing arm of State Ganga Committees.
- The Director General (DG) of NMCG is an Additional Secretary in Government of India.

Challenges Faced by NMCG

Land Acquisition:

- Several plants took time to be commissioned as **there were problems with land acquisition.**
- In many instances, the Detailed Project Reports (which prescribe all the steps necessary to execute a project, and the roles of agencies) needed revision.

Lack of Local Initiatives:

- State Governments are under the impression that **building treatment plants was entirely the Centre's responsibility.**
- Waste management, especially MSW segregation and recycling, is most effective when handled at the source.
- While there were plans to create a cadre of village and town-level volunteers to monitor water quality and support local bodies, the mission has faced challenges in effectively implementing these initiatives.

Inadequate Sewerage Coverage:

- Much of India's urban population resides outside sewerage networks, resulting in a substantial portion of waste not reaching STPs.

Improper Waste Disposal:

- The study by the Quality Council of India revealed that rubbish heaps are found near Ghats in numerous towns along the river, indicating improper waste disposal practices. This poses a threat to the cleanliness of the Ganga.

FSSAI urges states to establish inter-ministerial committee to focus on reducing pesticide use

Addressing the 44th meeting of the **Central Advisory Committee**, CEO, FSSAI, G. Kamala Vardhana Rao said, this initiative is aimed at ensuring agricultural practices remain safe and sustainable.

Pesticides

- Pesticide is any chemical or biological substance intended to prevent, destroy or control damage from pests which has *both agricultural and non-agricultural uses*.
- They also pose serious risks to human health and the environment, especially when they are misused, overused, or sold illegally.

Status of Pesticides in India

- **Stats of Pesticides Use:** According to FAO, India used over 61,000 tonnes of pesticides in 2020, which is relatively lower than that of Brazil, China, and Argentina.
- Currently, 104 pesticides are being manufactured in India among 293 registered pesticides.
- **Fourth Largest Producer:** India is the fourth largest producer of pesticides in the world. The Indian pesticides market was worth Rs 197 billion in 2018 according to a report by the database Research and Markets.
- **Major Exporting Destinations:** USA, Japan, China, and Brazil.
- **Exported Agrochemical:** The most prominent agrochemicals exported include Mancozeb, **Acephate**, Chlorpyrifos, Cypermethrin, and **Profenos**.
- **States Consuming Most Pesticides:** **Maharashtra** has consumed the most chemical pesticides in India in the past five years at 61, 138 tonnes, followed by UP and Punjab.

Concerns regarding uses of Pesticides

Harmful Effects on Farmers:

- Experts believe that chronic low-level pesticide exposure is associated with a broad range of nervous system symptoms such as headache, fatigue, dizziness, tension, anger, depression, and impaired memory, Parkinson's disease, and Alzheimer's disease, among others.

Harmful Effect on Consumers:

- Pesticides go up the food chain by working their way through the environment and into the soil or the water systems after which they are taken by aquatic animals or plants and ultimately humans. This process is called Biomagnification.

Harmful Effect on Agriculture:

- Continued use of pesticides for decades has contributed significantly to the current ecological, economic and existential crisis of the Indian agriculture sector.

Regulatory Issues:

- Although agriculture is a state subject, education, and research related to insecticides are governed by the **Insecticides Act, 1968**, which is a central act. Therefore, state governments do not have a direct role in amending this act.
- It is due to this that an estimated 104 pesticides that are still produced/ used in India, have been banned in two or more countries in the world.
- In 2021, non-profit **Pesticide Action Network (PAN)** International released a list of highly hazardous pesticides, of which over 100 pesticides are currently approved for use in India.

Way Forward

Regulatory Reforms:

- Strictly enforce regulations to curb the illegal sale and misuse of pesticides.
- Implement penalties for those found violating pesticide usage guidelines.

Government Support:

- Provide financial support to farmers to help them adopt safer and more sustainable agricultural practices.
- This could include subsidies for organic farming, integrated pest management, or the purchase of safer pesticides.

Community Awareness Programs:

- Conduct awareness campaigns at the community level to educate people about the risks associated with pesticide use.
- Involve local communities in monitoring and reporting cases of misuse or poisoning.

Regulations of Pesticides in India

- Pesticides are regulated in India through the Insecticides Act 1968 and Insecticides Rules 1971.
- **Insecticides Act, of 1968:** It was brought with a view of regulating the import, manufacturing, sale, transport, distribution, and use of insecticides and pesticides to prevent the risk to human beings and animals.
- The experiences in administering this act over the last five decades have exposed certain gaps.
- In this context, the Union Cabinet approved the **Pesticides Management Bill, 2020**.

Mega hydropower project on Siang

Upper Siang Multipurpose Storage Project

- The Upper Siang project is a proposed 11,000 MW hydropower project on the Siang River in Arunachal Pradesh.
- The Siang, originating near **Mount Kailash in Tibet (Tsangpo)**, flows over 1,000 km eastward, enters Arunachal Pradesh as the Siang, and later becomes the Brahmaputra in Assam.
- Initially proposed as two separate projects, it was consolidated into one larger project in 2017, to be built by the National Hydroelectric Power Corporation (NHPC), featuring a 300-metre high dam.

National Importance and Strategic Imperatives

- Officials emphasize the strategic importance of the Upper Siang project, particularly in response to China's plan for a 60,000 MW 'Super Dam' in Tibet's Medog County.
- This super dam's capacity would be nearly three times that of the world's largest hydropower station, the Three Gorges Dam on the **Yangtze River**.
- The Upper Siang project is seen as a necessary measure to counter potential water flow reductions caused by China's projects.

Environmental and Social Concerns

- Three anti-dam organizations—the Siang Indigenous Farmers Forum (SIFF), Dibang Resistance, and North East Human Rights—have voiced their concerns about the project's environmental and social impacts.
- The proposed mega dam threatens delicate ecosystems, wildlife habitats, and biodiversity.
- Additionally, activists worry about the displacement of local communities, particularly the **Adi tribe**. The project could submerge over 300 villages,

including the Upper Siang district headquarters of Yingkiong.

Local Resistance and Government Response

- Local resistance to the project is strong. SIFF activists expressed their concerns about the displacement of villages in the valley along the Siang.
- They noted that if the villages were submerged, residents would have nowhere to go since moving further uphill, where there is snow and ice, would be unfeasible.
- They pointed out that survival would be difficult there, as there would be no opportunities for farming or maintaining gardens.
- However, authorities have accelerated pre-construction activities, increasing the urgency among those resisting the project.
- NHPC officials have met with state leaders to discuss early commencement of Siang basin projects, and the Upper Siang district administration has held multiple meetings to lay the groundwork for a pre-feasibility survey.

Public Outreach and Concerns Over Framing

- The government is launching a massive public outreach campaign to drum up support for the project.
- NHPC has sanctioned a ₹325 crore CSR package for livelihood schemes and the development of health, education, and sports infrastructure.
- However, activists remain wary of the project being framed as a matter of national interest.
- They are particularly concerned about a provision in the Forest (Conservation) Amendment Act of 2023, which exempts strategic projects within 100 km of India's borders from clearance.

GEOGRAPHY

Cloudbursts in Himachal Pradesh

Cloudburst

- Cloudbursts are short-duration, intense rainfall events over a small area.
- It is a weather phenomenon with unexpected precipitation exceeding **100mm/h** over a geographical region of approximately **20-30 square km**.
- In the Indian Subcontinent, it generally occurs when a monsoon cloud drifts northward, from the Bay of Bengal or the Arabian Sea across the plains then on to the Himalaya that sometimes brings 75 millimetres of rain per hour.

Reasons behind frequent Cloudburst in Himalayan region:

- **Rugged topography: Mountainous** areas offer the terrain for moisture-laden air to rise swiftly along the mountain slopes.
- **Warming of oceans: Oceans** are warming up fast, as a result of which moisture-rich air reaches the Himalayan region leading to cloudburst. It is likely to occur more with an increase in moisture from the Indian Ocean.

Effects of Cloudbursts

Here are some of the most important consequences of a cloudburst:

- The most visible effect of a cloudburst is landslides. A rapid downward movement of a huge mountain landmass is termed a **landslide**. It results in loss of life and impacts vehicle traffic.
- **Mudslides** are also a very common effect of cloudbursts. It is a rapid flow of debris and dirt, which gets stronger and liquified with the addition of fast-

moving water.

- These natural disasters are not only harmful to human beings but can also destroy the rich flora and fauna of a region. As large swathes of forests get flooded, a large number of animals die, and trees get uprooted.
- **Land subsidence** is also a major consequence of cloudburst. Land subsidence means a rapid and sudden sinking or settling of the earth's surface.
- As cities, villages, and towns get destroyed by this natural disaster, another major impact that one can see is the large-scale Migration of Human beings . Therefore, it becomes challenging for the government to rehabilitate a huge displaced population in a short span of time.

Challenges with cloudbursts:

1. **Localized:** Due to their highly localized and short occurrence, most of the events go unreported, weakening the ability to understand these events in complete perspective.
2. **Prediction:** Most of the reported cloudbursts are in the interior of the Himalayas and hence predicting the location, amplitude and magnitude of such catastrophic events in advance remains a challenge.
3. **Inability of satellites:** Satellites lack the ability to detect cloudbursts because the resolution of their precipitation radars is considerably smaller than the area covered by each cloudburst event.
4. **Cost of Weather radars:** Although they can offer timely updates, their cost is quite high.

Coal India eyes lithium in Chile

Chile is home to half of the viable lithium reserves globally and is the world's **second-largest** lithium producer. It accounts for **about 36% of the global trade**.

Applications of Li metal-

- Lithium-ion batteries, rechargeable and lightweight, power the most-used electronic devices on the planet, from cell phones to laptops.
- The lithium battery allows surplus produced by photovoltaic solar panels to be stored more efficiently. These batteries can store between **95 and 99% of the energy** generated, while those of lead-acid which is still commonly used to store solar energy, only reach up to 85%.
- With the development of this technology, it is possible to store the energy that supplies electricity to regions that do not yet have this service.
- **Pharmaceuticals:** It is used as a mood stabilizer in the treatment of the bipolar disorder, depression, and other mental health conditions.
- **Aerospace and Military:** It is used in the aerospace and military industries to cool the temperature-sensitive components in space vehicles and military equipment, such as radar systems and missile guidance systems.
- **Lubrication:** It is used as an ingredient in high-temperature lubricating greases, due to its ability to withstand high temperatures and provide long-lasting lubrication.

Top Producers

- Lithium is found naturally in various minerals, including **spodumene, petalite, and lepidolite**.
- It is extracted from these minerals and refined into lithium metal or its

compounds.

- The top producers of lithium are **Australia, Chile, China, and Argentina.**
- Recently, a massive lithium deposit beneath **California's Salton Sea (US)**, holding an estimated **18 million tons of lithium**, was discovered.
- Lithium triangle made up of **Argentina, Chile, and Bolivia**—contain roughly half the world's known lithium.

Lithium-

- It is a delicate, white-silver alkali metal.
- It is the least dense metal and the least dense solid element under typical conditions.
- It never occurs freely in nature, but only in compounds, such as **pegmatitic** minerals, which were once the main source of Li.
- Due to its solubility as an ion, it is present in ocean water and is commonly obtained from **brines.**



Lithium Reserves in India

- The recently discovered lithium deposit is estimated to be **9 million tonnes in the Salal-Haimana area of the Reasi District of Jammu & Kashmir**, making it one of the largest deposits of lithium in the world.
- Earlier, researchers at the Atomic Minerals Directorate estimated lithium reserves of 14,100 tonnes in a small patch of land surveyed in **Southern Karnataka's Mandya district**.
- The Atomic Minerals Directorate for Exploration and Research, a unit of the Department of Atomic Energy, has identified 1,600 tonnes of lithium resources in the **Marlagalla area of Mandya district**.

Illegal mining, encroachments, deforestation a threat to Aravali as natural green wall

Geographical Details:

- Length: The Aravali range stretches 692 kilometres from Gujarat to Delhi through Rajasthan.
- Highest Peak: Guru Shikhar in Mount Abu, with an elevation of 1,722 meters.

Forest Area Change:

- Forest Area in 1999: 29,915 square kilometres.
- Forest Area in 2019: 29,210 square kilometers.
- Loss: 705 square kilometers of forest cover over the 20-year period.

Human Settlements:

- Percentage of Land in 1975: 4.5%.
- Percentage of Land in 2019: 13.3%.
- Increase: Significant growth in human settlements, indicating increased urbanization and land use changes.

Mining Area:

- Percentage of Land in 1975: 1.8%.
- Percentage of Land in 2019: 2.2%.
- Increase: Continued expansion of mining activities impacting the region.

Waterbodies:

- Percentage of Land in 1975: 1.7%.
- Percentage of Land in 1989: 1.9%.
- Later Trend: Waterbodies have decreased over time after an initial increase.

Carbon Flux:

- Positive Carbon Flux: Observed in areas with high rainfall and protected zones, indicating healthy carbon exchange and storage.
- Negative Carbon Flux: Noted in the central region near the Thar Desert, reflecting lower carbon sequestration and potential environmental stress.

Recommendations:

- LiDAR-based Drone Survey: Recommended for detailed mapping and monitoring of the Aravali range to detect and address illegal mining activities. LiDAR technology helps in creating high-resolution 3D models of the surface, which can be used to assess environmental changes and guide enforcement actions.
- Aravali Development Authority: Proposed to establish an independent body for devising and implementing strategies aimed at sustainable management and

preservation of the Aravali ecosystem.

- Ban on Mining: Suggested to halt further environmental degradation and protect the remaining ecological balance of the hills.

About the Aravalli Range:

- The Aravalli Range is one of the oldest mountain ranges in the world, stretching from **Gujarat to Delhi through Rajasthan**.
- It acts as a **natural green wall** in the north western part of India, forming an *ecotone zone* between the Thar Desert and the Gangetic Plain in a semi-arid environment.
- The range spans 692 km in length and varies in width from 10 km to 120 km, with over 500 hillocks. The highest peak is Guru Shikhar in Mount Abu, which is 1,722 meters above sea level.
- Rajasthan contains 80% of the range, while the remaining 20% is shared by Haryana, Delhi, and Gujarat.



Centre unveils new system to study weather, crop patterns

MoS Shri Bhagirath Choudhary launches the digital geo-spatial platform, Krishi-Decision Support System

Krishi-DSS Highlights:

4. **First-of-Its-Kind:** A pioneering geospatial platform tailored for Indian agriculture.
5. **Comprehensive Data Access:** Provides satellite images, weather information, reservoir storage, groundwater levels, and soil health data.
6. **Advanced Modules:**
 - Crop Mapping and Monitoring: Analyzes crop patterns over time for better crop rotation and sustainable practices.
 - Drought Monitoring: Offers near real-time data on soil moisture, water storage, crop conditions, and dry spells.
 - Crop Weather Watch: Tracks weather impacts on crops, harvest status, and crop residue burning.
7. **Field Parcel Segmentation:** Accurately segments field parcels to cater to specific needs and targeted interventions.
8. **Soil Information System:** Provides detailed soil data (type, pH, health) to assess crop suitability and land capability.
9. **Ground Truth Data Library:** Supports innovation with essential resources like ground truth data and spectral libraries for research and industry.
10. **Holistic Solutions:** Includes flood impact assessment, crop insurance, and farmer-centric advisories for disaster warnings (pest attacks, heavy rain, hail storms).
11. **Empowering Agriculture:** Aims to build a resilient, sustainable agricultural framework, enhancing farmer support and policy development.

Earthquake of magnitude 4.2 hits Andaman Islands

Earthquake

Earthquakes are sudden and violent shaking of the ground, caused by the release of energy from the Earth's crust. This energy release creates seismic waves that travel through the Earth's surface.

Causes:

- **Plate Tectonics:** Earth's lithosphere is divided into tectonic plates. When these plates interact, stress builds up along faults. When the stress exceeds the strength of the rocks, it is released as an earthquake.
- **Faults:** Cracks in the Earth's crust where the movement occurs. The sudden slip along these faults releases energy, causing seismic waves.
- **Magma Movement:** Magma rising through the crust can cause volcanic earthquakes by fracturing rocks and building pressure.
- **Mining:** Excavation can induce seismic activity by changing stress distributions.
- **Reservoir-Induced Seismicity:** Large reservoirs behind dams can alter stress in the Earth's crust, potentially causing earthquakes.
- **Hydraulic Fracturing (Fracking):** Injecting fluids into the earth to extract resources can cause minor seismic activity.

Tectonic Plates and Faults

- **Lithosphere:** The rigid outer layer of the Earth, divided into several major and minor plates.
- **Major Plates:** Include the Pacific Plate, North American Plate, Eurasian Plate, African Plate, South American Plate, Indo-Australian Plate, and Antarctic Plate.
- **Divergent Boundaries:** Plates move away from each other, creating new crust (e.g., Mid-Atlantic Ridge).

- **Convergent Boundaries:** Plates collide or move towards each other, leading to subduction (one plate going under another) or continental collision (e.g., Himalayas).
- **Transform Boundaries:** Plates slide past each other horizontally (e.g., San Andreas Fault).
- **Normal Faults:** Caused by stretching forces, where the hanging wall moves down relative to the footwall.
- **Reverse (Thrust) Faults:** Caused by compressive forces, where the hanging wall moves up relative to the footwall.
- **Strike-Slip Faults:** Horizontal movement along the fault line (e.g., San Andreas Fault).

