

500 **CURRENT AFFAIRS** **TOPICS**

Volume II

◆ 2024-25 ◆

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5 YEARS OF ABROGATION OF ARTICLE 370

Article 370 of the **Indian Constitution** granted special autonomy to **Jammu and Kashmir**.

- Drafted by **N Gopalaswami Ayyangar** and added as a **temporary provision in 1949**.
- Allowed Jammu and Kashmir to have its **own constitution, flag**, and autonomy over matters except **defence, foreign affairs, and communications**.
- Based on the terms of the **Instrument of Accession** signed by **Maharaja Hari Singh** in **1947** after an invasion by Pakistan.

Abrogation of Article 370 (August 5, 2019)

- **Presidential Order (2019)**: Redefined the “**Constituent Assembly of J&K**” to mean the “**Legislative Assembly of J&K**”.
- **Article 35A**: Stemming from **Clause 3 of Article 370**, Article 35A was introduced by a **Presidential Order in 1954** on the J&K Constituent Assembly's recommendation.
- **Purpose**: Empowered the **J&K legislature** to define **permanent residents** and assign them **special rights and privileges**.
- By invoking **President's rule**, Parliament assumed the **Legislative Assembly's power** to revoke **Article 370 as well as Article 35A**.
- **Concurrent Resolutions**: Passed by **both houses of Parliament** (Lok Sabha on **August 5** and Rajya Sabha on **August 6, 2019**), revoking Article 370's remaining provisions.
- **Jammu and Kashmir Reorganisation Act, 2019**: Passed by **Parliament in 2019**, bifurcated the state into two **Union Territories – Jammu and Kashmir and Ladakh**.

Jammu and Kashmir Reorganisation Act, 2019

- **Division**: Created **two Union Territories – Jammu and Kashmir and Ladakh**.
- **Leh and Kargil** districts were included in the **Union Territory of Ladakh**; remaining areas became **Union Territory of Jammu and Kashmir**.
- **Lok Sabha Representation**: **Five seats** were retained by **Jammu and Kashmir** and **one seat** allocated to **Ladakh**.
- **Legislative Assembly**: Seats in the Assembly reserved for **Scheduled Castes** and **Tribal communities** to maintain population proportion.
- **Women Representation**: **Lt. Governor** can nominate **two women** if required to ensure gender representation.
- **Assembly Tenure**: **5-year term** for the elected Legislative Assembly, which will be **summoned by the Lt. Governor every six months**.
- **Legislative Power**: The Assembly can legislate on matters in the **State List** except “**Police**” and “**Public Order**”.
- **Parliamentary Power**: Parliament holds the authority to legislate on matters for **Jammu and Kashmir** as a Union Territory, with **Concurrent List** matters applicable to all Union Territories.

Supreme Court Judgment on Article 370

- In **December 2023**, the **Supreme Court** upheld the **abrogation of Article 370**, validating the **2019 Presidential Orders** and extending the **Indian Constitution's** applicability to Jammu and Kashmir.
- **Union Territories Reorganisation**: Recognised the reorganisation of Jammu and Kashmir into two **Union Territories**, removing special privileges.
- **Sovereignty Issue**: Declared that Jammu and Kashmir did not possess **sovereignty**, as **Article 370** and the **J&K Constitution** did not imply a need for a separate merger agreement.
- **Temporary Provision**: Emphasized **Article 370** was a **temporary measure**, located in **Part XXI** of the Indian Constitution.
- **Instrument of Accession**: Reiterated that **Article 1** (stating “India that is Bharat shall be a Union of States”) applied fully to **J&K**.
- **Presidential Powers**: Affirmed that the **President** has the authority to enact irreversible changes, including dissolving the **State Assembly**, but these changes remain subject to **judicial and constitutional review**.
- **Constitution of Jammu and Kashmir**: Held that it is now **inoperative**, with the **Indian Constitution** fully applicable to Jammu and Kashmir.

Reasons for Abrogation of Article 370

- **Integration and Development:** Revocation facilitated **access to resources**, improved **infrastructure development**, and provided **economic opportunities** for integration with the rest of India.
- **National Security:** Strengthened government control and allowed for stricter **security measures**, enhancing **counter-terrorism** efforts in the region.
- **Ending Discrimination:** Ensured **equal rights** for women, Dalits, and marginalized groups by applying Indian laws, promoting **social justice**.
- **Legal Uniformity:** Abrogation brought **uniform laws** across India, reducing legal discrepancies and ensuring **equal rights** for all citizens.
- **Encouragement for Investment:** Opening the region to **outside investment** aimed to stabilize the area economically and socially, despite concerns over **demographic shifts**.
- **Political Stability:** Intended to create a stable political environment, restore **democratic processes**, and improve local governance.

Impact of Article 370 Abrogation

- **Uniformity in Laws:**
 - **Domicile Laws (April 2020):** Introduced domicile clause, allowing **15 years of residence** or **7 years of study** (including class 10th/12th exams in J&K) as eligibility for **domicile certificate**, replacing Permanent Resident Certificates.
 - **Land Laws:** Amended **14 land laws** in J&K, repealing **12**; included the **Jammu and Kashmir Alienation of Land Act, 1938** and **Big Landed Estates Abolition Act, 1950**. This allowed land rights for non-permanent residents.
 - **Property Rights for West Pakistan Refugees:** Granted **proprietary rights** to **West Pakistan Refugees** and individuals displaced in the **1965 India-Pakistan war**.
- **Bharatiya Nyaya Sanhita (BNS):** With the abrogation, **central laws** applied to J&K, rendering its state constitution defunct. **Ranbir Penal Code** was replaced by **Indian Penal Code (now BNS)**.
 - **Prosecution Wing:** Separated from **executive police** in J&K.
 - **State Investigation Agency (SIA):** Established in **November 2021** for efficient **terrorism-related investigations** in coordination with the **National Investigation Agency (NIA)**.
- **Decline in Violence:** Post-abrogation, significant **decrease in terror activities**, local militancy, and **stone-pelting** incidents; separatist strikes and violent protests reduced.
- **Electoral Participation:**
 - **2024 Lok Sabha Poll:** Recorded highest **voter turnout in 35 years** in J&K, with a **30-point increase** in Kashmir Valley from 2019.
- **Tourism Boom:**
 - **2023 Tourism Surge:** **21.1 million visitors** in 2023, greatly boosting the local economy post-Covid-19 and after the Article 370 abrogation.
- **Trade and Investments:**
 - Since 2019, **Rs 5,656 crore** invested in various sectors.
 - **New Central Sector Scheme** (Feb 2021): Attracted **310 investments** in 2020-21, **175 in 2021-22**, and **1,074 in 2022-23**.
 - Lt. Governor reported **Rs 66,000 crore** in private investment proposals within **two years**.
- **Infrastructure Development:**
 - Significant government investment in **roads, bridges, tunnels, and power lines**, enhancing travel and business within the region.

QUIT INDIA MOVEMENT (AUGUST 1942)

The **Quit India Movement** was a mass **Civil Disobedience Movement** initiated by **Mahatma Gandhi** on **August 8, 1942**, at the **Bombay session of the All India Congress Committee**.

- **Objective:** Sought immediate **end to British rule** in India, aiming for **complete independence**.
- **Slogan:** “**Quit India**” became the movement’s rallying cry, symbolizing the demand for the British to leave India.

Background of the Movement

- **World War II:** Britain demanded India’s support in WWII without promising independence. The **Indian National Congress** insisted on independence before support.
- **Cripps Mission (1942):** British attempt at a compromise through the **Cripps Mission** (offering limited self-government post-war) was rejected by Congress as inadequate.
- **Gandhi’s Stand:** Following the Cripps Mission's failure, Gandhi pushed for a decisive movement to pressure the British to leave India.