Seismic Waves and Measurement

- **Primary Waves (P-Waves):**

Characteristics: Fastest waves, travel through solids and liquids.

Movement: Compressional, moving particles in the same direction as the wave.

- **Secondary Waves (S-Waves):**

Characteristics: Slower than P-waves, travel only through solids.

Movement: Shear, moving particles perpendicular to the direction of the wave.

- **Surface Waves:**

Love Waves: Move horizontally, causing horizontal shearing of the ground.

Rayleigh Waves: Roll along the ground, creating an elliptical motion.

Measurement Tools:

- **Seismograph:** An instrument that records the amplitude, frequency, and duration of seismic waves.
- **Richter Scale:** Developed by Charles F. Richter, measures the amplitude of

seismic waves, logarithmically related to the earthquake's magnitude.

- **Moment Magnitude Scale (M_w):** Provides a more accurate measure of the total energy released by an earthquake, especially useful for larger events.
- **Modified Mercalli Intensity Scale:** Measures the intensity and impact of an earthquake at specific locations, based on observed effects.

Earthquake-Prone Regions

- **Ring of Fire:** A major area in the Pacific Ocean basin characterized by frequent earthquakes and volcanic eruptions due to tectonic plate boundaries.
- **Himalayan Belt:** Region of intense seismic activity due to the ongoing collision between the Indian Plate and the Eurasian Plate, forming the Himalayan mountain range.
- **Mid-Atlantic Ridge:** A divergent boundary running down the centre of the Atlantic Ocean, creating new oceanic crust and associated with frequent seismic activity.

Impacts of Earthquakes

Structural Damage:

- **Buildings:** Collapse or severe damage to buildings and infrastructure, often exacerbated by poor construction practices.
- **Infrastructure:** Bridges, roads, and utilities may be damaged or destroyed.
- **Casualties:**
- **Loss of Life:** Direct impact from building collapses and secondary effects like fires and landslides.
- **Injuries:** Resulting from structural failures and debris.

Secondary Effects:

- **Landslides:** Triggered by ground shaking, can bury communities and infrastructure.

- **Tsunamis:** Underwater earthquakes can generate large waves, causing flooding and destruction along coastlines.
- **Fires:** Gas lines and electrical infrastructure damaged during the quake can lead to fires.

Economic Impact:

- **Reconstruction Costs:** High expenses related to rebuilding damaged infrastructure and housing.
- **Economic Disruption:** Loss of productivity and economic activities due to damage.

Earthquake Preparedness and Mitigation

- **Building Codes:**
 - **Seismic Design:** Incorporation of earthquake-resistant features in building design, such as flexible structures and reinforced materials.
 - **Retrofitting:** Upgrading existing buildings to improve their seismic resilience.
- **Early Warning Systems:**
 - **Seismic Networks:** Monitoring networks that detect initial seismic waves and provide alerts to reduce damage and casualties.
 - **Public Alert Systems:** Dissemination of earthquake warnings through various channels.
- **Public Awareness:**
 - **Education Programs:** Training people on how to prepare for and respond to earthquakes, including “Drop, Cover, and Hold On” drills.
 - **Emergency Plans:** Developing and practicing emergency response plans.
- **Land Use Planning:**
 - **Zoning Regulations:** Avoiding construction in high-risk zones and

enforcing land-use policies to minimize earthquake damage.

Global and National Initiatives

- **Global Seismic Monitoring Networks:**
 - **USGS:** United States Geological Survey provides real-time earthquake data and research.
 - **EMSC:** European-Mediterranean Seismological Centre offers earthquake alerts and information.
- **National Disaster Management Authority (NDMA):**
 - **India:** Responsible for disaster preparedness, response planning, and implementation of strategies to mitigate the effects of natural disasters.
- **International Cooperation:**
 - **Research and Resources:** Collaborative efforts between countries to improve earthquake forecasting, share technology, and provide disaster relief.

The rise and rise of red sanders mafia.

- Seshachalam Hills, one of India's richest biospheres, has become the hot spot of red sanders smuggling and allied crimes threatening the survival of the endangered tree species. Over the years, despite changes in the governments and people in power, the smuggling of the precious wood continues unabated, indicating that the problem is of a socio-economic-political nature

Red Sanders (*Pterocarpus santalinus*)

About Red Sandalwood:

- Red Sanders (Red Sandalwood) is a flora-species that is endemic to the tropical

dry deciduous forest in Eastern Ghats region of Andhra Pradesh.

- It is locally known as **Yerra Chandanam, Rakta Chandanam**.
- It is a very slow-growing tree species that attains maturity **after 25 – 40 years**.
- It is fire-hardy and resistant to droughts.

High Demand & applications:

- Red Sanders is under severe pressure from illegal logging and harvesting. It is in demand in both domestic and international markets.
- Its rich hue and therapeutic properties are responsible for its high demand across Asia, particularly China, for use in cosmetics, medicinal products and high-end furniture/woodcraft.
- While the red dye obtained from the wood is used as a colouring agent in textiles and medicines.

Conservation Status:

- It is under '**endangered list**' in the International Union for Conservation of Nature (IUCN) Red List.
- It is listed in **Appendix-II** of the Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (**CITES**).
- Listed under **Schedule IV** of The Wildlife Protection Act.



Seshachalam Hills:

- Seshachalam Hills, one of India's richest biospheres which form the tip of the Eastern Ghats in Andhra Pradesh is considered a floristic hotspot for it houses many endemic and rare species including five gecko species, 12 species of lizards and 22 species of snakes.
- Spread over 5,000 square kilometres across Kadapa, Annamayya, Tirupati and Chittoor districts, besides covering substantial forest cover in Nellore district in the **State**, the Seshachalam Hills is the **first biosphere reserve in Andhra Pradesh** identified under UNESCO's Man and Biosphere programme in 2010.
 - However, it is red sanders (*Pterocarpus santalinus*), the tall trees which give one of the world's finest and rarest woods, growing in these hills makes Seshachalam a hotspot of crime and a hub of mafia.

Prime Minister congratulates people of Ladakh for creation of five new districts

New Districts: Zaskar, Drass, Sham, Nubra and Changthang

- These will enable the local people to get the benefits of government schemes at their doorstep
- After the formation of these five districts, there will now be a total of seven districts in Ladakh, including Leh and Kargil.
- **Ladakh** is also known as “**the Land of Passes**” (La-passes, dakh-land) is the largest in area among the regions viz., Jammu, Kashmir and Ladakh with an area of 95,876 km². The region is administered by India as a **union territory**.
- **Location:** Ladakh is situated in the northernmost region of India, bordered by Pakistan (to the west), China (to the north and east), and the Indian states of Jammu and Kashmir (to the south).
- **Topography:** It is characterized by its high-altitude desert landscape with mountain ranges such as the Himalayas and the Karakoram. Major rivers include the Indus and its tributaries, such as the **Zaskar and Nubra**.
- **Climate:** The region experiences an arid climate with harsh winters and cool summers. Temperatures can drop as low as -30°C in winter.

Importance of Ladakh

The importance of Ladakh to both India and China is rooted in complicated historical processes that led to the territory becoming union territory in 2019 (earlier it was part of the state of Jammu and Kashmir), and China's interest in it post the occupation of Tibet in 1950.

- **Rich in natural resources:** Ladakh is situated within the upper reaches of the Indus watershed, which in total supports about 120 million people in India (in the states of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab and

Rajasthan) and about 93 million in the Pakistan province of the Punjab (literally, "Land of the Five Rivers").

- Careful management of water resources within Ladakh is therefore vitally important, not only for the livelihoods of Ladakh is and the ecosystems of Ladakh, but for the health of the whole river system.
- **Solar radiation:** It is one of the most abundant natural resources in Ladakh, with annual solar radiation exceeding averages for other areas of India with high insulation.
- **Geothermal potential:** surveys have identified a **geothermal resource** at depths suitable for exploration and development.
- This resource could be developed to provide grid connected power to small settlements and army bases sited on the national highway.
- **Tourism industry:** Popularly known as the **Lama Land or little Tibet**, Ladakh lies at altitudes ranging between about 9,000 feet and 25,170 feet. From trekking and mountaineering to Buddhist tours of various monasteries, Ladakh has it all.
- **Provides connectivity:** The passes of Ladakh region connect some of the politically and economically significant zones of the world like Central Asia, South Asia, China and the Middle East.
- **Market access:** The south Asian countries can reach Central Asian markets through this region. Countries like Uzbekistan, Turkmenistan and Kazakhstan are rich in uranium, cotton, oil and gas resources.
- **Energy security:** In future, the oil and gas pipeline from Iran to China can pass through this mountainous corridor. India's energy needs can also be met by constructing a pipeline from Central Asia via this region.

Other Significance

- **Geopolitical Significance:** The land of Ladakh enjoys the significance of being located at the **ancient Silk Route** which passes through these regions and

played a very vital role in the development of culture, religion, philosophy, trade and commerce in the past.

- **Geostrategic location:** The presence of resources is what makes India, China and Pakistan struggle over Ladakh, in order to gain control over resources in this region. Pakistan and China are in conflict with India over Siachen and Aksai chin in this region. Ladakh's geostrategic significance has increased in the backdrop of these conflicts.

Issues and way forward:

Geopolitical Tensions:

- **Issue:** Ongoing border disputes with China, marked by recent skirmishes and increased military presence.
- **Way Forward:** Strengthen diplomatic dialogues, implement confidence-building measures, and enhance monitoring along the Line of Actual Control (LAC).

Environmental Challenges:

- **Issue:** Accelerated glacier melting and environmental degradation due to climate change and increased human activity.
- **Way Forward:** Adopt sustainable development practices, implement climate adaptation strategies, and improve waste management systems.

Socio-Economic Development:

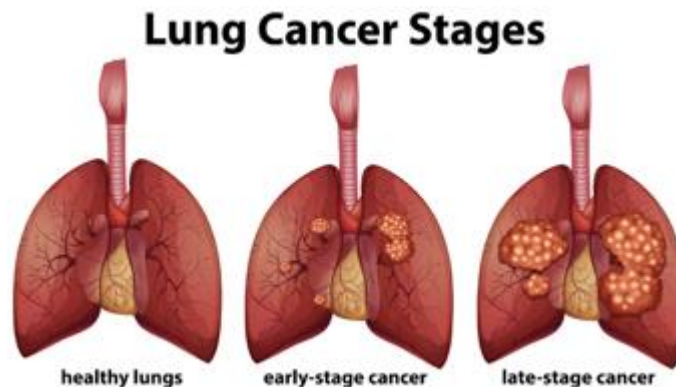
- **Issue:** Infrastructure deficits and heavy reliance on tourism impacting economic stability and quality of life.
- **Way Forward:** Invest in infrastructure, diversify the economy, and enhance local skill development for broader employment opportunities.

SCIENCE AND TECHNOLOGY

Lung cancer

Lung cancer is a form of cancer that initiates from the lungs and can spread to other body parts. It is classified into two main types:

- **Non-Small Cell Lung Cancer (NSCLC):** The most common type of lung cancer, accounts for about 85% of lung cancer cases. It includes subtypes like adenocarcinoma, squamous cell carcinoma, and large cell carcinoma.
- **Small Cell Lung Cancer (SCLC):** A less common but more aggressive, makes up about 15% of lung cancer cases and is known for its rapid growth and spread.



Key Facts About Lung Cancer

- **Global Prevalence:** Lung cancer is the leading cause of cancer-related deaths worldwide, accounting for approximately 18.4% of all cancer deaths.
- **Incidence Rate:** According to the World Health Organization (WHO), there were an estimated 2.1 million new cases of lung cancer in 2020.
- **Mortality:** Lung cancer causes more deaths each year than breast, colon, and prostate cancers combined, with over 1.8 million deaths annually.

- **Survival Rates:** The 5-year survival rate for lung cancer is about 19%, highlighting the need for early detection and effective treatment.

Risk Factors in India

- **Tobacco Use:** India is one of the largest consumers of tobacco globally, with approximately 267 million tobacco users. Both smoking and smokeless tobacco contribute to lung cancer risk.
- **Indoor Air Pollution:** The use of biomass fuels for cooking in rural areas leads to indoor air pollution, which is a significant risk factor for lung cancer, especially among women.
- **Environmental Pollution:** Rapid urbanization and industrialization have led to increased air pollution, contributing to the rising incidence of lung cancer in urban areas.

Government Initiatives

The Indian government has implemented many initiatives to combat lung cancer and promote lung health:

- **National Tobacco Control Programme (NTCP):** This programme aims to reduce tobacco consumption through awareness campaigns, regulatory measures, and support for cessation programs.
- **Ayushman Bharat Scheme:** This government scheme provides financial assistance for cancer treatment, improving access to healthcare for economically disadvantaged individuals.
- **Swachh Bharat Abhiyan:** Focuses on reducing air pollution and improving overall public health by promoting cleanliness and sanitation.

Ransomware Attack

The attack has likely impacted 150-200 cooperative banks and RRBs.

Concept

- Ransomware is a type of **malicious software** (malware) that threatens to publish or blocks access to data or a computer system, usually by encrypting it, until the victim pays a ransom fee to the attacker.
- In many cases, the ransom demand comes with a deadline. If the victim doesn't pay in time, the data is gone forever or the ransom increases.
- Users are shown instructions for how to pay a fee to get the decryption key. The costs can range from a few hundred dollars to thousands, payable to cybercriminals in Bitcoin.

Types of Ransomware:

- **Encrypting Ransomware (Crypto Ransomware):** Encrypts the victim's data, demanding a ransom for the decryption key.
- **Non-encrypting Ransomware (Screen-locking Ransomware):** Locks the victim's entire device, displaying a ransom demand on the screen.

Subcategories of Ransomware Include:

- **Leakware or Doxware:** Steals and threatens to publish sensitive data.
- **Mobile Ransomware:** Affects mobile devices, often using screen-lockers.
- **Wipers:** Threaten to destroy data, sometimes even if the ransom is paid.
- **Scareware:** Uses fear tactics to coerce payment, sometimes posing as legitimate alerts.

How to prevent ransomware

- Keep your operating system patched and up-to-date to ensure you have fewer vulnerabilities to exploit.

- Don't install software or give it administrative privileges unless you know exactly what it is and what it does.
- Install antivirus software, which detects malicious programs like ransomware as they arrive, and whitelisting software, which prevents unauthorized applications from executing in the first place.
- And, of course, back up your files, frequently and automatically! That won't stop a malware attack, but it can make the damage caused by one much less significant.

39% TB cases found during T.N. TB survey had no symptoms

Tamil Nadu TB Survey Highlights:

- **Survey: Conducted** from February 2021 to July 2022, involving 130,932 participants.
- **Results: Identified** 244 TB cases; 92.6% had abnormal chest X-rays, but only 54.5% reported symptoms.
- **Diagnostic Efficiency: Molecular** tests (CBNAAT) detected 91.8% of cases, whereas smear microscopy detected 50.4%.
- **Key Finding:** 39% of TB cases were asymptomatic, stressing the need for chest X-rays in screening.

Tuberculosis (TB)

- Tuberculosis (TB) is a **bacterial infection spread** through inhaling tiny droplets from the coughs or sneezes of an infected person.
- It mainly affects the lungs, but it can affect any part of the body, including the tummy (abdomen), glands, bones and nervous system.
- TB is a potentially serious condition, but it can be cured if it's treated with the

right antibiotics.

Symptoms of TB-

- Persistent cough that lasts more than 3 weeks and usually brings up phlegm, which may be bloody,
- Weight loss,
- Night sweats,
- High temperature,
- Tiredness and fatigue,
- Loss of appetite,
- Swellings in the neck.

Current Status of TB Burden in India

- India has notified a record 25.5 lakh TB patients in 2023. (More than 8.4 lakh patients were notified by the private healthcare sector). This is a 21-fold increase from 2013 notified level.
- According to WHO's Global TB report 2021, with 25.9 lakh TB cases, India is home to 25% of the global tuberculosis cases.

Government's steps for Eliminating TB in India

- **Introduction of CB-NAAT and TureNat for TB detection:** The government has increased access to more accurate molecular diagnostic tests like CB-NAAT and TureNat. The government has implemented a universal drug susceptibility test, which use the antibiotic susceptibility of the mycobacterium is determined for all newly diagnosed cases.
- Injectable kanamycin for TB elimination, which caused kidney failure and deafness, has been replaced by **Bedaquiline and Delamanid**. These new pharmaceuticals have also been included in the new National List of Essential Medicines, giving the government the authority to control their market pricing.

Science award for ISRO team, IISC's ex-chief Padmanabhan

- The Union government has announced the first set of Rashtriya Vigyan Puraskar, or national awards for scientists.
- President Droupadi Murmu is expected to confer the **Vigyan Ratna award on Biochemist Govindarajan Padmanabhan**. The Centre has announced **33 Rashtriya Vigyan Puraskars**, which include **18 Vigyan Yuva Puraskars** for young scientists and **13 Vigyan Shri Puraskars** and a **Vigyan Team award** that went to Team Chandrayaan-3.

Rashtriya Vigyan Puraskar

- The Government of India has announced the “Rashtriya Vigyan Puraskar” in the field of Science, Technology and Innovation.
- The National Award recognizes outstanding and inspiring scientific, technological and innovation contributions of researchers, technologists and innovators.

Domains for Awards:

- **13 domains**– physics, chemistry, biological sciences, mathematics and computer science, earth science, medicine, engineering science, agricultural science, environmental science, technology and innovation, atomic energy, space science and technology, and Others.
- Representation from each domain including gender parity will be ensured.

Four categories:

- **Vigyan Ratna (VR)** award will recognize lifetime achievements & contributions made in any field of science and technology.
- **Vigyan Shri (VS)** award will recognize distinguished contributions in any field of science and technology.
- **Vigyan Yuva-Shanti Swarup Bhatnagar (VY-SSB)** award will recognize & encourage young scientists up to the age of 45 years who made an exceptional contribution in any field of science and technology.
- **Vigyan Team (VT)** award to be given to a team comprising of three or more scientists/researchers/innovators who have made an exceptional contribution working in a team in any field of science and technology.

Eligibility:

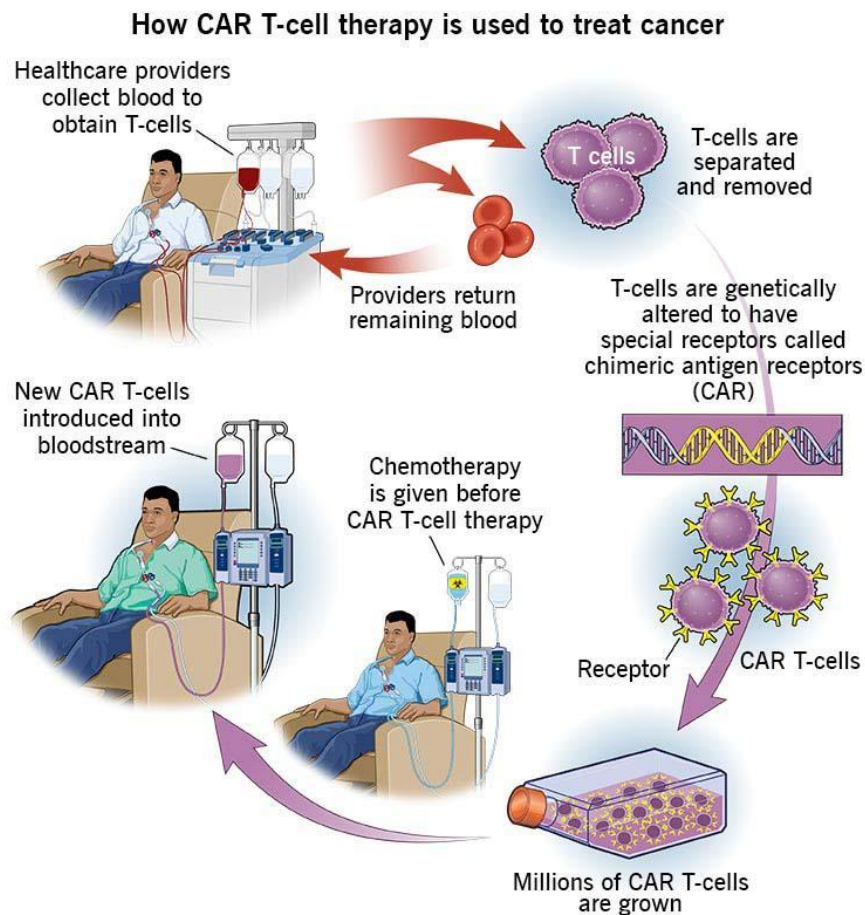
- Scientists/ technologists/innovators working in government, private sector organizations or any individual working outside any organization.
- People of Indian Origin staying abroad with exceptional contributions benefiting Indian communities.

Selection process

- The nominations will be invited from January 14 to February 28 (National Science Day) every year.
- All nominations received for the Rashtriya Vigyan Puraskar awards shall be placed before the Rashtriya Vigyan Puraskar Committee (RVPC) headed by the Principal Scientific Adviser (PSA) to the government of India.
- The committee will include secretaries of science departments, members of science and engineering academies and some distinguished scientists and technologists from different fields of science and technology.

CAR-T cell therapy

- CAR-T cell therapy, also known as **chimeric antigen receptor T-cell therapy** is a type of immunotherapy that uses a patient's own immune system to fight cancer.
- CAR T-cell therapy has been approved for **leukaemias** (cancers arising from the cells that produce white blood cells) and **lymphomas** (arising from the lymphatic system).
- CAR-T cell therapies, often referred to as "**living drugs**".



Development in India:

- **NexCAR19**, an indigenously developed therapy for **B-cell cancers**, has been collaboratively developed by ImmunoACT, Indian Institute of Technology Bombay (IIT-B), and Tata Memorial Hospital.

Potential Benefits of CAR-T therapy

- **High Remission Rates:** For some patients with advanced cancers who have not responded to other treatments, CAR-T therapy can lead to high rates of complete remission.
- **Personalised Approach:** The therapy is tailored to each individual patient's cancer, making it a highly targeted treatment.

Current Challenges and Limitations

Some challenges and limitations need to be overcome before CAR T-cell therapy can be widely applied to solid tumours and haematological malignancies.

- **Relapses** can occur in some patients due to antigen escape when cancer cells stop expressing the CAR's target antigen. Combination treatments or CAR T cells targeting multiple antigens may help prevent relapse.
- **Toxicity:** Severe toxicities like **cytokine release syndrome** and neurological issues can occur in some patients after CAR T cell infusion, although usually manageable.
- Complex, personalised manufacturing is logistically challenging. **Allogeneic off-the-shelf** CAR T cell products from donors aim to simplify manufacturing and administration.
- **High costs and reimbursement** difficulties make CAR T cell therapies inaccessible for many patients. Health systems need funding models to improve access.

Way Forward

- Ongoing innovation is expanding the range of cancer targets and working to **improve efficacy, safety** and
- It may eventually be an **off-the-shelf treatment** used earlier in cancer therapy, rather than later.
- **Combination regimens** with checkpoint inhibitors, bispecific antibodies or systemic immunomodulators may further enhance **CAR T cell potency**.
- **Next-generation enhancements** like **TRUCKs, ARM T cells** and the use of **iPSC-derived NK or T cells** may also help overcome current limitations.

Perseid meteor shower

The essential data about the Perseid meteor shower:

- **Peak Activity:** August 11-13.
- **Visibility:** Best between midnight and dawn, especially in the northern hemisphere.
- **Comet Threat:** Potential impact risk noted for 2126, but Earth is safe for at least 2,000 years.
- **Meteor Shower Rate:** Over 60 meteors per hour at peak.

Perseid Meteor Shower:

- The name Perseid is believed to be derived from the **Perseus constellation**.
- It peaks **during mid-August each** year and is considered to be among the best meteor showers. Perseids, usually swift and bright, leave a trail of light and colour behind them as they traverse through the night sky.
- It is also one of the most plentiful showers with **nearly 100 meteors** seen per hour.
- The Perseids are special because they often **generate fireballs**.

- Fireballs are big bursts of light and colour that last longer than a regular shooting star.
- This happens because fireballs come from larger pieces of **material from comets**.

Meteor Showers

- Meteors are bits of rock and ice that are ejected from comets as they manoeuvre around their orbits around the sun.
- As meteors fall towards the Earth, the resistance makes the space rocks extremely hot and, as meteorites pass through the atmosphere, they leave behind streaks of glowing gas that are visible to the observers and not the rock itself.
- Meteor showers, on the other hand, are witnessed when Earth passes through the trail of debris left behind by a comet or an asteroid.
- When a meteor reaches the Earth, it is called a meteorite and a series of meteorites, when encountered at once, is termed as a meteor shower.

Anti-diabetic herb Gurmar found on Gaya's Brahmayoni Hill

- Researchers have identified a range of medicinal plants on Brahmayoni Hill in Gaya, Bihar, including **Gymnema sylvestre** (Gurmar).
- Gurmar is noted for its **anti-diabetic properties** and has been used in developing the anti-diabetic drug **BGR-34** by the Council of Scientific and Industrial Research (CSIR).

Properties and Benefits of Gurmar

- **Gymnema sylvestre** contains gymnemic acid, which helps reduce blood sugar

levels by blocking sugar absorption in the intestines.

- It includes **flavonoids** (antioxidants) and **saponins** (which help lower cholesterol and regulate lipid metabolism).

Development and Efficacy of BGR-34

- **BGR-34** is an Ayurvedic formulation marketed by Aimil Pharma, incorporating Gurmar along with other phyto-ingredients such as Daruharidra, Giloy, Vijaysar, Manjishtha, and Fenugreek.
- A 2022 study by AIIMS Delhi confirmed BGR-34's effectiveness in reducing obesity, managing blood sugar levels, and improving metabolic health.
- The study references that the first diabetes drug, **Metformin**, was derived from the medicinal plant Galega, emphasizing the potential of plant-based treatments.
- The researchers advocate for further exploration of **Gurmar** to develop new therapeutic options and enhance understanding of its benefits.

Sustainability and Community Involvement

- There is a call to involve local populations in cultivating commonly used medicinal herbs to prevent their extinction.
- This approach aims to ensure the **sustainability** and continued availability of these valuable resources for future generations.

From Gaming to Digital Assets: How Web 3.0 is transforming India's tech industry through metaverse

Web 3.0

It is the decentralized form of internet run on blockchain technology. In this user can own stakes in platforms and applications which is now controlled by big Tec companies. The term 'Web 3' was first coined by **Gavin Wood, founder of Ethereum** in 2014, referring to a decentralized online ecosystem based on blockchain.

Significance of Web 3.0

- Web3 will deliver a **decentralized and fair internet** where users control their own data.
- With block chain, the time and place of the transaction are recorded permanently. Thus, Web3 enables **peer to peer transactions** by eliminating the role of the intermediary. This concept can be extended to
- The spirit of Web3 is **Decentralized Autonomous Organization** .
- DAO is all about the business rules and governing rules in any transaction are transparently available for anyone to see and software will be written conforming to these rules.
- With DAO, there is no need for a central authority to authenticate or validate.

Metaverse

It refers to a virtual or digital universe where people can interact with each other and digital objects in a shared online space. The term "metaverse" first appeared in author **Neal Stephenson's 1992 science-fiction novel Snowcrash**, which describes a future where millions of people use virtual avatars to participate in a cyberspace realm. The metaverse is essentially an interconnected network of virtual worlds, augmented reality, and virtual reality environments accessible through the internet.

- In this digital realm, users can create avatars, socialize with others, engage in

various activities, explore virtual landscapes, and even conduct business or trade virtual goods and services.

- Elements of the metaverse include virtual reality platforms, augmented reality experiences, online games, social media, virtual commerce, and virtual art galleries, among others.
- The metaverse aims to offer a seamless and immersive experience, blurring the lines between the physical and digital worlds.
- Companies such as Meta, Microsoft, and Roblox are all investing heavily in the metaverse, and it is seen as a potential major driver of growth in the technology industry in the coming years.

Applications of Metaverse-

- **Hardware Sales: Facebook** CEO Mark Zuckerberg believes augmented reality glasses will eventually be as widespread as smartphones. If that is the case, this will be a very big market.
- **Software Sales: Huge** scope in the development of software applications to support the meta-verse ecosystem.
- **Gaming:** Facebook's gaming platform Oculus VR is expected to be the gateway into the metaverse.
- **Physical Sales: Sales** of physical goods and services will be linked to the virtual ecosystem in the future.
- **Immersive Learning:** Immersive Learning is a training methodology that uses Virtual Reality (VR) to simulate real-world scenarios and train students in a safe and engaging immersive training environment.
- **decentralized commerce:** In-world transactions to happen peer-to-peer.
- **Non-Fungible Tokens (NFTs): NFTs** – the claim of ownership for a unique, non-interchangeable digital asset that is stored on a blockchain – may be widely

adopted.

Challenges Associated with Metaverse in India

- **Privacy and Security:** Online risks may be exacerbated in the metaverse, where unwanted contact could become more intrusive and pervasive.
- **There are both benefits and drawbacks to social networking sites. The rise of social media has introduced pseudo social behaviour** that has slightly delineated traditional social values of **collectivism and brotherhood.**
- Protecting the IPR (IP Rights) of content creators will also be a challenge considering the **difficulty in tracking copyright infringements in the virtual space.**
- **it will require a 5G connection to provide a safe and reliable experience.** Most rural communities are still struggling with acquiring and maintaining a secure **4G connection.**

Sweden reports first case of Mpox strain outside Africa amid global health emergency

Mpox (formerly known as Monkeypox) is a rare viral disease caused by the monkeypox virus, a member of the Orthopoxvirus genus, which includes variola virus (causing smallpox) and vaccinia virus (used in smallpox vaccines). First **detected in humans in 1970**, it is **endemic in central and West Africa.**

- **Transmission: Spread** from animals to humans (zoonotic) and between humans via close contact, respiratory droplets, or contaminated materials.
- **Symptoms:** Fever, rash, swollen lymph nodes; can lead to severe complications or death.
- **Vaccination:** WHO recommends vaccines, widely used in Nigeria and the

Democratic Republic of the Congo (DRC) to control outbreaks.

Epidemiology:

- **Endemic Regions: Historically**, monkeypox was primarily found in Central and West African countries, particularly in tropical rainforests.
- **Global Spread: In** recent years, there have been outbreaks in other regions, including the United States and Europe, demonstrating its potential for wider spread.

Transmission:

- **Zoonotic Transmission: The** virus is transmitted from animals to humans, with primary reservoirs being rodents and primates.
- **Human-to-Human Transmission: It** can spread through close contact with infected individuals, respiratory droplets, or contaminated materials such as bedding or clothing.
- **Direct Contact: Contact** with the skin lesions or bodily fluids of infected individuals can also transmit the virus.

Symptoms:

- **Incubation Period: Typically** 7 to 14 days, but can range from 5 to 21 days.
- **Initial Symptoms: Fever**, headache, muscle aches, backache, swollen lymph nodes, chills, and exhaustion.
- **Rash Development: Followed** by a rash that progresses through various stages: macules, papules, vesicles, pustules, and finally crusts. The rash usually starts on the face and then spreads to other parts of the body.
- **Duration: Symptoms** generally last 2 to 4 weeks.

Treatment:

- **Supportive Care: There** is no specific treatment for monkeypox; management focuses on supportive care to relieve symptoms.
- **Antiviral Drugs: In** severe cases, antiviral medications like tecovirimat (TPOXX) may be used.
- **Vaccination: The** smallpox vaccine has been shown to provide protection against monkeypox and may be used in outbreak settings.

Prevention:

- **Avoiding Contact: Reduce** the risk by avoiding contact with wild animals, especially in endemic areas, and avoiding contact with infected individuals.
- **Infection Control: Practice** good hygiene, including handwashing and using personal protective equipment (PPE) in healthcare settings.
- **Vaccination: Vaccination** of high-risk populations and healthcare workers can help prevent outbreaks.
- **Surveillance: Monitoring** and reporting of cases to track outbreaks and implement control measures.

Isolation and Quarantine: Infected individuals may need to be isolated to prevent spread, and contact tracing is crucial to identify and manage potential cases.

Zebrafish use surprising strategy to regrow spinal cord

Zebrafish are capable of fully healing a severed spinal cord. The researchers showed that survival and adaptability of the severed neurons themselves is required for full spinal cord regeneration. Stem cells capable of forming new neurons — and typically thought of as central to regeneration — only play a complementary role but do not lead the process.

Zebrafish:

- It is a **small** (2-3 cm long) **freshwater fish** found in **tropical and subtropical regions**.
- The vertebrate takes its name from the horizontal blue stripes running the length of its body.
- It is native to South Asia's Indo-Gangetic plains, where they are mostly found in the paddy fields and even in stagnant water and streams.
- IUCN Red List Status: **Least concerned**.

Significance in Clinical research:

- The zebrafish is an important and widely used vertebrate model organism in scientific research, for example in drug development, in particular pre-clinical development.
- It is also notable for its regenerative abilities and has been modified by researchers to produce many transgenic strains.

Union Minister Rajiv Ranjan Singh Assesses Progress on India's 2030 FMD-Free Target Through Vaccination

Key Highlights:

- **Goal:** Achieve an FMD-free India by 2030 through vaccination.
- **Economic Impact:** FMD causes ₹24,000 crore annual losses.
- **FMD-Free Zones:** Identified in Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Uttarakhand, Punjab, Haryana, Maharashtra, Gujarat.
- **Vaccination:** Extended nationwide, including pastoral sheep and goats; Ladakh already started.
- **Domestic Production:** All vaccines developed by ICAR; India can now export to

select Asian countries.

Foot and Mouth Disease:

- Foot and mouth disease (FMD) is a severe, highly contagious viral disease of livestock that has a significant economic impact.
- The disease affects cattle, swine, sheep, goats and other cloven-hoofed ruminants.
- FMD virus belongs to **Aphthovirus** genus of the **picornaviridae family**.
- FMD can spread when infected animals bring the virus into physical contact with susceptible animals.
- Virus contaminated facilities, contaminated vehicles, raw or improperly cooked garbage containing infected meat or animal products can also spread the virus of FMD.
- In rare cases, *humans are also susceptible*.