Reasons for Launching the Quit India Movement

- **Failure of Cripps Mission:** Indicated the British were unwilling to grant real constitutional progress during the war.
- **Economic Strain:** Rising **prices** and **war-time shortages** led to increasing popular discontent.
- **British Empire’s Decline:** Anticipated collapse of the British empire, especially following British withdrawals from **South-East Asia** and **Burma**.
- **Public Confidence Decline:** People began withdrawing funds, hoarding **gold, silver, and coins**, signaling a lack of faith in British rule.
- **Need for Self-Defense:** The movement sought to prepare Indians to defend against future threats, such as **Japanese aggression**, by building unity and mobilization.

Proclamation and Launch

- **Resolution:** On **July 14, 1942**, the **Congress Working Committee** met in **Wardha** and adopted the **Quit India Resolution**.
- **Launch Date:** **August 9, 1942** – Gandhi called for “**Do or Die**,” urging Indians to fight for freedom or die trying.
- **Arrests:** On the morning of **August 9**, Gandhi and other key Congress leaders were arrested, triggering violent demonstrations across India.

British Response to the Movement

- **Mass Arrests and Repression:** Thousands were **arrested**, public gatherings were dispersed by **force**, and the **Congress was declared illegal**.
- **Violent Suppression:** Police used **lathi-charges** and open **fire** on crowds, causing numerous deaths and quelling the movement’s mass phase within **6-7 weeks**.

Spread of the Movement and Key Features

Underground Activities

- **Leadership Emergence:** An **all-India underground leadership** developed to guide activists and provide morale support.
- **Fund and Material Supply:** Leaders raised funds and distributed **bombs, arms, and dynamite** for resistance.
- **Prominent Leaders:**
 - **Aruna Asaf Ali:** Known for hoisting the Indian flag at the Gowalia Tank Maidan during the movement's launch.
 - **Jayaprakash Narayan:** Played a significant role in underground activities supporting the movement.
 - **Ram Manohar Lohia:** Actively involved in organizing resistance and disseminating information.
 - **Usha Mehta** clandestinely operated the **Congress Radio** in Bombay to disseminate information.

Formation of Parallel Governments

- **Ballia, U.P.:** In **August 1942**, **Chittu Pande** led the establishment of the first parallel government.
- **Tamluk, Bengal:** **Jatiya Sarkar** established in **December 1942** lasted until **September 1944**, providing relief and administering justice.

- **Satara, Maharashtra:** The **Prati Sarkar** in Satara, led by **Nani Patil**, carried out attacks on British collaborators and established **Nyayadan Mandals** (people's courts).
Attack on Government Authorities
- **Peasant Actions:** Focused on symbols of British authority without targeting **zamindars**.
- **Support from Officials:** Many government officials provided **shelter, information**, and even financial help to activists.
Gandhi's Response
- **Jail Fast:** In **February 1943**, Gandhi undertook a **fast in jail**, refusing to condemn violence by the masses and blaming the British government's actions.
Participation Across Society
- **Youth:** Young people led the struggle as in earlier mass movements.
- **Workers:** Organized **strikes** despite police repression.
- **Women:** **Sucheta Kripalani, Usha Mehta, and Aruna Asaf Ali** were key figures in organizing underground activities.
- **Peasants:** In regions like **East U.P., Bihar, Midnapur, and Satara**, peasants actively supported the movement.
- **Zamindars:** Many **zamindars** denied help to the British; **Raja of Darbhanga** was a prominent supporter.
Muslim Participation
- **Limited Muslim Participation:** Although Muslim mass involvement was low, **Muslim League supporters** sometimes sheltered activists, avoiding hostility toward the movement.

RASHTRIYA VIGYAN PURASKAR, 2024

The **RVP** is a newly established, prestigious award series that **recognizes outstanding contributions** by scientists, technologists, and innovators of **Indian origin** (including Persons of Indian Origin or PIO), regardless of whether they work in India or abroad.

- **Purpose:** These awards celebrate **exceptional research, innovation, or discoveries** that benefit **Indian communities or society**.
- **Launch Year:** **2024** marks the first year of the RVP, which was introduced to replace older science awards, such as the **Shanti Swarup Bhatnagar Prize**, for a more inclusive and updated recognition system.
- **Annual Announcement and Ceremony:**
 - The awards will be announced each year on **May 11th (National Technology Day)**.
 - The **Award Ceremony** will be held on **August 23rd (National Space Day)**, commemorating **Chandrayaan-3's moon landing**.

Award Categories and Eligibility

- **Vigyan Ratna (VR):**
 - **Description:** Honors **lifetime achievements** in science and technology.
 - **Annual Limit:** Up to **3 awards**.
 - **Eligibility:** Renowned scientists and technologists with a career of significant accomplishments.
- **Vigyan Shri (VS):**
 - **Description:** Recognizes notable contributions in any science or technology field.
 - **Annual Limit:** Up to **25 awards**.
 - **Eligibility:** Individuals who have demonstrated distinguished achievements in their scientific or technological fields.
- **Vigyan Yuva-Shanti Swarup Bhatnagar (VY-SSB):**
 - **Description:** Encourages young scientists **under 45 years** for exceptional contributions.
 - **Annual Limit:** Up to **25 awards**.
 - **Eligibility:** Young scientists excelling in **research or innovation**.
- **Vigyan Team (VT):**
 - **Description:** Honors **collaborative contributions** by teams of three or more in science or technology.
 - **Annual Limit:** Up to **3 team awards**.
 - **Eligibility:** Teams with outstanding achievements across scientific or technological fields.

Benefits of the Rashtriya Vigyan Puraskar

- **Recognition:** Each recipient is awarded a **Sanad (Certificate)** signed by the **President of India**.
 - **Publication:** A **brochure with citations and awardee photographs** is released on the award day.
 - **Posthumous Awards:** Decorations are presented to **next of kin** in cases where an award is given posthumously.
- Key Awardees of 2024**
- **Vigyan Ratna:**
 - **Recipient:** **G. Padmanabhan** for lifetime contributions to **biological sciences**, specifically in **malaria research**.
 - **Background:** Former Director of the **Indian Institute of Science** and a recipient of **Padma Shri** and **Padma Bhushan**.
 - **Vigyan Team:**
 - **Awarded to:** **Chandrayaan-3 Team** for successfully achieving **India's first moon landing in 2023**, marking a historic milestone in space exploration.
 - **Vigyan Shri:**
 - **Annapurni Subramaniam:** Known for work on the **formation and evolution of star clusters and galaxies**.
 - **Jayant Bhalchandra Udgaonkar:** Recognized for contributions to **biology**.
 - **Naba Kumar Mondal:** Honored for achievements in **particle physics**.
 - **Vigyan Yuva:**
 - **Vivek Polshettiwar:** Recognized for research in **carbon capture technologies**.
 - **Urbasi Sinha:** Honored for contributions to **quantum research**.
 - **Roxy Mathew Koll:** Awarded for work in **climate science**.

Award Name	Field	Winner
Vigyan Ratna	Biological Sciences	Prof. Govindarajan Padmanabhan
Vigyan Shri	Agricultural Science	Dr Anandharamakrishnan C
Vigyan Shri	Atomic Energy	Dr Avesh Kumar Tyagi
Vigyan Shri	Biological Sciences	Prof. Umesh Varshney
Vigyan Shri	Biological Sciences	Prof. Jayant Bhalchandra Udgaonkar
Vigyan Shri	Earth Sciences	Prof. Syed Wajih Ahmad Naqvi
Vigyan Shri	Engineering Sciences	Prof. Bhim Singh
Vigyan Shri	Medicine	Dr Sanjay Behari
Vigyan Shri	Mathematics and Computer Science	Prof. Adimurthi Adi
Vigyan Shri	Physics	Lakshmanan Muthusamy
Vigyan Shri	Space Science and Technology	Naba Kumar Mondal
Vigyan Yuva	Agricultural Sciences	Dr Krishna Murthy S L
Vigyan Yuva	Agricultural Science	Dr Swarup Kumar Parida
Vigyan Yuva	Earth Sciences	Prof. Radhakrishnan Mahalakshmi
Vigyan Yuva	Biological Sciences	Prof. Aravind Penmatsa
Vigyan Shri	Chemistry	Prof. Vivek Polshettiwar
Vigyan Yuva	Chemistry	Prof. Vishal Rai
Vigyan Yuva	Earth Sciences	Dr Roxy Mathew Koll
Vigyan Yuva	Engineering Sciences	Dr Abhilash
Vigyan Yuva	Environmental Sciences	Dr Purabi Saikia
Vigyan Yuva	Environmental Sciences	Dr Bappi Paul
Vigyan Yuva	Mathematics and Computer Science	Prof. Mahesh Ramesh Kakde
Vigyan Yuva	Medicine	Prof. Jitendra Kumar Sahu
Vigyan Yuva	Medicine	Dr Pragya Dhruv Yadav
Vigyan Yuva	Physics	Prof. Urbasi Sinha
Vigyan Yuva	Space Science and Technology	Dr Digendranath Swain
Vigyan Team	Space Science and Technology	ISRO - Team Chandrayaan 3

MONETARY POLICY COMMITTEE

The **Monetary Policy Committee (MPC)** is responsible for setting policy rates to manage inflation, aiming to maintain **price stability** through tools like the **repo** and **reverse repo rates**.

- **Mandate:** Formed by the central government in **2016**, the MPC's goal is to keep the **Consumer Price Index (CPI)** between **2-6%** with a central target of **4%**.
- **Frequency of Meetings:** The MPC is required to meet **at least four times a year** to make decisions on policy rates based on economic conditions.

Key Points:

- **Establishment:** The **Monetary Policy Committee (MPC)** was formed following a **Memorandum of Understanding** between the **Central Government** and the **RBI** on adopting an inflation-targeting monetary policy.
- **Legal Basis:** The **Reserve Bank of India Act, 1934** was amended by the **Finance Act, 2016** to provide a statutory framework for the MPC.
 - Under **Section 45ZB** of the amended **RBI Act, 1934**, the **central government** has the authority to constitute a **six-member MPC**.
- **Function:** The MPC's primary role is to set the **benchmark policy rate (repo rate)** needed to maintain inflation within the government's target.
- **Replacement:** The MPC replaced the previous **Technical Advisory Committee** model for setting policy rates.

Composition of the MPC

- **Members:** The MPC consists of **six members**:
 - **RBI Governor** (Chairperson)
 - **Deputy Governor of RBI** responsible for monetary policy
 - **One official nominated by the RBI Board**
 - **Three members** appointed by the **Government of India**
- **Term for External Members:** The three external members nominated by the government serve a **four-year term**.
- **Meeting Quorum:** At least **four members** must be present for the meeting, including either the **Governor** or, if absent, the **Deputy Governor**.
- **Decision-Making:**
 - Decisions are made by a **majority vote**.
 - If there is a tie, the **RBI Governor** holds a **casting vote** to break it.
 - The MPC's decisions are **binding on the RBI**.

Support and Assistance

- **Assistance:** The **RBI's Monetary Policy Department (MPD)** assists the MPC in developing and implementing the monetary policy.

Background of the MPC

- **Previous System:** Before the MPC, policy rates were solely decided by the **RBI Governor**, with advice from a **Technical Advisory Committee (TAC)**. However, this setup was seen as overly reliant on one person's authority.
- **Recommendations for MPC:** Over the years, several committees recommended the creation of an MPC, including:
 - **Y.V. Reddy Committee (2002)**
 - **Tarapore Committee (2006)**
 - **Percy Mistry Committee (2007)**
 - **Raghuram Rajan Committee (2009)**
 - **Urjit Patel Committee (2014)**, which ultimately led to the MPC's formation.

Key Monetary Policy Tools

1. **Repo Rate:** The rate at which banks borrow from the RBI, with government securities as collateral. Part of the **Liquidity Adjustment Facility (LAF)**.

2. **Reverse Repo Rate:** The rate at which banks lend to the RBI. Also part of the **LAF**.
3. **Bank Rate:** Used by RBI to lend to banks, serving as a penal rate for shortfall in reserve requirements.
4. **Statutory Liquidity Ratio (SLR):** The percentage of a bank's deposits required to be held in liquid assets (e.g., government securities, cash, gold).
5. **Cash Reserve Ratio (CRR):** The cash proportion of deposits to be maintained with RBI, earning no interest.
6. **Standing Deposit Facility (SDF) Rate:** Rate at which the RBI accepts overnight, uncollateralized deposits from LAF participants.
7. **Marginal Standing Facility (MSF) Rate:** Penal rate for banks to borrow overnight from the RBI, allowing them to dip into SLR.
8. **Open Market Operations (OMO):** The RBI's sale or purchase of government securities to manage liquidity in the banking system.

Types of Monetary Policy

- **Expansionary Monetary Policy:** Increases money supply to stimulate demand or counter recession. Example: **Repo rate cut to 4% during the pandemic.**
- **Contractionary Monetary Policy:** Decreases money supply to control high inflation by making credit more expensive.

Inflation Targeting and CPI

- **Inflation Target:** Set by the central government every five years, in consultation with RBI. Current target: **4% CPI with 2-6% tolerance (effective April 1, 2021, to March 31, 2026).**
- **Consumer Price Index (CPI):**
 - **Measure of Inflation:** Represents a weighted average price of goods and services consumed by households, offering a broader index than **Wholesale Price Index (WPI)**.
 - **CPI Calculation:** Managed by the **National Statistical Office (NSO)**, under **Ministry of Statistics and Programme Implementation (MoSPI)**, with **2012 as the base year (100)**.
 - **Categories of CPI:**
 - **CPI for Industrial Workers (IW)** – published by the Labour Bureau, Ministry of Labour and Employment.
 - **CPI for Agricultural Labourers (AL)** – also published by the Labour Bureau.
 - **CPI Urban and CPI Rural** – published by NSO.

Failure to Maintain the Inflation Target

- **Failure Criteria:**
 - **Exceeds 6%** for three consecutive quarters.
 - **Falls below 2%** for three consecutive quarters.
- **RBI's Reporting Requirements:**
 - Reasons for target deviation.
 - Proposed corrective measures.
 - Timeframe for meeting the target post-remediation.

BAD BANK AIMS TO ACQUIRE ₹2 TRILLION OF STRESSED ASSETS

The government-backed **National Asset Reconstruction Company Ltd (NARCL)** aims to acquire **₹2 trillion** worth of stressed assets by **FY26**, reaching a milestone of **₹1 trillion** by **FY24**.

Structure for Managing NPAs

- **Union Budget 2021 Announcement:** The Finance Minister introduced an **Asset Reconstruction Company-Asset Management Company (ARC-AMC)** framework to handle NPAs within the banking sector.
- **Entities Involved:**
 - **National Asset Reconstruction Company Limited (NARCL)**
 - **India Debt Resolution Company Limited (IDRCL)**

National Asset Reconstruction Company Limited (NARCL)

- **Function:** NARCL purchases **bad loans from banks**, manages, sells, and recovers funds to resolve these stressed assets.
- **Incorporation Date:** Established on **7th July 2021**.
- **Ownership:** Majority owned by **Public Sector Banks**, with **Canara Bank** as the **Sponsor Bank** and private banks holding the remaining shares.
- **Regulation:** Registered as an **Asset Reconstruction Company** with **RBI** under the **Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002**.
- **Focus:** Specifically targets large legacy stressed assets, especially those with exposures of **₹500 crore** and above.
- **Acquisition Strategy:** Offers flexible acquisition terms, including a mix of **Cash and Security Receipts (SRs)**, to banks and financial institutions.
- **Objective:** Consolidate stressed assets under one entity to achieve efficient and timely resolution.