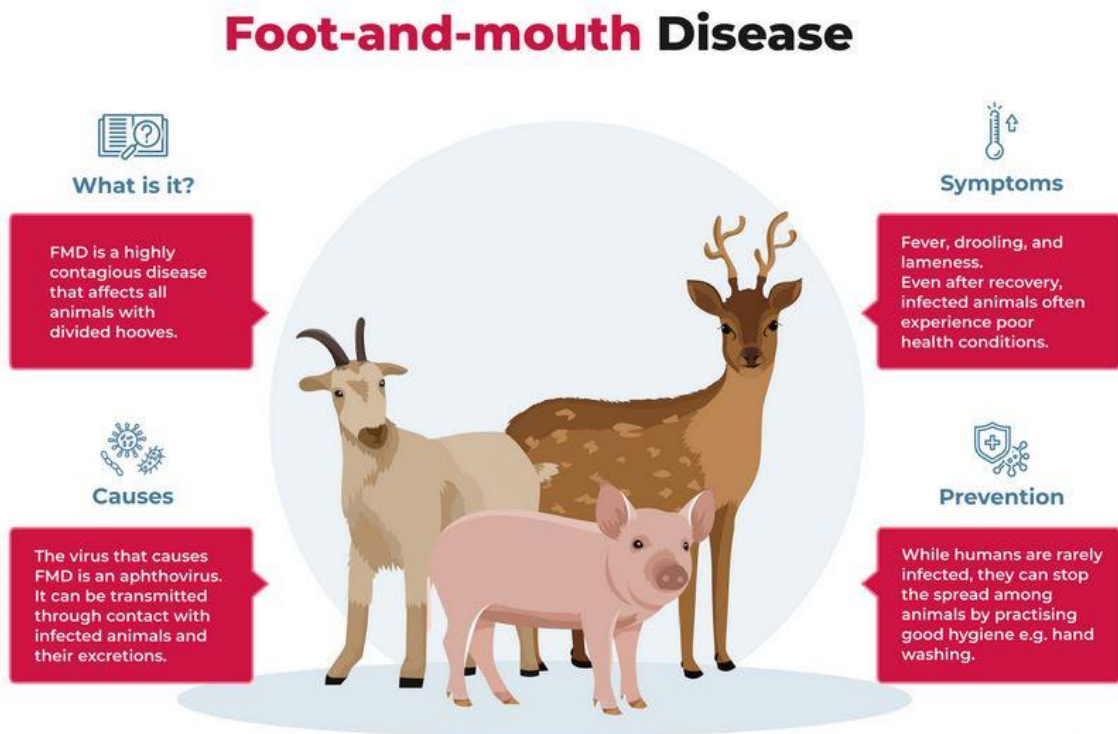
Can Humans be affected?

- Humans can be infected with foot-and-mouth disease through contact with infected animals, but this is extremely rare. Some cases were caused by laboratory accidents. Because the virus that causes FMD is sensitive to stomach acid, it cannot spread to humans via consumption of infected meat, except in the mouth before the meat is swallowed.
- Symptoms of FMD in humans include malaise, fever, vomiting, red ulcerative lesions (surface-eroding damaged spots) of the oral tissues, and sometimes vesicular lesions (small blisters) of the skin.

Government Initiatives

- FMD control program (FMDCP), initiated in 10th plan period and was extended to 11th and 12th plan period. Presently, it covers 351 districts in 13 states and 6 UTs.

The Ministry of Agriculture, Department (of Animal and Husbandry) had initiated **'FMD Mukh Bharat'** under **Rashtriya Krishi Vikas Yojana (RKVY)** during 2016-17, a program to cover all the states which were not covered under the six-monthly vaccination scheme.



Blue moon

Definition and Usage of "Blue Moon"

Common Definition: A "blue moon" traditionally refers to a **second full moon occurring in a single calendar month**. This is a rare event, hence the term "blue moon" is often associated with rarity.

Historical Definition: The term "blue moon" was also used to describe the moon appearing blue due to specific atmospheric conditions, such as volcanic eruptions.

Historical and Atmospheric Causes of a Blue Moon

Tambora Eruption (1815):

- **Location and Impact:** The eruption of Mt. Tambora, located in modern-day Indonesia, was the most powerful volcanic eruption in recorded history.
- **Climatic Effects:** The eruption released vast amounts of ash and sulfur dioxide into the atmosphere, leading to a significant drop in global temperatures (0.4–0.7 °C) and causing the climatic anomalies known as the "year without summer" in 1816.
- **Visual Impact:** The atmospheric particles from the eruption could have caused the moon to appear blue, as described in literary sources such as Percy Bysshe Shelley's poem "Alastor" written during that period.

Mayon Volcano Eruption (1814):

- **Preceding Event:** The eruption of the Mayon Volcano in the Philippines in the previous year also contributed to the atmospheric conditions leading to the "year without summer."

Krakatoa Eruption (1883):

- **Location and Impact:** The eruption of Krakatoa, a volcanic caldera in

Indonesia, was one of the most violent volcanic events in recorded history.

- **Climatic Effects:** The eruption resulted in substantial atmospheric dust and particles, which caused significant global climatic disturbances.
- **Visual Impact:** The Royal Society in London documented that the moon appeared blue, and the sun exhibited unusual colors (such as green) in various parts of the world due to these atmospheric effects.

Historical Use of the Term "Blue Moon"

Metaphorical Usage:

- **Early 1820s:** The term "blue moon" began to be used metaphorically to denote an event that is rare or infrequent.

Farmers' Almanac (1937):

- **Modern Definition:** The term "blue moon" was popularized to refer specifically to the second full moon in a single calendar month by the U.S. farmers' almanac published in 1937.
- **Misinterpretation:** This definition was based on a misunderstanding or misinterpretation of the term, which had historically been used in other contexts.

Recent Example

August 2023:

Occurrence: A blue moon, in the modern sense of the term, occurred in August 2023, demonstrating the modern usage of the term as referring to the second full moon in a calendar month.

Thalassemia Bal Sewa Yojana reaches successfully completes 500 bone marrow transplants

Key Highlights:

- Bone Marrow Transplants Completed: 500.
- Financial Assistance: Up to ₹10 lakh per patient.
- Eligibility: Families with annual income below ₹8 lakh.
- Launched: 2017.

Thalassemia Bal Sewa Yojana

About the scheme:

- Launched in 2017, this scheme is a Coal India CSR funded **Hematopoietic Stem Cell Transplantation (HSCT) program**.
- It aims to provide a one-time cure opportunity for Haemoglobinopathies like Thalassaemia and Sickle Cell Disease for patients who have a matched family donor.

Eligibility:

- Only patients whose monthly family income is below Rs 20,000 will be eligible for this assistance.
- The scheme has been extended to cover Aplastic Anaemia patients (lack of blood cell production in body).

Statistics:

- It is estimated 10,000 to 12,000 children are born with thalassemia every year in India.
- Data on the prevalence of silent carriers (persons without symptoms but

potential to transmit to offsprings) for various Haemoglobinopathies show that silent carriers are 9-4.6% for Thalassemia, while it can be as high as 40% for sickle cell anaemia especially among the tribal population.

Thalassemia

- Thalassemia is a chronic blood disorder. A person with this genetic condition cannot produce enough hemoglobin, which is found in red blood cells (RBCs).
- Patients also need blood transfusions every two to three weeks to survive as a result of this, which causes anemia.
- Thalassemias are conditions that are passed down through genes from one generation to the next.

Sickle Cell Disease

- It is an inherited disease caused by defects, called mutations, in the beta globin gene that helps make hemoglobin. The red blood cells become hard and sticky and look like a C-shaped farm tool called a "sickle". The sickle cells die early, which causes a constant shortage of red blood cells.

Cabinet approves the Department of Science and Technology scheme namely 'Vigyan Dhara'

The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi approved continuation of the three umbrella schemes, merged into a unified central sector scheme namely 'Vigyan Dhara' of Department of Science and Technology (DST).

The scheme has three broad components:

1. Science and Technology (S&T) Institutional and Human Capacity Building,

2. Research and Development and
3. Innovation, Technology Development and Deployment.

- This initiative, managed by the Department of Science and Technology (DST), is designed to enhance India's S&T capabilities through a streamlined approach.
- The proposed outlay for the implementation of the unified scheme 'Vigyan Dhara' is Rs.10,579.84 crore during the 15th Finance Commission period from 2021-22 to 2025-26.
- The merger of the schemes into a single scheme would enhance efficiency in fund utilization and establish synchronization among the sub-schemes/programs.
- The **primary objective** of the "Vigyan Dhara" scheme is to promote S&T capacity building as well as research, innovation, and technology development towards strengthening the Science, Technology and Innovation ecosystem in the country.

Components:

- The scheme endeavours to promote research in areas such as basic research with access to the international mega facilities, translational research in sustainable energy, water, etc. and collaborative research through international bilateral and multilateral cooperation.
- It will also contribute to building a critical human resource pool to strengthen the science and technology landscape and expand the R&D base of the country towards improving the **Full-Time Equivalent (FTE)** researcher count.
- Focused interventions will be taken up to enhance the participation of women in the field of S&T with the ultimate goal of bringing gender parity in Science, Technology, and Innovation (STI).

Cabinet approves BioE3 (Biotechnology for Economy, Environment and Employment) Policy for Fostering High Performance Biomanufacturing

This Policy will further strengthen Government's initiatives such as '**Net Zero**' carbon economy & '**Lifestyle for Environment**' and will steer India on the path of accelerated '**Green Growth**' by promoting '**Circular Bioeconomy**'.

About BioE3 (Biotechnology for Economy, Environment and Employment) Policy-

- To be steered by the **Department of Biotechnology**, the policy is for fostering high-performance biomanufacturing.
- High-performance biomanufacturing is the ability to produce products from medicine to materials, address farming and food challenges, and promote manufacturing of bio-based products through the integration of advanced biotechnological processes.
- The policy seeks to include innovation-driven support for research and development and entrepreneurship across thematic sectors.
- This will accelerate technology development and commercialization by establishing biomanufacturing and **bio-AI hubs** and **biofoundry**.
- Along with prioritising regenerative bioeconomy models of green growth, this policy will facilitate the expansion of India's skilled workforce and provide a surge in job creation.

Focus areas of the policy:

It primarily concentrates on the following 6 strategic sectors:

1. High-value bio-based chemicals, biopolymers & enzymes;
2. Smart proteins & functional foods;

3. Precision biotherapeutics;
4. Climate-resilient agriculture;
5. Carbon capture & its utilisation; and
6. Marine and space research.

Lifestyle for the Environment

- The idea of LiFE was introduced by India during the 26th United Nations Climate Change Conference of the Parties (**COP26**) in Glasgow in 2021.
- The idea promotes an environmentally conscious lifestyle that focuses on 'mindful and deliberate utilisation' instead of 'mindless and wasteful consumption.'
- With the launch of the Mission, the prevalent "use-and-dispose" economy governed by mindless and destructive consumption will be replaced by a circular economy, defined by conscious and deliberate consumption.

Net-Zero Target

- Net Zero refers to achieving an overall balance between carbon emissions produced and carbon taken out of the atmosphere.
- It is referred to as carbon neutrality, which does not mean that a country would bring down its emissions to zero.
- Further, absorption of the emissions can be increased by creating more carbon sinks such as forests.
- The removal of gases from the atmosphere requires futuristic technologies such as carbon capture and storage.
- More than 70 countries have promised to become Net Zero by 2050.

Vaccine-derived polio

Recently, a vaccine-derived polio case has been confirmed in a two-year-old child from Tikrikilla, Meghalaya. Health authorities clarified that this is not wild poliovirus but an infection seen in individuals with low immunity.

Vaccine-Derived Poliovirus (VDPV)

- It is a rare form of poliovirus, which generally originates from the **Oral Polio Vaccine (OPV)**. These mostly emerge in communities with low sanitation and immunity levels.

Occurrence and Transmission

- The OPV contains an attenuated (weakened) virus. This virus replicates in the intestines and triggers the body's immune response without causing the disease.
- After vaccination, the weakened virus is excreted in the stool. In areas with poor sanitation and low immunization coverage, this virus can spread to others in the community.

Types of Vaccine-Derived Poliovirus:

- **Circulating Vaccine-Derived Poliovirus (cVDPV):** This type can spread in communities and cause outbreaks, especially in areas where vaccination rates are low.
- **Immunodeficiency-Related Vaccine-Derived Poliovirus (iVDPV):** Occurs in individuals with primary immunodeficiencies, where the weakened immune system cannot clear the vaccine virus, allowing it to mutate.
- **Ambiguous Vaccine-Derived Poliovirus (aVDPV):** Cases where the source of the virus is unclear and does not fit into the other two categories.

Global context:

- Since 2000, over 10 billion doses of OPV have been administered globally, resulting in 24 cVDPV outbreaks in 21 countries, with fewer than 760 cases.

Prevention and Control

- **High Immunization Coverage:** The key to preventing VDPV is maintaining high vaccination coverage to ensure the virus cannot circulate and mutate.
- **Switch to Inactivated Polio Vaccine (IPV):** Some countries have switched from OPV to Inactivated Polio Vaccine (IPV), which uses a killed virus and does not carry a risk of VDPV.

Key Facts about Polio:

Polio overview: Polio is a viral infectious disease that can cause irreversible paralysis and even death by affecting the nervous system.

Wild Poliovirus strains:

There are three distinct strains of wild poliovirus:

- Wild Poliovirus Type 1 (WPV1)
- Wild Poliovirus Type 2 (WPV2)
- Wild Poliovirus Type 3 (WPV3)

Although symptomatically similar, each strain has genetic and virological differences, necessitating separate eradication efforts.

Transmission:

- The virus primarily spreads through the fecal-oral route and can multiply in the intestine, where it can invade the nervous system. It predominantly affects children under five.

New smart sensor for adjusting drug dosage to manage Parkinson's Disease

Key Highlights:

- **Development of Sensor:** The Institute of Advanced Study in Science and Technology (IASST) has created an affordable, user-friendly, and portable smartphone-based fluorescence turn-on sensor system for detecting **L-dopa** levels.
- **Importance in Parkinson's Disease:** Accurate monitoring of L-dopa is crucial for managing Parkinson's disease, which involves balancing dopamine levels to avoid side effects and ensure effective symptom control.
- **Detection Range and Limits:** It detects L-dopa in biological fluids (blood plasma, sweat, urine) within a linear range of **5 μM to 35 μM** , with detection limits of 95.14 nM, 93.81 nM, and 104.04 nM respectively.
- **Operational Setup:** The sensor system includes a **365nm LED** and a smartphone camera. The setup is enclosed in a dark chamber to minimize external light interference. The mobile app analyzes RGB values from images to determine L-dopa concentration.

Parkinson's Disease-

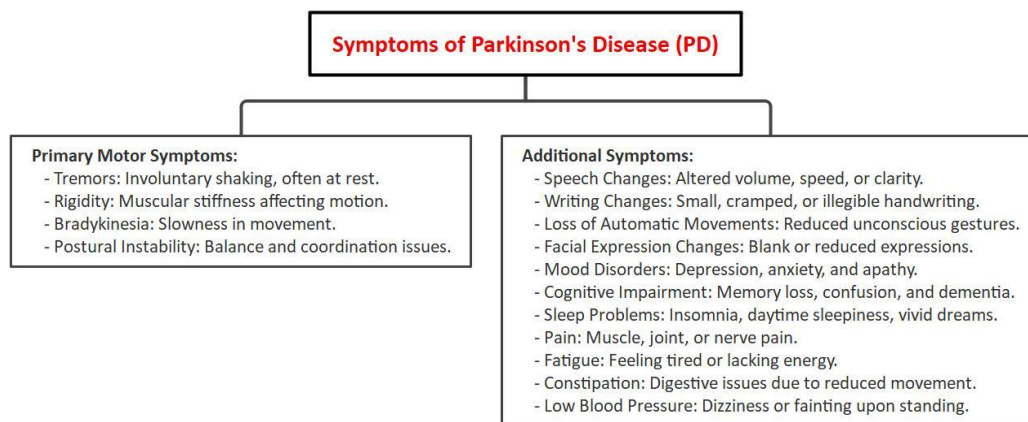
- Parkinson's disease is a progressive **neurodegenerative disorder** that impairs movement and can lead to immobility and dementia over time.
- The disease usually occurs in older people, but younger people can also be affected. Men are affected more often than women.
- The prevalence of PD has doubled in the past 25 years. India shares around 10% of the global burden of Parkinson's disease.

Cause:

- It is caused by the degeneration of nerve cells in the part of the brain called the

substantia nigra, which controls movement.

- These nerve cells die or become impaired, losing the ability to produce an important chemical called dopamine.
- Dopamine operates with other neurotransmitters to help coordinate the millions of nerve and muscle cells involved in the movement.
- Lack of dopamine causes the slowed movements and tremors symptoms of Parkinson's disease.



Treatment:

- There is no cure for Parkinson disease, but therapies including medicines, surgery and rehabilitation can reduce symptoms.
- Levodopa/carbidopa, a combination medicine that increases the amount of dopamine in the brain, is the most common medication.

World Parkinson's Day:

- Every year, 11th April is observed as World Parkinson's Day.
- The day aims to amplify awareness and understanding about Parkinson's disease internationally.

Single-strain Oral Cholera vaccine launched in Hyderabad

A novel single-strain Oral Cholera Vaccine (OCV), vaccine named, HILLCHOL®, has been launched by the Bharat Biotech International Limited (BBIL) in Hyderabad.

Objective: Enhance production and supply capabilities to combat cholera globally.

Global Cholera Statistics:

- Deficit of OCV: About 40 million doses worldwide.
- Recent Cases: Over 800,000 cases in the past year.
- Deaths Reported: 5,900 deaths in 31 countries.