India Debt Resolution Company Limited (IDRCL)

- **Role:** Works closely with NARCL to support the **resolution of stressed assets**.
- **Functionality:** NARCL acquires and consolidates bad loans, while **IDRCL** manages the resolution process, establishing strategies within the **RBI framework**.

Swiss Challenge Process

- **Definition:** This method allows private players to participate in government projects through a **bidding process**.
 - A private entity proposes a development project and holds exclusive **Intellectual Property Rights**.
- **Government Options:**
 - The government can purchase these rights and open the project to competitive bidding, or
 - Invite other private proposals, giving the initial bidder a chance to match the highest offer.
- **Usage:** Employed in states like **Karnataka, Andhra Pradesh, Rajasthan, Madhya Pradesh, Bihar, Punjab, and Gujarat** for projects in **roads and housing**.

National Bank for Financing Infrastructure and Development (NaBFID)

- **Purpose:** NaBFID is a specialized **Development Finance Institution** established to enhance funding for infrastructure projects in India.
- **Legislation:** Created by the **National Bank for Financing Infrastructure and Development Act, 2021**.
- **Objectives:**
 - Address the need for **long-term, non-recourse financing**.
 - Promote the **bonds and derivatives markets**.
 - Support sustainable economic growth.
- **Loan Targets:**
 - **FY26:** Sanction loans worth **₹3.2 trillion**.
 - **FY25 Target:** **₹2 trillion**, with **₹1.09 trillion** already sanctioned by **July 2024**.

Non-Performing Assets (NPA)

- **Definition:** A loan or advance is classified as **NPA** if the principal or interest remains overdue for more than **90 days**.
- **Gross Non-Performing Assets (GNPA):** Reflects the total value of a bank's NPAs over a specific period.
- **Net Non-Performing Assets (NNPA):** Calculated by subtracting provisions from gross NPAs, showing the accurate value of NPAs.
- **Provision for NPAs:** Banks allocate a part of their profits each quarter for NPAs as a financial safeguard.

NAMING OF INDIAN OCEAN STRUCTURES

Three underwater formations in the **Indian Ocean** have been named as **Ashoka Seamount**, **Chandragupt Ridge**, and **Kalpataru Ridge**.

- **Ashoka Seamount** and **Chandragupt Ridge** are named after **Mauryan dynasty rulers**.
- **Kalpataru Ridge** is the third structure named by the **International Hydrographic Organization (IHO)** and **UNESCO's Intergovernmental Oceanographic Commission (IOC)**, based on names proposed by **India**.
- **Past Structures Named after Indian Scientists:**
 - **Raman Ridge:** Named in **1992** after **Sir CV Raman**, discovered by a **US oil vessel** in **1951**.
 - **Panikkar Seamount:** Named in **1993** after **oceanographer NK Panikkar**, discovered by India's **Sagar Kanya** research vessel during its **22nd cruise** in **1986**.
 - **Wadia Guyot:** Named in **1993** after **geologist DN Wadia**, found in **1992** by **Sagar Kanya**.
- **Total Indian Named Structures:** There are now **seven underwater structures** in the Indian Ocean named after **Indian scientists** or named as proposed by **India**.

Discovery and Research Background

- **Research and Discovery by NCPOR:** All three newly named structures were identified by **National Centre for Polar and Ocean Research (NCPOR)**, Goa, during an international survey along the **Southwest Indian Ridge**.
- **Research Programme:** India has been conducting **Indian Southern Ocean Research** since **2004**, with **NCPOR** as the lead agency. This programme studies various oceanic phenomena, including **bio-geochemistry**, **biodiversity**, **paleoclimate**, and **air-sea interactions**.
- **Specific Discoveries:**
 - **Ashoka Seamount:** Discovered in **2012** using the **Russian vessel Akademik Nikolay Strakhov**, this **oval-shaped** structure spans **180 sq km**.
 - **Kalpataru Ridge:** Also discovered in **2012** by the same vessel, it is **elongated** and covers **430 sq km**. It is believed to support marine life habitats.
 - **Chandragupt Ridge:** Discovered in **2020** by the Indian vessel **MGS Sagar**, it is an **elongated, oval structure** covering **675 sq km**.

International Hydrographic Organization (IHO)

- **Purpose:** The **IHO** is an **intergovernmental organization** established in **1921** that ensures global seas, oceans, and waterways are surveyed and charted.
- **Functions:** Coordinates **national hydrographic offices**, promotes **uniformity in nautical documents**, and provides survey standards.
- **Headquarters:** Located in **Monaco**.

Intergovernmental Oceanographic Commission (IOC) of UNESCO

- **Role:** The **IOC** promotes global cooperation in **marine science** to enhance management of oceans and coasts.
- **Programmes:** Works with **150 Member States** on **capacity building**, **ocean science**, **tsunami alerts**, and **ocean literacy**.
- **UN Ocean Decade:** The **IOC** is responsible for the **United Nations Decade of Ocean Science for Sustainable Development (2021-2030)**.
- **Headquarters:** Located in **Paris, France**.

SRINAGAR RECOGNIZED AS A 'WORLD CRAFT CITY'

Srinagar has become the **fourth Indian city** to receive the title of '**World Craft City**' from the **World Craft Council (WCC)**.

- **Background:** This recognition follows **Srinagar's inclusion in the UNESCO Creative City Network (UCCN)** for **crafts and folk arts** three years ago.
Craft Sector in Kashmir
- **INTACH-K Collaboration:** The **Indian National Trust for Art and Cultural Heritage-Kashmir (INTACH-K)**, in partnership with the **J&K Handicrafts Department**, is actively mapping Srinagar's craft sector for the final nomination process.

- **Artisanal Heritage:** Srinagar's craft sector is rich, with over **20,000 registered artisans** specializing in crafts like **papier-mâché, walnut wood carving, hand-knotted carpets, Sozni embroidery, Pashmina, and Kani shawls.**
- **Economic Impact:** By **2016-17**, the handicraft sector contributed approximately **2.64% to J&K's economy.**

World Craft Council (WCC) – Key Details

- **Overview:** The **World Craft Council (WCC)** is a **non-profit, non-governmental organization** established in **1964.**
- **Registration and Affiliation:** Registered in **Belgium** as an **international association (AISBL)** and affiliated with **UNESCO.**
- **Founders:** **Kamaladevi Chattopadhyay** and **Aileen Osborn Webb.**
- **Mission:** To foster global collaboration among artisans, promote **economic development** through craft activities, conduct **workshops, conferences, exhibitions,** and provide support to craftspeople.
- **Structure:** The WCC operates in five regions: **Africa, Asia Pacific, Europe, Latin America, and North America.**
- **Meeting Schedule:** The **European branch** meets annually, while the **General Assembly** takes place every four years (held in **Chennai in 2012**).

World Craft City Designation

- **Initiation:** The **World Craft City** initiative was launched in **2014** by **WCC-International.**
- **Purpose:** Recognizes the critical role of **local authorities, artisans, and communities** in promoting cultural, economic, and social development.
- **India's World Craft Cities:**
 - **Jaipur:** Known for **Kundan Jadai (gem setting), Meenakari jewelry, lac crafts, and Gotta Patti work.**
 - **Mysuru:** Famous for **Kinnal paintings, sandalwood carvings, and rosewood inlay.**
 - **Mamallapuram:** Renowned for **stone carving,** with roots in the **Pallava dynasty (275 CE to 897 CE).**

KOZHIKODE: INDIA'S FIRST UNESCO 'CITY OF LITERATURE'

Kozhikode has become **India's first city** to be designated as a **UNESCO 'City of Literature'** as part of the **UNESCO Creative Cities Network (UCCN).**

- **Event:** The designation was announced during UCCN's **16th annual conference** held on **1 July in Braga, Portugal.**

Details of the UCCN 2023 Conference

- **Theme:** This year's UCCN annual conference theme is **'Bringing youth to the table for the next decade'.**
- **Purpose of UCCN:** UNESCO grants **Creative Cities** status based on cities' unique cultural contributions in areas like **Design, Film, Gastronomy, Literature, Media Arts, Music, and Folk Art.**

New Cities Joining UCCN in 2023

- **Recent Additions:** In **October 2023, 55 new cities** joined the UCCN.
 - **Kozhikode** was recognized as the **'City of Literature'.**
 - **Gwalior in Madhya Pradesh** was designated as the **'City of Music'** for its rich musical heritage.
- **Significance:** These designations are expected to boost **international recognition** for these cities, provide **global funding** opportunities, enable **collaborations** with institutes worldwide, and promote their respective cultural fields.

India's Cities in the UNESCO Creative Cities Network (UCCN)

- **Total Cities:** With the addition of **Kozhikode** and **Gwalior,** India now has **seven cities** in the UCCN list:
 - **Srinagar** for **Crafts and Folk Arts** (2021)
 - **Mumbai** for **Film** (2019)
 - **Hyderabad** for **Gastronomy** (2019)
 - **Chennai** for **Music** (2017)
 - **Jaipur** for **Crafts and Folk Arts** (2015)
 - **Varanasi** for **Music** (2015)

UNESCO Creative Cities Network (UCCN)

- **Establishment:** UCCN was established in **2004** to foster collaboration among cities that view **creativity** in areas like **music, film, literature, gastronomy, media arts, design, crafts, and folklore** as drivers for sustainable development.
- **Membership:** The network now includes **350 cities** globally.
- **Origin:** UCCN evolved from UNESCO's **Global Alliance for Cultural Diversity** initiative launched in **2002**.

UNESCO City of Literature Program

- **Part of UCCN:** The **City of Literature** program is part of the **Creative Cities Network**, initiated in **2004**.
- **Global Reach:** There are **53 UNESCO Cities of Literature** spanning **39 countries** across **six continents**.

GREAT BARRIER REEF RECORD HIGHEST OCEAN HEAT

- **Publication:** The study, titled '**Highest ocean heat in four centuries places Great Barrier Reef in danger**', was published in the journal **Nature**.
- **Research Institute:** Conducted by scientists from the **Australian Institute of Marine Science**, it highlights an ongoing, severe **mass bleaching event** affecting the Great Barrier Reef (GBR).
- **Temperature Records:** Sea Surface Temperatures (SSTs) at the reef have reached the **highest levels in 407 years**.

Key Findings of the Study

- **Mass Coral Bleaching Events:** The study records that **all coral bleaching events** between **2016 and 2024** were triggered by high SSTs.
 - **Five mass bleaching events** occurred over the last decade.
- **Human Influence:** Climate models confirm that **anthropogenic** factors are driving the warming trend.
- **Temperature Anomalies:** In **2024**, SSTs were **1.73°C above the historical average** during the peak bleaching period of January-March.
 - **Past Temperature Increases:**
 - **2016:** 1.5°C above pre-1900 levels.
 - **2017:** 1.54°C increase.
 - **2020:** 1.53°C higher.

Great Barrier Reef (GBR):

- **Description:** The **Great Barrier Reef** is the **largest coral reef system** globally, comprising **over 2,300 km** of reefs and **900 islands** in the **Coral Sea off Queensland, Australia**.
- **UNESCO World Heritage Site:** Designated in **1981**, the GBR is home to endangered species such as the **dugong** and **large green turtle**.
- **Protection Status:** Managed by **Australia's Great Barrier Reef Marine Park Authority**, it is largely a **marine protected area**.

Severe Coral Bleaching in Lakshadweep and Historical Analysis

- **Sample Analysis:** Scientists extracted coral samples from **22 locations** in Lakshadweep to identify stress bands, indicating past bleaching events, including those during the **1877-78 El Niño**.
 - Analysis showed that mass bleaching was absent in the **1800s** and most of the **1900s**.
- **Temperature Reconstruction:** By reconstructing SSTs back to **1618**, scientists compared historical data to current temperatures, finding that severe coral bleaching began to intensify in the **1980s**.

Projected Impact of Global Warming on Coral Reefs

- **Coral Loss Projections:** The study estimates that if global warming is limited to **1.5°C** (per the **Paris Agreement**), **70-90%** of the existing coral reef may still be lost.
 - **Above 2°C** warming would have **devastating effects** on coral ecosystems.
- **Ecosystem Changes:** Continued warming will likely cause a shift in coral community structures, reducing species diversity and simplifying the **reef ecosystem**.

Adaptation and Thermal Stress

- **Adaptation Limitations:** Current coral adaptation strategies are limited, as **adaptation rates are slower than the pace of global warming**.
- **Thermal Stress Tolerance:** Different coral species have varied **thermal stress thresholds**:
 - **Acropora** species are **sensitive** to heat stress.
 - **Porites** species show **higher resistance** to thermal stress.

INTERIM GOVERNMENT IN BANGLADESH LED BY DR. MUHAMMAD YUNUS

- **Leadership Change:** On **August 6**, Nobel laureate **Dr. Muhammad Yunus** was appointed **chief advisor** to Bangladesh's interim government by the **Anti-Discrimination Student Movement**.
- **Background:**
 - **Birth:** Born in **1940** in **Chittagong**, Bangladesh
 - **Education:** Holds a **PhD** from **Vanderbilt University** in the United States and initially taught in the US before returning to Bangladesh in **1972**.
 - **Grameen Bank:** Founded **Grameen Bank** in **1983** to provide **microloans** to entrepreneurs who otherwise would not qualify for traditional loans.
 - **Nobel Peace Prize:** Awarded the **Nobel Peace Prize** in **2006** for pioneering **microcredit** to help impoverished people, especially **women**.
 - At **84 years old**, Yunus envisions a world with **zero poverty, zero unemployment, and zero net carbon emissions**
 - **Political Ambition:** Considered launching a political party in **2007** but did not proceed.
 - **Government Investigations:** Faced multiple government investigations since **2008** during Sheikh Hasina's tenure.
 - **Legal Issues:** Convicted of violating labor laws in a trial viewed by some as **politically motivated**.
 - **Sentence:** Received a **six-month jail sentence** but is currently out on **bail**.

Events Leading to the Interim Government

- **Political Transition:**
 - **Prime Minister Sheikh Hasina** unexpectedly **resigned and fled to India** amid large-scale protests and tensions surrounding a job quota system.
 - The **Bangladesh Army** stepped in to stabilize the situation, resulting in the establishment of the interim government led by Yunus.
- **Formation of Interim Government:**
 - Yunus assumed leadership on **Thursday** and took control of **27 ministries**, including **defence, public administration, education, energy, and information**.
 - A **17-member council of advisors** was formed, including prominent critics of the former regime.

Key Advisors and Their Assigned Ministries

1. **Saleh Uddin Ahmed:** Ministry of **Finance** and Ministry of **Planning**.
2. **Asif Nazrul:** Ministry of **Law, Justice, and Parliamentary Affairs**.
3. **Adilur Rahman Khan:** Ministry of **Industries**.
4. **A F Hasan Arif:** Ministry of **Local Government, Rural Development, and Cooperatives**.
5. **Touhid Hossain:** Ministry of **Foreign Affairs**.
6. **Syeda Rizwana Hasan:** Ministry of **Environment, Forest, and Climate Change**.
7. **Sharmeen Murshid:** Ministry of **Social Welfare**.
8. **AFM Khalid Hossain:** Ministry of **Religious Affairs**.
9. **Farida Akhter:** Ministry of **Fisheries and Livestock**.
10. **Nurjahan Begum:** Ministry of **Health and Family Affairs**.
11. **Nahid Islam:** Ministry of **Posts, Telecommunications, and Information Technology**.
12. **Asif Mahmud Sajib Bhuiyan:** Ministry of **Youth and Sports**.