Cholera:

- It is an acute diarrhoeal infection caused by eating or drinking food or water that is contaminated with the bacterium **Vibrio cholerae**.
- Left untreated, cholera can be fatal within hours, even in previously healthy people.
- The disease is most common in places with poor sanitation, crowding, war, and famine. Cholera outbreaks are more common in warm climates.
- Cholera is often predictable and preventable. It can ultimately be eliminated where access to clean water and sanitation facilities, as well as good hygiene practices, are ensured and sustained for the whole population.

Symptoms:

- Often, symptoms are mild. But sometimes they are very serious.
- About one in 20 people infected have severe watery diarrhea accompanied by vomiting, which can quickly lead to dehydration. This can lead to death if left untreated.

Transmission:

- A person may get cholera by drinking water or eating food contaminated **with**

the cholera bacterium.

- The disease can spread rapidly in areas with inadequate treatment of sewage and drinking water.

Prevention and Control:

Surveillance

- Cholera surveillance should be part of an integrated disease surveillance system that includes feedback at the local level and information-sharing at the global level.
- Countries affected by cholera are encouraged to strengthen disease surveillance and national preparedness to rapidly detect and respond to outbreaks.

Water and sanitation interventions

- The long-term solution for cholera control lies in economic development and **universal access to safe drinking water and adequate sanitation.**
- Actions targeting environmental conditions include the implementation of adapted **long-term sustainable WASH solutions to** ensure the use of safe water, basic sanitation and good hygiene practices in cholera hotspots.
- The WASH solutions for cholera are aligned with those of the **Sustainable Development Goals (SDG 6).**

Community Engagement

- Local cultural practices and beliefs are central to promoting actions such as the adoption of protective hygiene measures such as handwashing with soap, safe preparation and storage of food and safe disposal of the faeces of children.
- Community engagement should be done throughout the outbreak response with increased communication regarding potential risks, symptoms of cholera, and precautions to take to avoid cholera.

Ayurvedic Whole System effective in Managing Rheumatoid Arthritis: Study

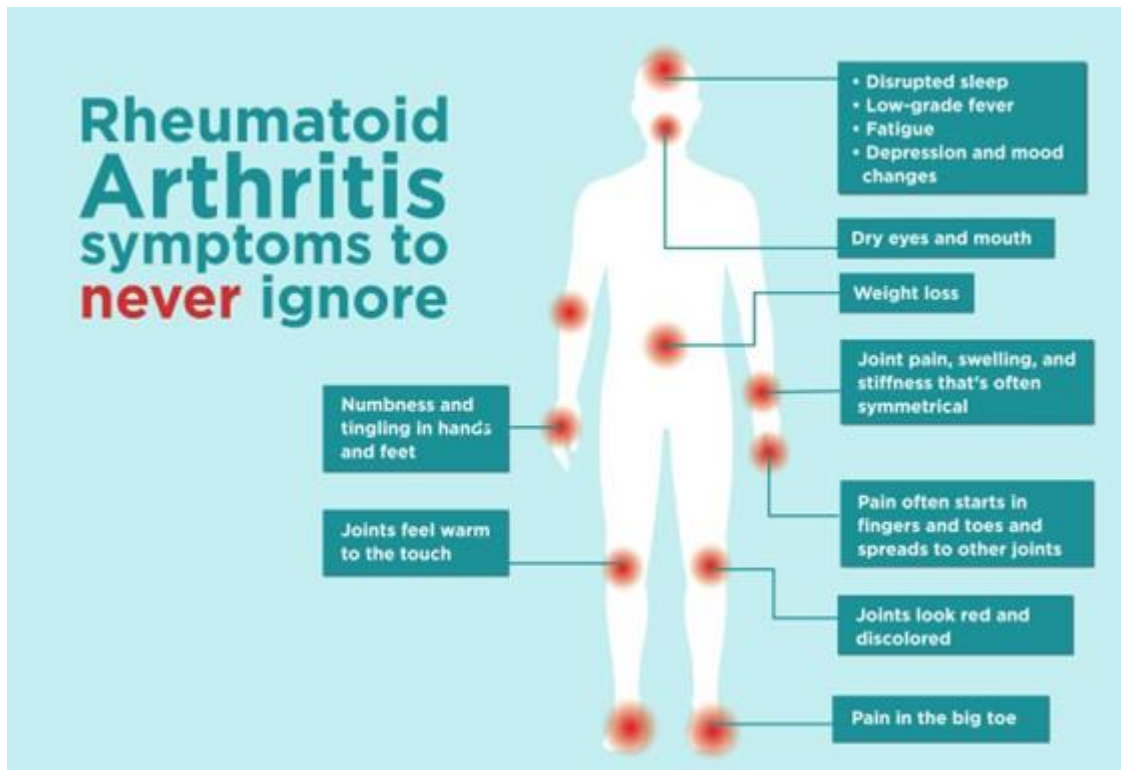
- **Objective:** To evaluate the effectiveness of the Ayurvedic Whole System (AWS) in managing **Rheumatoid Arthritis (RA)**.
- **Findings:** AWS significantly alleviated RA symptoms and induced a metabolic shift towards normalization.

Rheumatoid Arthritis (RA):

- It is an autoimmune and inflammatory disease, which means that your immune system attacks healthy cells in your body by mistake, causing inflammation (painful swelling) in the affected parts of the body.
- RA mainly attacks the joints, usually many joints at once. RA commonly affects joints in the hands, wrists, and knees.
- In a joint with RA, the lining of the joint becomes inflamed, causing damage to joint tissue. This tissue damage can cause long-lasting or chronic pain, unsteadiness (lack of balance), and deformity (misshapeness).
- RA can also affect other tissues throughout the body and cause problems in organs such as the lungs, heart, and eyes.

Cause:

- The exact cause of RA is unknown, but researchers believe that it involves a combination of genetic and environmental factors.
- Some people may have certain genes that make them more susceptible to developing RA, but these genes are not enough to cause the disease by themselves. There may be other triggers, such as infections, stress, hormones, or smoking, that activate the immune system and cause inflammation in the joints.



Treatment:

- There is **no cure for RA**, but there are treatments that can help control the symptoms and prevent or slow down joint damage.
- Various medications are used to manage rheumatoid arthritis (RA) symptoms. These include nonsteroidal anti-inflammatory drugs (NSAIDs) like **ibuprofen**, **corticosteroids** for rapid relief (with potential side effects), **disease-modifying antirheumatic drugs (DMARDs)** to slow down disease progression, and biologic agents that target specific inflammatory molecules.
- Physical therapy is an integral part of RA treatment, aiming to improve joint function and mobility. Therapeutic approaches may include exercises,

stretching, massage, and heat/cold therapy.

- Occupational therapy helps enhance daily activities and overall quality of life for individuals with RA. It involves the use of assistive devices, adaptive equipment, and ergonomic advice to facilitate better functioning.
- In cases of severe joint damage or deformity unresponsive to other treatments, surgery may be considered. Surgical options include repairing, replacing, or fusing affected joints to alleviate pain and improve joint function.

SOCIETY

Government spends 14% of funds under Ayushman Bharat on those over 70 years.

Under the vision of Ayushman Bharat, Pradhan Mantri Jan AarogyaYojana (AB-PMJAY) shall be implemented so that each and every citizen receives his due share of health care. With Ayushman Bharat – Pradhan Mantri Jan AarogyaYojana, the government is taking healthcare protection to a new aspirational level. This is the “**world’s largest government funded healthcare program**” targeting more than 50 crore beneficiaries.

Features of the scheme:

- Ayushman Bharat is a progression towards promotive, preventive, curative, palliative and rehabilitative aspects of Universal Healthcare through **access of Health and Wellness Centres (HWCs)** at the primary level and provision of **financial protection** for accessing **curative care at the secondary and tertiary levels through engagement with both public and private sector.**
- It adopts a continuum of care approach, comprising of two inter-related components: **Creation of 1,50,000 Health and Wellness Centres** which will bring health care closer to the homes of the people.
- These centres will provide **Comprehensive Primary Health Care (CPHC), covering both maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services.** The first Health and Wellness Centre was launched by the Prime Minister at Jangla, Bijapur, Chhattisgarh on 14th April 2018.
- The second component is the **Pradhan Mantri Jan ArogyaYojana (PMJAY) which provides health protection cover to poor and vulnerable families for**

secondary and tertiary care.

- The Health and Wellness Centres will play a critical role in creating awareness about PMJAY, screening for non-communicable diseases, follow-up of hospitalization cases among others

Benefits under the scheme:

- Ayushman Bharat- Pradhan Mantri Jan ArogyaYojana (PMJAY) will provide a **cover of up to Rs. 5 lakhs per family per year, for secondary and tertiary care hospitalization.**
- Over 10.74 crore vulnerable entitled families (**approximately 50 crore beneficiaries**) will be eligible for these benefits.
- PMJAY will provide **cashless and paperless access to services** for the beneficiary at the point of service.
- PMJAY will **help reduce catastrophic expenditure for hospitalizations, which** impoverishes people and will help mitigate the financial risk arising out of catastrophic health episodes.
- Entitled families will be able to use the **quality health services they need without facing financial hardships.**
- When fully implemented, PMJAY will become the world's largest fully government-financed health protection scheme. It is a **visionary step towards advancing the agenda of Universal Health Coverage (UHC).**

Implementation Challenges-

- **Healthcare Facilities:** Need for improved infrastructure and capacity to handle increased patient load.
- **Quality Assurance:** Ensuring consistent quality of care across both public and private hospitals.

- **Beneficiary Awareness:** Ensuring that all eligible individuals are aware of and can access the benefits.
- **Community Engagement:** Effective outreach strategies to reach remote and underserved populations.
- **Detection Mechanisms:** Implementing robust systems to detect and prevent fraud.
- **Audit and Evaluation:** Regular audits and evaluations to ensure proper utilization of funds and services.

Nandini Sahakar Yojana

Nandini Sahakar Yojana

- The Nandini Sahakar Scheme was initiated by the **National Cooperative Development Corporation (NCDC)** in 2010.
- It is a women-focused framework providing financial assistance, project formulation, hand-holding, and capacity development.
- The scheme aims to assist women cooperatives in undertaking business model-based activities under the purview of NCDC.

Scope of Assistance

- The scheme provides a range of support including financial aid, project formulation, and capacity development. It is designed to assist women cooperatives in taking up various business activities. Notably, there is no specified minimum or maximum limit on the financial assistance available under the scheme. It also integrates critical inputs such as business plan formulation, credit, subsidy, and interest subvention from other schemes.

Nandini Sahakar

Empowering Women through Cooperatives

Objective:

- ▶ Enhance the socio-economic status of women.
- ▶ Support entrepreneurial dynamism via women cooperatives.

Eligibility:

- ▶ Cooperative societies with at least **50% women** as primary members.
- ▶ Minimum of three months in operation.

Benefits:

- ▶ Credit linkage for infrastructure term loan and working capital.
- ▶ Subsidy or interest subvention from other government schemes/agencies.

Incentives:

- ▶ **NCDC** provides a **2% interest** subvention on its term loan interest rate for new and innovative activities.
- ▶ **1% interest** subvention on its term loan interest rate for all other activities, lowering borrowing costs.



Current Status

- As of March 31, 2024, no proposals have been received from women cooperatives in Bihar under the Nandini Sahakar Scheme. However, on a national level, the National Cooperative Development Corporation (NCDC) has disbursed a cumulative total of ₹6426.36 crore for the development of cooperatives exclusively promoted by women.

PMAY-U 2.0 to give housing financiers more credit cushion

Key Highlights of PMAY-U 2.0:

- **Increased Credit Risk Guarantee Fund:** Corpus raised from ₹1,000 crore to ₹3,000 crore.
- **Fund Management Transfer:** Managed by **National Credit Guarantee Company** instead of National Housing Bank.
- **Total Financial Assistance:** ₹2.3 lakh crore subsidy over five years.
- **Total Investment:** ₹10 lakh crore.
- **Target:** Financial aid to 1 crore urban poor and middle-class families.
- **Houses Sanctioned:** 64 lakh houses approved so far.
- **Construction Cost Sharing:** Costs shared by Centre, State governments, UTs, urban local bodies, and beneficiaries.
- **Technology and Innovation Sub-Mission (TISM):** New initiative to be established under PMAY-U 2.0.

Pradhan Mantri Awas Yojana-Urban

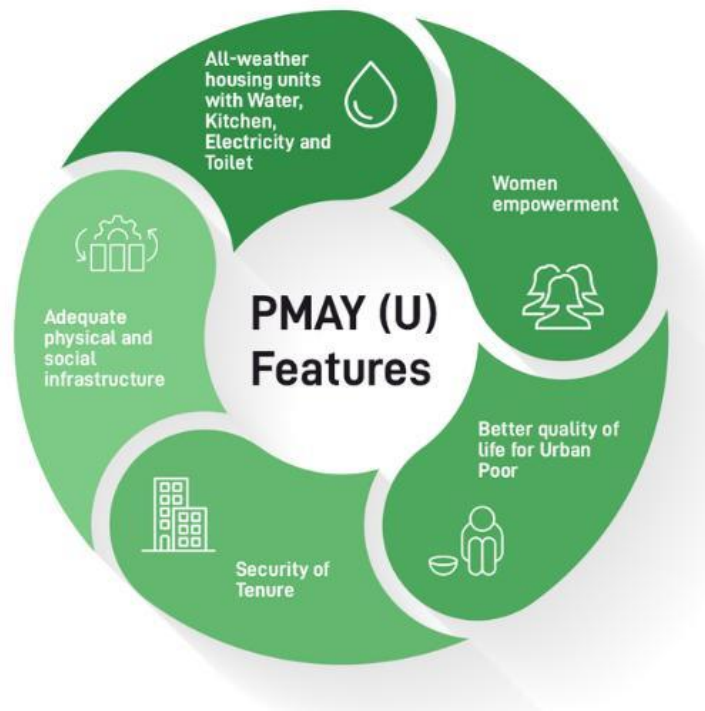
- Pradhan Mantri Awas Yojana (PMAY) falls under the Government's mission - **Housing for All by 2022** for urban housing being implemented by the Ministry of Housing and Urban Affairs (MoHUA).
- It makes home loans affordable for the urban poor by providing **a subsidy on the Interest Rate** of a home loan during repayment by way of EMI (Equated Monthly Instalments).

The Mission seeks to address the housing requirement of urban poor including slum dwellers through following programme verticals:

- Slum rehabilitation of Slum Dwellers with participation of private developers

using land as a resource.

- Promotion of Affordable Housing for weaker section through credit linked subsidy.
- Affordable Housing in Partnership with Public & Private sectors.
- Subsidy for beneficiary-led individual house construction /enhancement.



Progress under PMAY-U Phase 1

- In the first phase of PMAY-U, 1.18 crore houses have been sanctioned, and more than 85.5 lakh houses have already been constructed and delivered to beneficiaries.
- The scheme has made significant strides in providing all-weather pucca houses to eligible candidates in urban areas.

WCD Minister Annpurna Devi calls for Centre-State collaboration to enhance welfare programs

The highlights:

- **Meeting:** First national-level video conference with State Ministers and UT Administrators.
- **Focus:** Collaboration between Centre and States for women and child welfare.
- **Flagship Programmes:**
 - **Mission Saksham Anganwadi and Poshan 2.0**
 - **Mission Vatsalya**
 - **Mission Shakti**
- **Participation:** 21 out of 28 State Ministers.
- **Objective:** Review ongoing programmes and plan future strategies.

Mission Saksham Anganwadi and Poshan 2.0

- Saksham Anganwadi and Poshan 2.0 is an **Integrated Nutrition Support Programme**.
- It seeks to address the challenges of malnutrition in children, adolescent girls, pregnant women and lactating mothers through a strategic shift in nutrition content and delivery and by creation of a convergent eco-system to develop and promote practices that nurture health, wellness and immunity.

Objectives:

- To prepare a **comprehensive strategy to address the challenge of malnutrition, the Supplementary Nutrition Programme under Anganwadi Services**.
- Scheme for Adolescent Girls and Poshan Abhiyaan have been aligned under **Poshan 2.0 as an Integrated Nutrition Support Programme**.

- The objectives of Poshan 2.0 are as follows:
 - To contribute to human capital development of the country.
 - Address challenges of malnutrition.
 - Promote nutrition awareness and good eating habits for sustainable health and wellbeing.
 - Address nutrition related deficiencies through key strategies.
 - AYUSH systems shall be integrated under Poshan 2.0 for wellness and nourishment.

Mission Vatsalya:

- Mission Vatsalya Scheme is a roadmap to achieve development and child protection priorities aligned with the Sustainable Development Goals (SDGs).
- It lays emphasis on child rights, advocacy and awareness along with strengthening of the juvenile justice care and protection system with the motto to "**leave no child behind**".

Objectives:

- To secure a healthy and happy childhood for each and every child in the country.
- To ensure opportunities to enable them to discover their full potential and assist them in flourishing in all respects, in a sustained manner, foster a sensitive, supportive and synchronized ecosystem for development of children, assist States and UTs in delivering the mandate of the Juvenile Justice Act, 2015 and achieve the Sustainable Development Goals (SDGs).
- It promotes family-based non-institutional care of children in difficult circumstances based on the principle of institutionalization of children as a measure of last resort.

Mission Shakti

- **"Mission Shakti"** was launched during the **15th Finance Commission period 2021-22 to 2025-26.**
- **Mission Shakti** is an integrated women empowerment programme is launched as an umbrella scheme for the safety, security and empowerment of women for implementation.