Additional Details

- **Swearing-in:** Fourteen out of the **17 advisors** took their oaths on **Thursday night**, with three advisors absent and expected to take their oaths later.
- **Support Base:** The interim government has **military backing** and was formed in response to public discontent with Hasina's **15-year administration**.

GROUND-LEVEL OZONE IN INDIAN CITIES: CSE

The **Centre for Science and Environment (CSE)** conducted a study highlighting the **high levels of ground-level ozone (O_3)** in several major Indian cities, raising concerns for public health, especially for those with respiratory conditions.

Key Findings of the Study

- **High Ozone Exceedance Days:**
 - **Delhi-NCR** led with **176 days** of ground-level ozone exceedance between **1st January and 18th July 2023**.
 - **Mumbai** and **Pune** recorded **138 days** each, followed by **Jaipur** with **126 days**.
- **Nighttime Exceedance:**
 - Contrary to expectations, ozone levels remained high even after sunset in some cities:
 - **Mumbai** logged **171 nights** of exceedance.
 - **Delhi-NCR** recorded **161 nights**.
- **Rising Exceedance Compared to Last Year:**
 - **Seven out of ten cities** saw an increase in ozone exceedance:
 - **Ahmedabad** experienced a **4,000%** rise.
 - **Pune** saw a **500%** increase.
 - **Jaipur** recorded a **152%** rise.
- **Standards and Measurement:**
 - The **8-hour ozone standard** is **100 $\mu\text{g}/\text{m}^3$** , and the **one-hour standard** is **180 $\mu\text{g}/\text{m}^3$** .
 - The **Central Pollution Control Board (CPCB)** caps ozone data at **200 $\mu\text{g}/\text{m}^3$** , limiting a full assessment of exceedances.
- **Health Risks:**
 - Exposure to ground-level ozone can cause **chest pain, coughing, bronchitis, emphysema, asthma**, and long-term lung damage.
- **Green Areas Affected:**
 - Contrary to common assumptions, **green, high-end neighborhoods** were found to have high ozone levels, as cleaner areas with fewer pollutants allow ozone to accumulate.
- **Inverse Spatial Distribution:**
 - Ozone distribution is **inversely related to nitrogen dioxide (NO_2) and particulate matter ($\text{PM}_{2.5}$)**. It forms in polluted areas but drifts to less polluted zones, leading to higher concentrations in those areas.

About Ground-Level Ozone

- **Definition:**
 - Ground-level ozone, or **tropospheric ozone**, is a **secondary pollutant** created when **nitrogen oxides (NO_x)** and **volatile organic compounds (VOCs)** react in sunlight, especially during **summer**.
 - It is different from the protective **stratospheric ozone layer** and is considered "bad ozone" due to its harmful effects on health and the environment.
- **Formation and Impact:**
 - **Rising temperatures and heatwaves** increase ozone formation, leading to poor air quality in cities like **Delhi**.
 - Ground-level ozone has been linked to a rise in **ozone-related deaths**, especially in **South Asia**, with projections indicating that over **1 million deaths** in India could be caused by ozone exposure by **2050**.
 - It also affects **crop health**, reducing the yield and quality of essential crops like **wheat and rice**, posing a threat to **food security**.

DR. T.V. SOMANATHAN – NEW CABINET SECRETARY OF INDIA

Dr. T.V. Somanathan, an IAS officer of the Tamil Nadu cadre (1987 batch), has been appointed as the **Cabinet Secretary** following the retirement of Shri Rajiv Gauba.

- **Academic Qualifications:**
 - Holds a **Ph.D. in Economics** from Calcutta University.
 - Completed the **Executive Development Program** at Harvard Business School.
 - Is a **Chartered Accountant, Cost Accountant, and Company Secretary**.
- **Roles at the Centre:**
 - Served as **Joint Secretary** and **Additional Secretary** in the **Prime Minister's Office**.
 - Worked as **Joint Secretary** in the **Ministry of Corporate Affairs**.
 - Held the position of **Director, Corporate Affairs** at the **World Bank** in Washington, DC.
 - Prior to becoming Cabinet Secretary, he was **Finance Secretary** and **Secretary, Department of Expenditure**.
- **Roles in Tamil Nadu State Government:**
 - Served as **Managing Director of Chennai Metro Rail Corporation Ltd.**
 - Held positions as **Secretary to the Chief Minister** and **Additional Chief Secretary & Commissioner of Commercial Taxes** during the GST rollout.
 - Also served as **Commissioner, Disciplinary Proceedings**.
- **World Bank Career:**
 - Joined the **World Bank** in **1996** under the **Young Professionals Program** as a **Financial Economist**.
 - Appointed **Manager of the Budget Policy Group**, becoming one of the Bank's youngest **Sector Managers**.
 - Served as **Director** at the World Bank from **2011 to 2015**.
- **Publications:**
 - Authored **over 80 papers** on economics, finance, and public policy.
 - Published **three books** with **McGraw Hill** and **Cambridge/Oxford University Press**.

The Office of the Cabinet Secretariat

- **Establishment:** Created in **1947** and operates under the **Prime Minister** (politically) and **Cabinet Secretary** (administratively).
- **Structure:**
 - Comprises **three wings: Civil Wing, Military Wing, and Intelligence Wing**.
 - Functions as a department under the **Allocation of Business Rules, 1961**.
 - Has subject-specific **advisors to the Prime Minister**.
- **Functions:**
 - Provides **secretarial assistance** to the Cabinet.
 - Prepares for **Cabinet meetings** and supports **information-sharing and deliberations**.
 - Maintains **records** of Cabinet discussions and decisions and circulates them among ministries.
 - Submits **monthly summaries** on key topics to the Cabinet.
 - Oversees **implementation of Cabinet decisions** by ministries and agencies.
 - Serves as the **primary coordinating agency** for the Government of India.

Role of the Cabinet Secretary

- **Office Creation:** The position of **Cabinet Secretary** was established in **1950**.
- **Appointment:** Appointed by the **Appointments Committee of the Cabinet** based on **seniority and merit**.
- **Responsibilities:**
 - Functions under the **Prime Minister**.
 - Supports the **Council of Ministers** and coordinates between ministries.
 - Oversees **administration of Government of India (Allocation of Business) Rules, 1961** and **Government of India (Transaction of Business) Rules, 1961**.
 - Heads the **Civil Service** and upholds morale among civil servants.
 - Acts as a **buffer** between politicians and civil servants in cases of conflict.
 - Serves as the **ex-officio Chairman of the Civil Services Board (CSB)**.

NATIONAL INSTITUTIONAL RANKING FRAMEWORK (NIRF) 2024

The **Ministry of Education** released the **ninth edition** of the **India Rankings 2024**, based on the parameters defined by the **National Institutional Ranking Framework (NIRF)**.

- **Historical Background:**

- This edition builds on the previous **eight editions** from **2016 to 2023** with updates and improvements.
- **Participation** has increased significantly, from **3,565 institutions in 2016** to **10,845 institutions in 2024**.
- The number of categories has grown from **four in 2016** to **sixteen in 2024**.

Ranking Highlights

- **Top Institutions:**

- **IIT Madras** ranks first in both **engineering** and **overall categories**.
- **IISc Bengaluru** is the top-ranked **university** in India.
- **Top 10 Ranking:**
 - **1st:** IIT Madras
 - **2nd:** IISc Bengaluru
 - **3rd:** IIT Bombay
 - **4th:** IIT Delhi
 - **5th:** IIT Kanpur
 - **6th:** IIT Kharagpur
 - **7th:** AIIMS Delhi
 - **8th:** IIT Roorkee
 - **9th:** IIT Guwahati
 - **10th:** JNU, New Delhi

- **New Categories:**

- Three new categories were introduced: **Open Universities**, **Skill Universities**, and **State-Funded Government Universities**.

Evaluation Criteria and Methodology

- **Updated Ratios:**

- **Faculty-to-student ratio** adjusted for different categories:
 - **Medical Institutes:** From **1:15** to **1:10**.
 - **State Government Universities:** From **1:15** to **1:20**.

- **Five Broad Parameters:**

- **Teaching, Learning, and Resources**
- **Research and Professional Practice**
- **Graduation Outcomes**
- **Outreach and Inclusivity**
- **Perception**

- **Categories for Ranking:**

- The 2024 rankings cover **16 categories**: overall, universities, medical, engineering, management, law, architecture and planning, colleges, research institutions, pharmacy, dental, agriculture and allied sectors, state-funded government universities, skill universities, open universities, and innovation.

Participation and Results

- **Participation Growth:**

- **2024:** **10,885 institutions** participated.
- **2023:** **5,543 institutions** participated.

- **Open Universities Ranking:**

- **1st:** Indira Gandhi National Open University
- **2nd:** Netaji Subhash Open University (Kolkata)
- **3rd:** Dr. Babasaheb Ambedkar Open University (Ahmedabad)

About the National Institutional Ranking Framework (NIRF)

- **Establishment:** Approved by the **Ministry of Human Resource Development (MHRD)** and launched in **2015**.

- **Purpose:** Provides a standardized methodology to rank institutions across India.
- **Development:** The framework was based on recommendations from a **Core Committee** set up by MHRD, defining broad parameters for ranking institutions.
- **Evaluation Parameters:**
 - Encompasses **Teaching, Learning and Resources, Research and Professional Practices, Graduation Outcomes, Outreach and Inclusivity, and Perception.**
- **Faculty-to-Student Ratio Update:**
 - Medical institutes now have a **1:10** faculty-to-student ratio, while state government universities have a **1:20** ratio.

MADHYA PRADESH HIGH COURT RULING ON GARLIC CLASSIFICATION

Madhya Pradesh High Court recently addressed a legal dispute over whether **garlic** should be classified as a **vegetable** or a **spice**. This classification impacts how and where garlic can be sold in markets across the state, affecting farmers' and commission agents' incomes.

- **Case Background:**
 - In **2015**, the **Madhya Pradesh Market Board** classified garlic as a **vegetable** following requests from farmers.
 - The **Agriculture Department** contested this decision, reclassifying garlic as a **spice** under the **Agricultural Produce Market Committee Act of 1972**.
 - The **Potato Onion Garlic Commission Agent Association** challenged the reclassification in **2016**. A **single-judge** ruled in favor of the Association in **February 2017**.
 - Business groups opposed this ruling, arguing it would favor commission agents. This led to a **review petition** in **July 2017**, resulting in the current two-judge bench review.
- **High Court Ruling:**
 - The **High Court upheld** the 2017 order, confirming that garlic, being **perishable**, should be classified as a **vegetable**.
 - The ruling allows garlic to be sold in both **vegetable and spice markets**, providing flexibility and potentially higher prices for farmers.
- **Implications:**
 - **Farmers** can now sell garlic in both types of markets, expanding their options for better pricing.
 - **Commission agents** can bid for garlic in vegetable markets, increasing competition and benefiting both farmers and traders.
 - The ruling comes when garlic prices are at an **all-time high**, potentially boosting its market value further.

Key Facts About Garlic

- **Botanical Classification:** Garlic (**Allium sativum**) is considered a **vegetable** botanically due to its **bulb, tall stem, and long leaves**.
- **Distinctive Smell:** The strong odor of garlic and onion comes from **sulfur-containing compounds**.
- **Optimal Growth Conditions:**
 - Grows best in **well-drained, fertile loamy soil** with a **pH range of 6-8**.
 - Requires a **cool, moist climate** during growth and **warm, dry weather** at maturity.
 - Thrives at **1200–2000 meters** above sea level.
- **Soil Requirements:** **Soils rich in organic matter** are preferred for moisture and nutrient retention. Heavy soils may cause **deformed bulbs**, while poorly drained soils can lead to **discolored bulbs**.

Garlic Production and Exports

- **India's Global Position:** India is the **second-largest garlic producer** globally, with **record-high exports in 2023** due to supply chain issues in China.
- **Export Markets:** Indian garlic is popular in **West Asia**, with key markets in the **United States, Malaysia, Brazil, Germany, and the United Kingdom**.

Geographical Indication (GI) Tags for Garlic Varieties

- **Riyawan Garlic (Madhya Pradesh):**
 - GI-tagged for **high yield**, strong flavor, and **higher oil content** compared to other varieties.
- **Kodaikanal Malai Poondru (Tamil Nadu):**
 - Known for **medicinal and preservative properties** due to its **antioxidant and antimicrobial compounds**.
 - Contains higher levels of **organosulfur compounds, phenols, and flavonoids**.
- **Kanthalloor Vattavada Veluthuli (Kerala):**
 - GI-tagged for its **strong aroma and flavor**.
 - Grown in **high-altitude regions of Kanthalloor and Vattavada**, prized for **medicinal uses** and culinary applications.

PIL FILED IN DELHI HIGH COURT CHALLENGING BHARATIYA NYAYA SANHITA (BNS) ACT

- **Legal Challenge:** A **Public Interest Litigation (PIL)** has been filed in the **Delhi High Court** challenging the **Bharatiya Nyaya Sanhita (BNS) Act** for not including legal measures against **non-consensual sodomy** and other "unnatural" sexual acts.
- **Court Proceedings:** The PIL was presented before the **division bench** of **Acting Chief Justice Manmohan** and **Justice Tushar Rao Gedela**. Further hearing is scheduled for **Tuesday**.

Background on Section 377 of the IPC

- **Previous Legal Framework:**
 - Under the **Indian Penal Code (IPC)**, **Section 377** mandated severe penalties, including **life imprisonment** or a **maximum of ten years** for engaging in "carnal intercourse against the order of nature" with any person or animal.
 - This section was largely **decriminalised** by the **Supreme Court** in the **2018 Navtej Singh Johar ruling**, which **legalised consensual sexual acts between adults**.
- **Supreme Court Ruling:**
 - The **Supreme Court** ruled that **Section 377** would still apply to **non-consensual acts involving adults, all acts involving minors, and bestiality**.

Criticisms of the Bharatiya Nyaya Sanhita (BNS)

- **Lack of Provisions:** The **BNS**, enacted in **July 2023** to replace the **IPC**, does not include specific provisions to penalise **non-consensual "unnatural" sexual acts**. This omission has been widely criticised.
- **LGBTQIA+ Concerns:** The **decriminalisation of Section 377** in 2018 was a milestone for the **LGBTQIA+ community**. However, the section was retained in the **IPC** to criminalise **sexual offences against animals, men, and transgenders**.
- **Impact on Animal Cruelty:** **Section 377** of the **IPC** also covered **sexual cruelty against animals**. With the **BNS** lacking similar provisions, such offenders could go unpunished. **PETA India** raised this issue, writing to **Prime Minister Narendra Modi** in **December**.

Expert Concerns

- **Protection Gaps:** Legal experts are concerned that the absence of provisions similar to **Section 377** in the **BNS** leaves **men and transgender individuals** without adequate protection and **legal recourse** in cases of **non-consensual sexual violence**.
- **PIL Objective:** The PIL seeks to address this gap, urging the court to ensure the **BNS provides comprehensive protection** against all forms of **non-consensual sexual violence**.