The Umbrella Scheme of Mission Shakti has two sub-schemes namely:

- **"Sambal"** for safety and security of women and "Samarthya" for empowerment of women.
- **Under "Samarthya" sub- scheme,** a new component i.e. **Hub for Empowerment of Women (HEW)** has been included with the aim to facilitate inter-sectoral convergence of schemes and programs meant for women at the Central, State/ UT and District levels for creating an environment in which women are able to realize their full potential.

Dr. Virendra Kumar to administer Mass Pledge on Nasha Mukht Bharat Abhiyaan

- **Current Status:** Implemented in all districts of India from August 2023.
- **Annual Event:** Mass pledge-taking ceremony on 12th August 2024, marking the fifth year of NMBA.
- **Theme for 2024:** 'Viksit Bharat ka Mantra, Bharat ho Nashe se Swatantra'

Nasha Mukht Bharat Abhiyaan-

- The Nasha Mukht Bharat Abhiyaan, launched in the year 2020 by the Ministry of

Social Justice & Empowerment, has emerged as a pioneering initiative to combat the rampant issue of substance abuse in India.

- This transformative campaign, spearheaded by the **Department of Social Justice & Empowerment**, stands as a beacon of hope in the endeavor to create a society free from the clutches of addiction.
- Through a comprehensive approach that incorporates awareness programs, counseling services, and capacity building, the **Nasha Mukta Bharat Abhiyaan** strives to empower individuals to break free from the vicious cycle of substance dependency.

Features of Nasha Mukta Bharat Abhiyaan-

- **Awareness Generation Programs:** The abhiyaan places great emphasis on conducting widespread awareness programs to educate individuals about the perils of substance abuse. These programs are designed to reach people of all age groups and social backgrounds.
- **Targeting Educational Institutions:** By engaging with schools and universities, the campaign aims to prevent the initiation of substance abuse among the youth. Educational institutions become crucial spaces for spreading awareness and fostering a culture of healthy living.
- **Community-Based Approach:** The NMBA focuses on identifying dependent populations within communities. This approach ensures that support reaches those who are most vulnerable to the grips of addiction.
- **Counseling and Treatment Facilities:** Providing accessible counseling and treatment facilities is a pivotal aspect of the initiative. Individuals seeking help can avail of professional guidance and rehabilitation services.

Institutions

- The Ministry of Social Justice and Empowerment supports organizations that work for preventive education & awareness generation on substance abuse, capacity building, treatment and rehabilitation. These organizations are:
- **Integrated Rehabilitation Center For Addicts (IRCA)s**: are de-addiction centres with inpatient facilities of counselling and treatment for drug dependent persons.
- **Community Peer Led Intervention (CPLI)**: work with the community supported by youth volunteers for early preventive education, especially for vulnerable adolescents and youth in the community.
- **Outreach and Drop in Centres (ODIC)**: provide facilities of screening, assessment and counselling along with providing referral & linkage to treatment and rehabilitation services for drug dependents.
- **GEO Location**: Ministry supported institutions providing Drug addiction counselling, treatment and rehabilitation and other facilities have been Geo-tagged to make their services accessible and easier to locate.

Kiren Rijju & George Kurian Launch Haj Application 2025 & Jiyo Parsi Scheme Portal

Key Highlights:

Haj Quota and Application:

- **Quota**: Saudi Arabia has allotted India a quota of over 1.75 lakh Haj pilgrims for Haj-2025.
- **Application Process**: Haj applications can now be submitted via the Haj Suvidha App and the Haj Committee of India's website.

Reforms in Haj Administration:

- **Ladies without Mehram (LWM):** For the first time, Muslim women aged 45 and above can perform Haj without a male companion.
- **Statistics:** 4,558 women performed Haj under the LWM category in 2024, marking an all-time high.

Jiyo Parsi Scheme Portal:

- **Purpose:** Provides financial assistance to the Parsi community through Direct Benefit Transfer (DBT).
- **Call to Action:** Eligible Parsi couples are encouraged to take advantage of the scheme.

Jiyo Parsi Scheme

- The **Ministry of Minority Affairs** initiated the Jiyo Parsi Scheme in **2013** to check the declining Parsi population.
- The **main objective** of the scheme was to arrest the declining trend of the Parsi population by adopting a scientific protocol and structured interventions, in order to stabilize their population and thereby increasing the population of Parsis in India.

The scheme comprises of **three components:**

1. **Advocacy Component that** includes workshops, advertisement campaigns to create awareness, etc.,
 2. **Health of the Community Component which** covers Childcare and Creche support, assistance to elderly, etc.
 3. **Medical Component includes** financial assistance for the detection and treatment of infertility, fertility treatment, etc.
- The scheme also offers cash assistance to encourage Parsi couples to have children. The scheme is applicable to all couples, irrespective of their financial status.

- This has resulted in 214 births over the last five years through **assisted reproductive techniques (ART)**.
- This is a 100% **Central Sector Scheme**.

About Parsis:

- Parsi are a group of followers in India who follow the Zoroastrianism. The religion was founded by Prophet Zoroaster (or Zarathustra).
- According to the Union Ministry of Minority Affairs, the population of Parsis has declined from about 114,000 in 1941 to 57,264 in 2011.
- Maharashtra has the highest Parsi population in the country followed by Gujarat.
- Infertility and late marriages are among the main reasons for the rapid decline in the Parsi population.

Hajj Pilgrimage

- The Hajj is a religious **pilgrimage** to the holy city of Mecca in Saudi Arabia that is **mandatory for all able-bodied Muslims who** can afford it. It is **one of the Five Pillars of Islam** and is considered a central part of Muslim religious life.

Five Pillars:

1. **Shahada (Faith):** The declaration of faith in the oneness of God and the acceptance of Muhammad as God's prophet.
 2. **Salah (Prayer):** **Performing** the five daily prayers facing the Kaaba in Mecca.
 3. **Zakat (Charity):** **Giving** a portion of one's wealth to those in need.
 4. **Sawm (Fasting):** **Fasting** during the month of Ramadan.
 5. **Hajj (Pilgrimage):** **Making** a pilgrimage to the holy city of Mecca at least once in a lifetime if one is physically and financially able.
- The Hajj takes place during the **Islamic month of Dhu al-Hijjah and involves several rituals**.

IEC Campaign on PM-JANMAN mission, to raise awareness and ensure 100% saturation of Government Schemes in PVTG majority tribal areas

This campaign is an effort aimed at saturating PVTG families with key individual entitlements and the disseminate information about the PM-JANMAN interventions for providing PVTG habitations with basic facilities, so as to enable these tribal communities to be aware about the Central and State schemes and the benefits thereunder.

PM-JANMAN

About:

- PM-JANMAN, launched on 15th November 2023, on **Janjatiya Gaurav Diwas**, focuses on 11 critical interventions through 9 ministries to improve the socio-economic welfare of PVTGs.
- PM-JANMAN comprises **Central Sector** and **Centrally Sponsored Schemes** to improve the socio-economic conditions of PVTGs.
- The scheme has a total outlay of Rs 24,104 crore to be spent over a three-year period, of which nearly 80% is only for the construction of houses and roads.
- An allocation of Rs 15,000 crore has been made for the next three years under the Development Action Plan for the Scheduled Tribes (DAPST) to implement the housing component of PM-JANMAN.

Main targets of the scheme:

- To provide 4.90 lakh pucca homes at a cost of Rs 2.39 lakh per house.
- Construction of 8,000 kilometres of roads at a cost of Rs 1 crore per kilometre.
- Piped water supply for all Particularly Vulnerable Tribal Group (PVTG) habitations.
- Community water supply in 2,500 villages/habitations with a population of less

than 20 households.

- A thousand mobile medical units with medicine cost for 10 districts at Rs 33.88 lakh per mobile medical unit.
- Last-mile electricity connection for 57,000 households.

Challenges in implementation of the scheme

- **Data inaccuracy**-There is lack of current data on PVTGs, as **no census since 1951** has accounted for them separately.
- **Lack of transparency**- The current project is going ahead with the baseline surveys but the results are not made public.
- **Lack of accountability**- The scheme involves multiple ministries, this may lead to issue of overlapping or conflicting mandate, gaps in service delivery etc.,
- **Loss of cultural heritage**-The scheme provides education, health, skill development etc., this may result in loss of their intellectual and cultural heritage, and reduce their resilience and adaptability.
- **Lack of autonomy**- Mobile connectivity, Anganwadi centres and **Bandhan Vikas Kendra** may bring the PVTGs under the purview of state and market forces and compromise their sovereignty and rights.

Particularly Vulnerable Tribal Groups (PVTGs)

- In 1973, the **Dhebar Commission** established Primitive Tribal Groups (PTGs) as a distinct category, encompassing tribal communities characterized by a declining or stagnant population, the use of **pre-agrarian technology**, economic backwardness, and low literacy.
- These groups are identified as less developed among the tribal communities.
- In 2006, the Government of India renamed the **PTGs as PVTGs**. They reside in remote and inaccessible areas, facing challenges due to poor infrastructure

and administrative support.

- There are **75 PVTG** communities spread across 18 States and Union Territories in India.

Way Forward

- Implement a standardised data collection methodology to ensure data accuracy.
- Implement streamlined processes to expedite data collection and project execution without compromising quality.
- Engage tribal communities in the scheme's planning and execution to enhance inclusivity and effectiveness.
- Invest in infrastructure and communication networks in tribal regions to facilitate data collection and scheme implementation.
- Develop adaptive strategies to account for dynamic population movements among tribal groups and ensure comprehensive coverage of eligible beneficiaries.
- Provide training and capacity-building programs for stakeholders involved in data collection and scheme implementation to enhance efficiency and effectiveness.

Government gears up to host World Audio Visual and Entertainment Summit (WAVES) in Goa

- The Government is gearing up to host the inaugural World Audio Visual and Entertainment Summit (WAVES), aiming to bolster India's Media and Entertainment industry and extend its global influence.

- The Summit will be being held in Goa from 20th of November to 25th of November this year.
- With the Union Minister of Information and Broadcasting Ashwini Vaishnaw, launching 25 Challenges under the '**Create in India Challenge – Season 1**' , WAVES is poised to become a significant platform for icons of the Media and Entertainment fraternity worldwide, focusing on entertainment economics and technology.

WAVES:

- It is an international summit organized by the Ministry of Information & Broadcasting, Government of India.
- The summit will be hosted in Goa in collaboration with the State Government of Goa.
- The **Entertainment Society of Goa** will act as the Nodal Agency for the event, following an MOU with Ministry of Information & Broadcasting.
- It is supported by industry partners like the Federation of Indian Chambers of Commerce & Industry (FICCI) and the Confederation of Indian Industry (CII).

Objectives and Significance of WAVES

- WAVES is envisioned as a pivotal platform that will convene industry leaders, stakeholders, and innovators to explore opportunities, tackle challenges, and attract trade to India.
- By facilitating conversations on entertainment economics and the latest technological advancements, WAVES aim to shape the future of the Media and Entertainment industry.
- The summit will highlight India's potential to serve as a global content creation

hub, offering high-quality and cost-effective solutions.

ANUBHAV AWARDS 2024 will be conferred by Union Minister Dr Jitendra Singh in Vigyan Bhawan, New Delhi

This award ceremony is unique as out of 15 awardees, 33% percent are women, the highest ever in the history of "Anubhav" since its inception in 2015, indicating their growing role and contribution in the Governance.

ANUBHAV Awards

- It recognizes the contribution made by **Retired Officials** to Nation building while working in Government and to document the administrative history of India by written narratives.
- The **ANUBHAV Portal**, established in March 2015, serves as an online platform for retiring and retired government employees to share their experiences.
- The portal was launched by the Government of India, Ministry of personnel, Public Grievances & Pensions, Department of Pension & Pensioners' welfare.

Objectives

- It aims to create a database of significant suggestions and work experiences.
- It channelizes the human resource of retiring employees for nation building.
- Enable Ministries/ Departments to take crucial steps while considering useful and replicable suggestions.

Eligibility:

- To participate in the scheme, retiring Central Government employees/pensioners are required to submit their Anubhav write ups, 8 months prior to retirement and up to 1 year after their retirement.

- Thereafter, the write-ups will be published after assessment by concerned Ministries/Departments. The published write-ups will be shortlisted for Anubhav Awards and Jury Certificates.

Significance and Impact

- **Documenting Administrative History:** The scheme helps in creating a repository of experiences that can serve as a foundation for good governance and administrative reforms.
- **Sharing Wisdom:** It provides a national forum for the retirees to share their experiences and insights, fostering a culture of learning and reflection.
- **Recognition:** Acknowledging the unsung heroes of the government machinery, it boosts morale and encourages a sense of ownership and pride among the retirees.

Recent Developments

- As of now, 54 ANUBHAV Awards have been conferred since the inception of the scheme.
- The last year award ceremony took place on 23rd October 2023, where 05 Anubhav Awards and 10 Jury Certificates were presented.
- The DoPPW has been actively involved in grievance redressal, with over 72,110 grievances resolved and significant improvements in the redressal time.

SC's National Task Force Holds First Meeting to Address Medical Professionals' Safety

- Union Health Ministry has created a national portal on its website under the title **“Suggestions to NTF”** to seek suggestions from individuals and different stakeholders across the country.

National Task Force

- The Supreme Court formed a 10-member National Task Force to make a blueprint for the safety and facility of healthcare workers at their workplace.

Responsibilities

- The NTF has been tasked with the critical responsibility of devising an action plan to ensure the safety and well-being of medical professionals.
- It will particularly focus on preventing gender-based violence and creating dignified working conditions for interns, resident doctors, and non-resident doctors.

Areas to be addressed

- Enhancing security in emergency rooms and other critical areas.
- Implementing baggage screening to prevent the entry of arms.
- Restricting the number of non-patient visitors.
- Managing crowd control effectively.
- Providing restrooms and gender-neutral spaces for medical staff.
- Introducing biometric and facial recognition systems.
- Improving lighting and installing CCTV in all hospital areas.
- Arranging transport for medical professionals between 10 pm and 6 am.
- Conducting workshops on handling grief and crisis situations.
- Performing quarterly audits of institutional safety measures.

- Establishing police force commensurate with hospital footfall.
- Applying the **Prevention of Sexual Harassment (POSH)** Act to medical establishments, ensuring the constitution of an Internal Complaints Committee (ICC).
- Setting up an emergency helpline for medical professionals.

Present Scenario of Legal Protection to Healthcare Professionals

- Currently no imperative law exists to protect healthcare people nationwide.
- As of 2020, 19 States had carried out their statutes, each with varying provisions. Other States and Union Territories had no legal guidelines in any respect.
- This loss of uniformity intended for safety is inconsistent.
- Among States, Kerala and Karnataka offer their healthcare workers with the strongest criminal protections in India.

Union Minister of Women and Child Development launches new She-Box Portal to make Workplaces safer for Women

Launch of New Website

- **Objective:** The new website aims to create a cohesive visual identity for the Ministry, enhancing engagement with national and global audiences.
- **National Goal:** The initiative aligns with India's vision for **"Viksit Bharat"** by 2047, focusing on women's participation in economic growth.
- **Legislative Framework:** The SHe-Box portal supports the Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, 2013, which aims to protect women from sexual harassment and address grievances in the workplace.

She-Box

- The Ministry of Women & Child Development has launched **Sexual Harassment electronic Box (SHe-Box)** as an effort to provide a single window access to every woman, irrespective of her work status, whether working in organised or unorganised, private or public sector, to facilitate the registration of complaint related to sexual harassment.
- Any woman facing sexual harassment at the workplace can register their complaint through this portal. Once a complaint is submitted to the 'SHe-Box', it will be directly sent to the concerned authority having jurisdiction to act into the matter.

Features:

- **Confidentiality:** Complaints are handled confidentially to protect the privacy of the complainants.
- **Accessibility:** It is designed to be easily accessible to women across various sectors and regions.
- **Response Mechanism:** The portal is linked to internal committees within organizations responsible for handling such complaints, ensuring that they are addressed promptly.

Limitations of the She Box Portal

1. **Awareness and Accessibility:**
 - **Limited Reach:** Not all women, especially in remote areas or informal sectors, might be aware of the portal or have access to it.
 - **Digital Divide:** Women with limited access to technology or the internet may find it difficult to use the portal.
2. **Privacy and Confidentiality:**

- **Data Security:** Ensuring the confidentiality and security of the complaints and personal information is crucial. There may be concerns about data breaches or misuse.
- **Fear of Stigmatization:** Women might still fear retaliation or social stigmatization despite the portal's confidential nature.
- 3. **Effective Resolution Mechanism:**
 - **Implementation Delays:** Complaints may not always be addressed in a timely manner, leading to prolonged stress for the complainants.
 - **Inadequate Action:** There might be instances where complaints are not adequately followed up or resolved, impacting the effectiveness of the portal.
- 4. **Lack of Awareness Among Employers:**
 - **Compliance Issues:** Some organizations may not be fully aware of or comply with the requirements to address complaints effectively, even if they are reported through the She Box Portal.

Way Forward for the She Box Portal

1. **Increasing Awareness and Accessibility:**
 - **Outreach Programs:** Conduct awareness campaigns to inform women about the portal and how to use it. This can include educational workshops, community programs, and collaborations with NGOs.
 - **Improving Digital Literacy:** Offer training programs to enhance digital literacy among women, especially in rural and underserved areas.
2. **Enhancing Privacy and Confidentiality:**
 - **Strengthening Data Security:** Invest in robust cybersecurity measures to protect data and ensure that complaints are handled with the highest level of confidentiality.
 - **Clear Guidelines:** Establish clear protocols for handling sensitive information

and managing complaints to prevent any potential misuse.

3. **Strengthening Employer Compliance:**

- **Training for Organizations:** Provide training for employers and organizations on how to handle complaints effectively and ensure they adhere to the guidelines set by the POSH Act.
- **Regular Audits:** Conduct regular audits of organizations to ensure compliance with the Act and the effective use of the She Box Portal.

ART AND CULTURE

Panchvaktra temple

- Situated at the confluence of the Rivers **Suketi and Beas**.
- The temple stands on a huge platform and is very well furnished.
- Panchvaktra temple is a supreme shrine dedicated to Lord Shiva.
- The temple is built in the typical Shikhara architecture style which looks astounding.
- Temple got its name from the five faced statue image of Lord Shiva, out of which only three can be seen when viewed from the front.
- It is one of the protected monuments which comes under the Archaeological Survey of India and has been declared a national site.
- Inside the Panchvaktra temple, there is a huge statue of Lord Shiv. The statue has five faces which depict about the different character of Lord Shiv- Aghora, Ishana, Tat Purusha, Vaamdeva and Rudra. Angora is the destructive nature, Ishana is omnipresent and omnipotent, Tat Purusha is his ego, Vaamdeva is the female facet and Rudra is his creative and destructive aspect. Panchvaktra is defined as the union of all these.



Virupaksha temple in Hampi

Location: Hampi, Karnataka, India.

Significance:

- One of the oldest and most historically significant temples in India, dedicated to Lord Shiva.
- It is **part of the Group of Monuments at Hampi**, designated as a **UNSC world heritage site**.
- It is situated on the **southern bank of the Tungabhadra river**.

Historical Background-

- **Period of Construction: Originally** constructed in the 7th century during the reign of the Chalukya dynasty, with major expansions and renovations during the Vijayanagara Empire (14th to 17th centuries).
- **Dynasty: Prominently** associated with the Vijayanagara Empire under King Devaraya II and other rulers.

Architectural Features-

- **Style: Dravidian** architecture.
- **Main Components:**
- **Sanctum (Garbhagriha):** Houses the primary deity, Virupaksha (a form of Lord Shiva).
- **Vimana:** The tower above the sanctum, typically square or rectangular in shape.
- **Mandapa:** Pillared hall or portico in front of the sanctum.
- **Raya Gopura:** The main entrance tower, elaborately decorated.
- **Intricate Carvings: Features** detailed sculptures and carvings depicting Hindu mythology, including various deities and mythological scenes.
- **Sculptures: Notable** for its detailed and elaborate sculptures, including

representations of gods, goddesses, and mythological figures.

- **Inscriptions: Contains** several inscriptions that provide valuable historical information about the Vijayanagara Empire.



Bharatanatyam

Bharatanatyam is one of the oldest classical dance forms of India, originating from Tamil Nadu. It is renowned for its graceful movements, intricate footwork, and expressive storytelling. It evolved from the ancient dance-drama tradition known as "Sadir," performed in temples as a form of devotion.

Historical Background:-

- **Ancient Roots: Bharatanatyam** has roots in the Natya Shastra, an ancient

treatise on performing arts attributed to the sage Bharata Muni. The dance form has been practiced for over 2000 years.

- **Temple Dance Tradition: Traditionally** performed by Devadasis (temple dancers), it was both a religious offering and an art form.
- Several texts beginning with **Bharata Muni's Natya Shastra**(200 BCEE. to 200 C .E.) provide information on this dance form.
- Historical references to dance are found in the Tamil **epics Silappatikaram (c. 2nd century CE) and Manimegalai.**
- The **Abhinaya Darpana by Nandikesvara** is one of the main sources of textual material, for the study of the technique and grammar of body movement in Bharatnatyam Dance.

Features:-

- **Performance Style: Bharatanatyam** is characterized by its fixed upper torso, bent legs, intricate footwork, hand gestures (mudras), and expressive facial expressions (abhinaya).
- **Dance Forms: Includes** solo performances (margam) and group dances, typically set to Carnatic music.
- **Costumes and Makeup: Performers** wear traditional silk sarees with intricate jewelry. Makeup is elaborate, emphasizing facial expressions.
- **Themes: The** dance form covers a range of themes including mythological stories, devotional hymns, and folklore. It often portrays narratives from Hindu epics like the Ramayana and Mahabharata.
- **Structure: The** performance usually begins with an Alarippu (invocatory piece), followed by Jatiswaram (pure dance), Varnam (dance with expressive elements), Padams (expressive pieces), and ends with Tillana (rhythmic dance) and Shloka (closing piece).

PROJECT PARI

Key highlights:

- **Launched by:** Ministry of Culture
- **Executed by:** Lalit Kala Akademi and **National Gallery of Modern Art**
- **Event:** Coincides with the **46th World Heritage Committee Meeting** in New Delhi (July 21-31, 2024)
- **Objective:** Enhance Delhi's public art scene by blending traditional Indian artforms with contemporary themes
- **Artforms involved:** Phad, Thangka, Warli, Gond, Tanjore paintings, among others
- **Number of artists:** Over 200 visual artists
- **Goal:** Celebrate cultural heritage, enhance visual landscape, foster community pride
- **Government effort:** Merge cultural history with modern public art through artist incentives.

Project PARI:

- The **Project PARI (Public Art of India)** aims to stimulate dialogue, reflection, and inspiration, contributing to the dynamic cultural fabric of the nation.
- It provides a **platform to uplift the aesthetic and cultural outlook of Delhi** while adding grandeur to the rich historical legacy of our national capital.
- The representation of Art in public spaces is particularly significant as it showcases the nation's rich and diverse cultural heritage.
- The proposed sculptures being created for Project PARI include wide-ranging ideas such as paying tributes to nature, ideas inspired by the **Natyashastra**, Gandhi ji, toys of India, hospitality, ancient knowledge, **Naad or Primeval**

Soun, Harmony of life, **Kalpataru – the divine tree**, etc.

- Women artists have been an integral part of Project PARI and their participation in large numbers is a testimony of **Bharat's NARI SHAKTI**.

Significance of Public Art

Cultural Reflection

1. **Representation:** Public art represents India's diverse cultural heritage.
2. **Accessibility:** Transforms urban spaces into open galleries, making art accessible to everyone.

Inclusivity and Social Cohesion

1. **Democratization:** Public art installations bring art outside museums and galleries, integrating it into daily life.
2. **Shared Identity:** Fosters a shared cultural identity and enhances social unity.
3. **Engagement:** Invites citizens to interact with art, stimulating dialogue, reflection, and inspiration.

Lalit Kala Akademi

It is India's national academy of fine arts established by the Government of India to promote and propagate understanding of Indian art, in and outside the country.

Lure of easy money keeps Kuppam Jallikattu going

- Jallikattu (or sallikkattu) is also known as **eru thazhuvuthal** and **mañcuvirattu**.
- The bull-taming sport is popular in Madurai, Tiruchirappalli, Theni, Pudukkottai and Dindigul districts — known as the Jallikattu belt.
- A tradition over 2,000 years old, Jallikattu is a competitive sport as well as an event to honour bull owners who rear them for mating.
- It is a traditional sport in which contestants try to tame a bull for a prize; if they fail, the bull owner wins the prize.
- Jallikattu is considered a traditional way for the peasant community to preserve their pure-breed native bulls.
- Kangayam, Pulikulam, **Umbalachery, Barugur and Malai Maaduaire** among the popular native cattle breeds used for Jallikattu.

The Associated Concerns

- The primary question involved was whether Jallikattu should be granted constitutional protection as a collective cultural right under Article 29 (1).
- **Article 29 (1)** is a fundamental right guaranteed under **Part III** of the Constitution to protect the educational and cultural rights of citizens.
- The court examined if the laws “perpetuate cruelty to animals” or were actually a means to ensure “the survival and well-being of the native breed of bulls”.
- The five-judge Bench heard parties on whether the new Jallikattu laws were “relatable” to **Article 48** of the Constitution, which urged the state to endeavour to organize agriculture and animal husbandry on modern and scientific lines.
- The Constitution Bench also looked into whether Jallikattu and bullock-cartraces laws of Karnataka and Maharashtra would actually sub-serve the objective of “prevention” of cruelty to animals under the Prevention of Cruelty to Animals Act of 1960.

The Associated Legal Interventions-

- In 2011, the Centre added bulls to the list of animals whose training and exhibition is prohibited.
- The Supreme Court banned Jallikattu through a judgment in May 2014 in the **Animal Welfare Board of India vs A. Nagaraja** case on the grounds of cruelty to animals.
- In 2018, the Supreme Court referred the Jallikattu case to a Constitution Bench, where it is pending now.
- The bone of contention is the Prevention of Cruelty to Animals (Tamil Nadu Amendment) Act of 2017 and Prevention of Cruelty to Animals (Conduct of Jallikattu) Rules of 2017, which had re-opened the gates for the conduct of the popular bull-taming sport in the name of culture and tradition despite a 2014 ban by the Supreme Court.

ARGUMENTS FOR AND AGAINST



International Buddhist Confederation to organize a Two-day Conference at Nalanda, Bihar on the Life and Legacy of Guru Padmasambhava

(Source: PIB)

- The key themes of the conference will include his life and teachings, his travels across the Himalayas, and, most importantly, his relevance in the present time.
- Guru Padamasambhava also represents a consolidation of many strands of culture ranging from Yogic and Tantric practices to meditation, art, music, dance, magic, folklore and religious teachings.

Guru Padmasambhava

Historical Background-

- **Era and Origins:** Guru Padmasambhava is traditionally believed to have lived during the 8th century CE. He is thought to have been born in **Uddiyana** (an ancient region, often identified with parts of modern-day Pakistan or Afghanistan), though exact details about his life are shrouded in legend.
- **Introduction to Tibet:** Padmasambhava is credited with **bringing Buddhism to Tibet**. His mission was sanctioned by the Tibetan king **Trisong Detsen**. This occurred during a period when Tibetan Buddhism was being established and faced challenges from indigenous Bon practices and other religious obstacles.

Role and Influence in Tibetan Buddhism

- **Spiritual Significance:** Guru Padmasambhava is revered as a legendary master and teacher who helped to establish and propagate **Vajrayana Buddhism** in Tibet. He is often considered an embodiment of wisdom and compassion and is central to the **Nyingma school** of Tibetan Buddhism.

- **Transmission of Teachings:** He is known for transmitting esoteric teachings, including the Dzogchen teachings, which are crucial for Tibetan Buddhism. His teachings emphasize direct experience and enlightenment.



Cultural and Religious Legacy

- **Iconography:** In Tibetan art and iconography, Padmasambhava is often depicted seated in a meditative posture or performing various ritual acts. His images frequently include symbols of his spiritual powers, such as a vajra (ritual scepter) or a lotus flower.
- **Temples and Practices:** Numerous monasteries and temples in Tibet and the

Himalayan region are dedicated to him. His teachings continue to influence practices, rituals, and the spiritual lives of many Tibetan Buddhists.

- **Modern Impact:** In contemporary times, Padmasambhava's influence extends beyond Tibet. His teachings and the practices associated with him have gained recognition and respect in various Buddhist communities worldwide.

FACTS FOR PRELIMS

PM Modi Extends Condolences on the Passing of classical dancer Dr. Yamini Krishnamurthy

One of India's first classical dancers was Yamini Krishnamurthy. She has received training in both **Kuchipudi and Bharatanatyam**, two contrasting dancing styles. She was born in Madanapalle, Andhra Pradesh, on December 20, 1940.

Kuchipudi

Kuchipudi is a **classical dance** form from **Andhra Pradesh**, India. It derives its name from the village of Kuchipudi in the Krishna district, where it was traditionally performed. It is known for its graceful movements, intricate footwork, and vibrant expressions, combining both dance and drama.

Historical Background-

- **Origins:** **Kuchipudi** has ancient roots, influenced by the traditional dance-drama performances of the region. It evolved from a combination of devotional dances and theatrical performances.

- **Development:** In the 20th century, it was popularized and codified by dancers like **Vedantam Lakshminarayana Sastry** and later by **Vempati Chinna Satyam**, who were instrumental in modernizing and bringing the dance form to a wider audience.
- People learned this classical dance from generations through the **Guru-Shishya Parampara**

Features

- **Performance Style: Kuchipudi** features a blend of expressive storytelling and elaborate choreography. It often incorporates elements of drama and mime.
- **Dance Forms: Includes** solo and group performances, with intricate footwork and fluid movements. The dance is typically performed to Carnatic music.
- **Costumes and Makeup: Performers** wear traditional silk costumes, and makeup includes elaborate designs to enhance expressions and portray different characters.
- **Themes: The** repertoire includes mythological and devotional themes, often depicting stories from Hindu epics like the Ramayana and Mahabharata.
- **Repertoire: Traditional** performances include "Bhama Kalapam," "Tarangams," and "Varnams," showcasing a range of emotions and stories.

10th National Handloom Day Celebrations

Source: PIB

Highlights:

- **Date & Venue:** August 7, 2024, at Vigyan Bhawan, New Delhi.
- **Chief Guest:** Hon'ble Vice President of India.
- **Awards:** Sant Kabir Awards and National Handloom Awards to be presented.
- **Publication:** Release of Award Catalogue and Coffee Table Book "Parampara-Sustainability in Handloom Traditions of India."
- **Initiated:** August 7, 2015, to commemorate the Swadeshi Movement of 1905.
- **Purpose:** Honour handloom weavers and raise awareness about the handloom sector's cultural and economic impact.

Significance of Handlooms in India-

Economic Contribution

- **GDP Share:** The handloom sector contributes approximately **0.8% to India's GDP**, reflecting its role in the broader economic framework.

Employment

- **Direct Employment:** The sector provides direct employment to around 4.5 million people, with a significant number being women. This includes weavers, dyers, and allied artisans.

Production Value

- **Annual Production:** The total value of handloom production is estimated at over ₹37,000 crore. This includes a diverse range of products such as sarees,

fabrics, and garments.

Exports

- **Export Value:** Handloom exports are valued at around ₹2,500 crore. Key export destinations are the United States, Europe, and Japan, showcasing the global appeal of Indian handloom products.

Key States

- **Tamil Nadu:** Renowned for Kanchipuram silk.
- **West Bengal:** Known for traditional Bengali textiles like Murshidabad silk.
- **Assam:** Famous for **Muga silk** and Assam silk.
- **Uttar Pradesh:** Noted for Banarasi sarees.
- **Maharashtra:** Known for Paithani sarees.

Problems in the industry-

The lack of effective policy support

- Combined with the fragmented nature of the sector has given rise to many problems.

Weaver and supply chain problems

- Most of the problems concerning the sector can be broadly categorised into weaver and supply chain problems.

Lack of financial viability

- According to the Handloom Census, approximately 67 per cent of the weavers still earn less than 5,000 a month, which is less than the amount that an

unskilled worker earns as per the minimum wage rule.

Handing the tradition over

- Existing weavers are not showing an interest in handing the tradition over to their next generations.

Indirect sources of credit

- Most of the weavers depend on indirect sources of credit with high rates of interest. This is due to the low penetration of banking facilities among the weaver community.

Government Initiatives-

1. National Handloom Development Programme (NHDP)

- NHDP has been formulated for its implementation during the financial year 2021-22 to 2025-26.
- The scheme will follow a need-based approach for integrated and holistic development of handlooms and welfare of handloom weavers.

2. The Yarn Supply Scheme (YSS)

- The Yarn Supply Scheme (YSS) with partial modification and renamed as Raw Material Supply Scheme (RMSS) has been approved for implementation during the period from 2021-22 to 2025-26.
- To make available quality yarn & their blends to the eligible Handloom weavers at subsidized rates.

3. Handloom Weavers' Comprehensive Welfare Scheme

- It is providing Life, accidental and disability insurance coverage to handloom weavers/workers under the components Pradhan Mantri Jivan Jyoti Bima Yojana (PMJJBY), **Pradhan Mantri Suraksha Bima Yojana (PMSBY)** and Converged **Mahatma Gandhi Bunkar Bima Yojana (MGBBY)**.

4. Weaver MUDRA Scheme

- Under the Weavers' Mudra Scheme, credit at concessional interest rate of 6% is provided to the handloom weavers.

Urban Haat

- These are set up in the big towns/metropolitan cities to provide adequate direct marketing facilities to the craft persons/weavers and eliminate middle agencies. 38 such Urban Haats have been sanctioned across the country so far.

PM Modi pays tribute to participants of the Quit India Movement

Quit India Movement

The Quit India Movement emerged against the backdrop of World War II and the deteriorating relationship between the British government and the Indian National Congress (INC). The impact of World War II on British resources and the growing demand for independence in India set the stage for the movement. The Quit India Movement 1942 was a mass Civil **Disobedience Movement launched by Gandhi on August 8, 1942, at the Bombay session of the All India Congress Committee.**

Key Factors Leading to the Movement

- **World War II:** The British decision to involve India in the war without consulting Indian leaders, and the worsening economic conditions due to the war, led to widespread discontent.
- **Cripps Mission (1942):** The mission, led by Stafford Cripps, proposed a vague promise of independence after the war and failed to address Indian aspirations, leading to frustration.
- **Demand for Immediate Independence:** The INC's demand for immediate self-rule gained momentum, fueled by widespread dissatisfaction with British policies.

Declaration and Launch

- **August Offer (1940):** Before the Quit India Movement, the British made some concessions but failed to satisfy Indian demands for complete independence.
- **Gandhi's Call:** On August 8, 1942, the All India Congress Committee, led by Mahatma Gandhi, passed the Quit India Resolution demanding an immediate

end to British rule.

- **Key Slogan:** The movement was marked by the slogan "Do or Die" ("Karo Ya Maro"), emphasizing the urgency and determination for independence.

Major Events

- **Initial Response:** The movement began with widespread protests, strikes, and demonstrations. However, it was met with severe repression by the British government.
- **Arrests and Repression:** Key leaders, including Mahatma Gandhi, Jawaharlal Nehru, and other INC leaders, were arrested. The British government imposed a brutal crackdown, including curfews and military action.
- **Civil Disobedience:** The movement saw significant acts of civil disobedience, including non-cooperation, sabotage, and mass protests.

Regional Impact and Repression

- **Spread of the Movement:** The Quit India Movement spread across India, with varying levels of intensity. Regions like Bombay, Bengal, and Bihar saw significant unrest.
- **Repression Tactics:** The British employed military force, arrested leaders, and used repressive measures to suppress the movement. Many activists were imprisoned, and violence erupted in several regions.

Impact and Outcome

- **Short-Term Impact:** The movement was repressed within a few months, and normalcy was restored by early 1943. However, it left a lasting impact on Indian

political consciousness and mobilization.

- **Long-Term Impact:**
 - **Political Awakening:** The movement galvanized Indian opinion against British rule and increased the demand for independence.
 - **Post-War Developments:** The British government recognized the need to address Indian aspirations. This led to the subsequent negotiation and the eventual independence of India in 1947.

British Response to Quit India Movement 1942

- The British responded to the movement by mass arrests and public flogging.
- Thousands of innocent people died in this violent suppression.
- They even fired and “**lathi charged**” at the public.
- The Congress was affirmed an illegal association.
- Tens of thousands were arrested, and the police used the most cruel methods to quell the unrest.
- The brutal repression succeeded in fizzling out the mass phase of the struggle within a period of 6-7 weeks.

Flood Watch India 2.0

The Union Ministry of Jal Shakti has launched Version 2.0 of the 'Flood Watch India' mobile application.

Flood Watch India:

- It gives information related to the flood situation and forecasts up to 7 days on a real-time basis to the public.
- The in-house developed user-friendly app has readable and audio broadcast and all the information is available in 2 languages, viz. English and Hindi.
- Another feature of the app includes real-time flood monitoring where users can check up-to-date flood situations throughout the country.
- It utilizes near real-time river flow data from various sources.
- It also provides flood forecasts at the nearest location where users can check the flood advisory at the station nearest to them on the Home Page itself.
- The app will also provide State-wise/Basin-wise Flood Forecast (up to 24 hours) or Flood Advisory (up to 7 days) which can be accessed by selecting specific stations, state wise or basin wise from the dropdown menu.

New features in Flood Watch India 2.0

- Version 2.0 expands the number of flood monitoring stations from 200 to 592, providing more detailed flood forecasts.
- The app now includes data on the storage levels of 150 major reservoirs, aiding in flood risk assessment for downstream areas.
- Advanced technologies such as satellite data analysis, mathematical modeling, and real-time monitoring are utilized to deliver accurate forecasts.

Partition Horrors Remembrance Day: PM Modi remembers victims, says day to pay tribute to their courage

Indian Independence Act 1947

Lord Mountbatten was appointed Viceroy of India. He proposed **the Mountbatten Plan (Dickie Bird Plan) on June 3 1947**. Despite Gandhi's strong opposition, all parties consented to the partition, leading to the passing of the Indian Independence Act of 1947 in the British Parliament. It effectively ended British rule over India. The country was partitioned into India and Pakistan (east and west). The act also repealed the use of the title 'Emperor of India' by the British Crown.

- It declared India as an **independent and sovereign state**
- It provided for partition of India and creation of two new dominions- India and Pakistan
- It **abolished the position of secretary of state for India**
- It abolished the office of viceroy and provided for each dominion, a governor-general, who was to be appointed by the British King on the advice of the dominion cabinet
- It empowered the constituent assemblies of the two dominions to frame and adopt any constitution for their respective nations and to repeal any act of the British parliament, including the independence act itself
- The constituent assemblies were empowered to legislate for their respective dominions till the new constitutions were drafted and enforced
- It granted the princely states the freedom to join either of the dominions or to remain independent
- Governance of each dominion was to be conducted based on the provisions of the **GoI act, 1935**
- British monarch could no longer ask for bills or veto them. However, this was reserved for Governor-General.
- Governor-General of the dominions were made to act on the aid and advise of the council

Consequences of the Partition of India-

- **Mass Migration: About** 15 million people relocated to what they believed to be a safer territory. Muslims headed towards Pakistan, while Hindus and Sikhs headed towards India.
- **Mass Killings and atrocities on both sides: Approximately** 1-2 million people were killed, many were killed by members of other communities and sometimes their own families, as well as by the contagious diseases that swept through refugee camps.
- **Violence against women: Women** were kidnapped, raped, publicly humiliated, and many were forced to die by suicide in an attempt to protect their chastity.
- **Impact in terms of economic resources:** India was deprived of jute and cotton and Pakistan of fuel.
- **Problem of Refugees: Both** states subsequently faced huge problems accommodating and rehabilitating post-Partition refugees, whose numbers swelled when Pakistan illegally tried to occupy Jammu and Kashmir in 1947-48.
- **Hostility and Suspicion: The** legacy of violence caused by partition has created an atmosphere of hostility and suspicion between the two countries that impacts the relationship even to this day.

Handwritten translation of Rabindranath Tagore's 'Jana Gana Mana' goes viral on Independence Day 2024

Early Life and Background:

- **Born:** May 7, 1861, in Calcutta (now Kolkata), India.
- **Family:**
 - **Father:** Debendranath Tagore, a prominent figure in the Brahmo Samaj, an intellectual and reformist movement.

- **Mother:** Sarada Devi, known for her devotion and spiritual influence.
- **Education:**
 - Home-schooled initially; exposed to a variety of educational influences.
 - Briefly attended University College London but did not complete formal higher education.

Major Achievements:

- **Nobel Prize:** Awarded the Nobel Prize in Literature in 1913 for his collection of poems "Gitanjali," becoming the first non-European to win the prize.

Reforms and Contributions

Educational Reforms:

- **Visva-Bharati University (1921):**
 - Founded in Shantiniketan, aimed to integrate Indian and Western educational traditions.
 - Emphasized holistic education, blending arts, humanities, and science with a focus on creativity and individuality.

Social Reforms:

- Advocated for social justice, women's rights, and educational empowerment.
- Criticized colonial rule and societal norms, promoting ideas of equality and cultural renaissance.

Cultural Contributions:

- Promoted the use of Indian languages and culture in literature and education.
- Encouraged the fusion of traditional Indian art forms with modern ideas.

Major Works

Poetry:

- **Gitanjali (Song Offerings) (1910, English translation 1912):**
 - Collection of poems expressing deep spiritual and philosophical themes.
- **The Crescent Moon (1903):**
 - Poems for children, reflecting innocence and simplicity.
- **Fruit-Gathering (1916):**
 - Poems celebrating nature and human experience.

Novels:

- **The Home and the World (Ghare-Baire) (1909):**
 - Explores themes of nationalism, personal freedom, and the complexities of relationships during the Indian independence movement.
- **Noukadubi (The Wreck) (1926):**
 - A novel about the impact of social norms on personal identity and relationships.
- **Chokher Bali (A Grain of Sand) (1903):**
 - Examines themes of passion, betrayal, and social constraints.

Short Stories:

- **Kabuliwala (1892):**
 - A story of an Afghan merchant and his bond with a young Bengali girl, exploring themes of cultural and emotional connections.
- **The Postmaster (1891):**
 - Centers on the emotional connection between a postmaster and an

orphan girl in a remote village.

- **The Professor (1891):**

- Highlights the relationship between a professor and a student, focusing on social and intellectual themes.

Plays:

- **The King of the Dark Chamber (1910):**

- A philosophical play exploring themes of governance, divine rule, and human aspiration.

- **Raja (The King) (1910):**

- Discusses leadership, justice, and the nature of power.

- **Chitra (1892):**

- A dramatic adaptation of the Mahabharata character Chitra, focusing on themes of gender and identity.

Essays and Other Writings:

- **Nationalism (1917):**

- A collection of essays critiquing the concept of nationalism and its implications for society.

- **Sadhana (1909):**

- Essays on spirituality and religious experience.

Music:

- **Rabindra Sangeet:**

- Tagore composed over 2,000 songs, reflecting a range of themes including spirituality, love, and social issues.

PM Modi Pays Homage to Sri Aurobindo on Birth Anniversary

Sri Aurobindo

He is popularly known as yogi **Rishi Aurobindo**. He was a **revolutionary, nationalist, poet, educationist and philosopher**. He was born on August 15, 1872, in Calcutta to Shri Krishnadhan Ghosh. His father was a rich doctor from Calcutta. At the **age of seven** he was taken to England for education. There he studied at St. Paul's School, London, and at King's College, Cambridge

Roles played as a Service officer and professor: He became a state service officer on his return to India in **1893**. He worked for the next thirteen years in the Princely State of Baroda in the service of the Maharaja and as a professor at Baroda College.

Revolutionary: He also joined a revolutionary society and took a leading role in secret preparations for an **uprising against the British Government in India**. He became a leading figure in the freedom movement and used to write fearless articles for the **English newspaper Bande Mataram**.

- He also contributed articles to the **Bengali weekly Yugantar**.
- Later, he started the weekly English journal titled Dharma, in which he tried to convey the message of Swaraj or freedom from British rule.
- He was one of the founders of the **youth club Anushilan Samiti** which protested against the atrocities of the British government.
- He was one of the leading protesters against the 1905 Partition of Bengal and called on the citizens to boycott British institutions and goods.
- He took part in the 1906 session of the Indian National Congress and was a member of the team which set four objectives-Swadeshi, Swaraj, education and boycott.

Leader of the Nationalist movement:

- In 1906, soon after the Partition of Bengal, Sri Aurobindo quit his **post in Baroda and went to Calcutta**, where he soon became one of the **leaders of the Nationalist movement**.
- He was the **first political leader in India to** openly put forward, in his **newspaper Bande Mataram**, the idea of complete independence for the country.
- **Prosecuted twice for sedition and** once for conspiracy, he was released each time for lack of evidence.

Literary Works:

- An English newspaper called Bande Mataram (in 1905)
- Bases of Yoga
- Bhagavad Gita and Its Message
- The Future Evolution of Man
- Rebirth and Karma
- Savitri: A Legend and a Symbol
- Hour of God

PM Modi greets citizens on occasion of World Sanskrit Day

- World Sanskrit Day, also known as **International Sanskrit Day**, Sanskrit Diwas, and Vishwa Samskrita Dinam, is observed on the day of Shravana Purnima in the Hindu calendar.
- The primary objective of this day is to increase awareness and promote Sanskrit, one of India's most ancient languages

World Sanskrit Day Theme 2024: "Vedic Heritage and Tradition"

History:

- The first World Sanskrit Day was celebrated in 1969.
- It serves as a tribute to the birth anniversary of Panini, a distinguished Sanskrit scholar and grammarian.

Important Facts about the Sanskrit Language-

- It is an Indo-Aryan language and is considered to be one of the oldest languages and is known as the mother of most languages of India.
- It is believed to have originated in India around 3500 years ago and is often referred to as Dev Vani (the language of the deities).
- It is divided into two parts which are Vedic and classical:
- Vedic Sanskrit is the older and more archaic form of Sanskrit, which is attested in the Rig Veda, the Upanishads, and the Puranas.
- Classical Sanskrit is the later and more standardised form of Sanskrit, which is based on the grammar of Panini and used in literature, philosophy, science, and art.

Panini: Sanskrit scholar and grammarian

- Panini probably lived in the 4th century BC, the age of the conquests of Alexander and the founding of the Mauryan Empire, even though he has also

been dated to the 6th century BC, the age of The Buddha and Mahavira.

- By the time Panini's great grammar, the 'Ashtadhyayi' was composed, Sanskrit had virtually reached its classical form — and developed little thereafter.
- Panini's grammar, which built on the work of many earlier grammarians, effectively stabilised the Sanskrit language.

PM Modi pays homage to Maharaja Bir Bikram Kishore Manikya Bahadur on his birth anniversary

- Maharaja Bir Bikram Manikya Bahadur, born on August 19, 1908, was a prominent royal figure who played a pivotal role in the modernization and development of the princely state of Tripura.
- He succeeded his father, Birendra Kishore Manikya Debbarman in August 1923. He was succeeded by his own son, Maharaja Kirit Bikram Kishore, who was king for two years till the state's accession to India in 1949, but who did not rule, as he was a minor.
- He was the king of Tripura State till 1947.



Reforms in Tripura

Education

- Maharaja Bir Bikram recognized the importance of education in societal progress.
- He established the **Maharaja Bir Bikram College** (MBB College) in Agartala, aimed at providing quality education to his subjects. This institution continues to contribute to Tripura's educational landscape.

Infrastructure

- Under his leadership, significant infrastructure projects were undertaken.
- Road networks, bridges, and public buildings were constructed to enhance connectivity and elevate living standards across the state.
- Understanding the significance of healthcare, he established hospitals and medical facilities, ensuring accessible and quality medical services for the people of Tripura.
- This initiative contributed to improved healthcare outcomes.

Administrative Efficiency

- Maharaja Bir Bikram introduced administrative reforms to enhance governance and efficiency.
- His administration focused on inclusive policies that aimed at the welfare and upliftment of the people.

Cultural Preservation

While driving modernization, the Maharaja also emphasized the preservation of Tripura's cultural heritage.

- He supported local arts, crafts, and traditions, ensuring that the state's identity remained intact.

Prime Minister pays tribute to Major Dhyan Chand on National Sports Day

- **National Sports Day** is celebrated on August 29, every year. It celebrates the spirit of sportsmanship, honours our athletes, and remembers the legends who have brought glory to India. August 29, marks the birth anniversary of Major Dhyan Chand.

National Sports Day 2024 Theme

- The National Sports Day 2024 theme is **“Sport for the Promotion of Peaceful and Inclusive Societies.”**
- It underscores the vital role that sports play in fostering unity, inclusion, and peace, within communities. It highlights how sports can bring people together across different backgrounds, promoting mutual respect, understanding, and cooperation.

Significance of National Sports Day

- The National Sports Day is celebrated in memory of **Major Dhyan Chand** and also with the objective to highlight the significance of sports in our lives and staying fit and healthy.
- The President of India gives away the prestigious Rajiv Gandhi Khel Ratna, Arjuna Award and Dronacharya Award on this day at the Rashtrapati Bhavan to sportsmen and coaches across various sports.
- This day has been used as a platform by the government to launch various schemes or programmes.

Major Dhyan Chand

- **Birth:** Dhyan Chand was born on August 29, 1905, in Allahabad, India.
- His incredible ball control and vision on the field earned him the titles **“Hockey**

Wizard” and “The Magician.” Due to his regimental duties, he used to practice under the moonlight earning the nickname “Chand,” meaning moon in Hindi.

- **Death:** He passed away on December 3, 1979.

Olympic Success:

1. **1928 Amsterdam Olympics:** India won the gold medal, and Dhyhan Chand was instrumental in the victory, scoring numerous goals.
2. **1932 Los Angeles Olympics:** India retained the gold medal, with Dhyhan Chand playing a crucial role and scoring 12 out of 35 goals.
3. **1936 Berlin Olympics:** India won their third consecutive gold medal, and Dhyhan Chand was a key player, scoring eight goals in the tournament.

Awards and Honors:

1. **Padma Bhushan:** India’s third-highest civilian award was bestowed upon him in 1956.
2. **Major Dhyhan Chand National Stadium:** The stadium in Delhi is named in his honor, serving as a prominent venue for hockey events.
3. **Dhyhan Chand Award:** Instituted by the Government of India in 2002, this award recognizes lifetime achievements in sports and games.

Awards named after Major Dhyhan Chand:

- **Major Dhyhan Chand Khel Ratna Award** (highest sporting honour of India)
- **Dhyhan Chand Award** (highest award for lifetime achievement in sports)

Government initiatives to promote sports in India

Khelo India Program:

- **Objective:** Revive sports culture at the grassroots level.
- **Components:** Includes Khelo India Youth Games and support for talent identification.

Sports Authority of India (SAI):

- **Role:** Provides training, coaching, and infrastructure development.

National Sports Development Fund (NSDF):

- **Purpose:** Financial support for sports infrastructure and talent development.

National Sports Awards:

- **Includes:** Rajiv Gandhi Khel Ratna, Arjuna Awards, Dronacharya Awards, Dhyan Chand Awards for recognizing achievements in sports.

Fit India Movement:

- **Objective:** Promote fitness and a healthy lifestyle through awareness campaigns and events.



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1. White dwarf stars ..nuclear fuel
2. ...white dwarf stars ... period of time.

Which of the statements given above is/are correct

(a).....(b).....(c).....(d)[Read our Explanation as well.](#)

UPSC PRELIMS 2024 QUESTION

Consider the following statements:

Statement-I: Giant starsn dwarf stars.

Statement-II: Compared to dwarf stars, ..
nuclear reactions. Which one of the following
is correct?. (a).....(b).....(c).....(d)

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- * Explanation pdf with source links
- * Discussion session
- * Hidden remote questions covered
- * Current affairs centric questions

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