Evolution of Section 377 IPC in India

- **Colonial Origins: Section 377** was introduced in the **Indian Penal Code (IPC)** in 1860 by the **British** to criminalise “carnal intercourse against the order of nature.” It was derived from the **British Buggery Act of 1533**.
- **Naz Foundation Case (2009):** The **Delhi High Court** in the **Naz Foundation v. Government of NCT of Delhi** (2009) case ruled **Section 377 unconstitutional** for criminalising consensual homosexual activities between adults, citing violations of **fundamental rights**.
- **Supreme Court Reinstatement (2013):** In the **Suresh Kumar Koushal v. Naz Foundation** (2013) case, the **Supreme Court** overturned the **Delhi High Court ruling**, re-criminalising **homosexual acts** and stating that only **Parliament** could change the law.
- **Historic Decriminalisation (2018):**
 - In the **Navtej Singh Johar v. Union of India** (2018) case, a **five-judge constitutional bench** of the **Supreme Court** unanimously decriminalised **consensual same-sex relations** among adults by reading down **Section 377**.
 - However, **Section 377** was retained for **non-consensual acts, minors, and bestiality**.

BOMBAY HIGH COURT RULING ON PARENTAL RIGHTS OF EGG DONORS IN SURROGACY

The **Bombay High Court** ruled that a **sperm or egg donor** cannot claim to be a **biological parent** of a child born through their gametes and has **no legal rights** over the child.

- **Case Background:**
 - A **42-year-old woman** sought custody of her twin daughters, born through **altruistic surrogacy**.
 - The children were jointly in the custody of their **father** and the **egg donor**, who is the petitioner’s younger sister.
 - The case involved questions regarding the rights of the **surrogate mother, biological mother, and egg donor** to access and custody of the children.
 - The petitioner’s younger sister, who donated the eggs, tragically lost her own daughter and husband shortly after the donation, creating a complex family dynamic.
 - The case was brought to the **High Court** for legal clarity while the trial court handles the **custody dispute**.
- **Rival Arguments:**
 - The **mother** argued that the twins are **legitimate children** of the couple, born within wedlock, and that she, along with her husband, has the legal rights as biological parents.
 - The **estranged husband** contended that his sister-in-law, as the **egg donor**, has a legitimate claim to be recognized as a biological parent and that his wife has no rights over the twins.
 - Both parties acknowledged that the **egg donor was the younger sister** of the petitioner and the **surrogate mother was an anonymous woman** in Bengaluru.
- **Legal Provisions on Surrogacy in India:**
 - **Surrogacy in India** is governed by the **Surrogacy (Regulation) Act, 2021** and **Assisted Reproductive Technology (ART) (Regulation) Act, 2021**.
 - **Surrogacy Definition:** Under the **2021 Act**, surrogacy is an arrangement where a woman carries a pregnancy genetically unrelated to her and agrees to hand over the child to the genetic parents.
 - Since the **surrogacy agreement was signed in 2018**, the **2005 National Guidelines on Assisted Reproductive Technologies (ART) Clinics** apply, not the 2021 Act.
 - Both the **Surrogacy Act, 2021** and the **2005 guidelines** consider the **intending parents** as the **biological parents** of the surrogate child.
 - The **2005 guidelines** specify that the **donor must relinquish all parental rights**.
- **Court’s Ruling:**
 - The **Bombay High Court**, interpreting the **ICMR guidelines**, ruled that the twin daughters are the legitimate children of the **petitioner and her estranged husband** since they were born from their **wedlock** and with **mutual consent**.

- The court confirmed that **“there was no ambiguity”** regarding the petitioner and her husband’s intent as **intending parents**.
- The court held that **sperm/oocyte donors** are not entitled to any **parental rights or duties** towards the child, thus denying the petitioner’s younger sister any claim to be recognized as the **biological mother**.

Key Legal Provisions on Surrogacy and Recent Amendments

- **Surrogacy (Regulation) Act, 2021:**
 - **Prohibits Commercial Surrogacy:** Only **altruistic surrogacy** is permitted, where the surrogate mother receives no financial compensation other than **medical expenses**.
 - **Eligibility for Surrogacy:** Only **intending couples** who are **married**, facing **infertility issues**, and meet specific age requirements can opt for surrogacy.
 - **Close Relative Clause:** The surrogate mother must be a **close relative** of the intending parents.
 - **Penalties:** Imposes fines up to **Rs 5 lakh** for the first offense and **Rs 10 lakh** and a **ten-year jail term** for subsequent offenses related to exploitation or violation of surrogacy laws.
- **Assisted Reproductive Technology (ART) (Regulation) Act, 2021:**
 - **Regulation of ART Clinics:** Establishes standards for ART clinics and banks to ensure ethical practices.
 - **Donor Anonymity and Rights:** Donors are required to relinquish all **parental rights** and cannot claim any **legal rights** over the child.
- **Key Amendments and Provisions in Recent Surrogacy Laws:**
 - **Ban on Foreign Nationals:** The 2021 laws ban **foreign nationals** from opting for surrogacy in India, limiting it to **Indian citizens**.
 - **Single and Same-Sex Couples:** Only **married heterosexual couples** are eligible for surrogacy, excluding single, same-sex couples, and live-in partners.
 - **Surrogate’s Consent:** The surrogate’s **informed consent** is mandatory, and she retains the right to withdraw before implantation.

NEW RAMSAR SITES ADDED IN INDIA

Three Indian wetlands — Nanjarayan Bird Sanctuary, Kazhuveli Bird Sanctuary, and Tawa Reservoir — have been designated as **Wetlands of International Importance** under the **Ramsar Convention**.

- **Total Ramsar Sites in India:** With this addition, India now has **85 Ramsar sites** covering an area of **1,358,069 hectares**.

Details of the Newly Added Ramsar Sites

1. **Nanjarayan Bird Sanctuary, Tamil Nadu**
 - **Location:** Situated in **Tiruppur district, Tamil Nadu**.
 - **Type:** Large, **shallow freshwater lake**.
 - **Water Source:** Mainly fed by **Nallar drainage** from heavy rainfall.
 - **Historical Background:** Named after **King Nanjarayan**, who restored the lake.
 - **Ecological Importance:**
 - **Agricultural water source** and aids **groundwater recharge**.
 - Habitat for a variety of **birds, butterflies, amphibians, reptiles, small mammals, and plants**.
 - **Migratory birds** like **Bar-headed Goose, Northern Shoveler, Spot-billed Pelican** are found here.
 - **Significance:** This is the **17th bird sanctuary in Tamil Nadu**.
2. **Kazhuveli Bird Sanctuary, Tamil Nadu**
 - **Location:** **Coromandel Coast, Villupuram district**; north of Pondicherry.
 - **Type:** **Brackish water lake**, connected to the Bay of Bengal via **Uppukalli creek** and **Edayanthittu estuary**.
 - **Divisions:**
 - Estuarine part with **brackish water**.
 - **Uppukalli creek** feeds sea water.
 - **Kazhuveli basin** holds freshwater.
 - **Area:** Spans **5,151 hectares**, making it one of the **largest wetlands in peninsular India**.
 - **Ecological Importance:**

- Key role in **groundwater recharge**.
- Located on the **Central Asian Flyway**; important for **migratory and resident bird species** like **Eurasian Coot, Painted Stork, Greater Flamingo, Black-headed Ibis**.
- **Flora**: Contains degraded **mangrove patches** with **Avicennia species** and **reed growth** across hundreds of hectares.

3. Tawa Reservoir, Madhya Pradesh

- **Location**: Near **Itarsi town**, in **Narmadapuram district (formerly Hoshangabad)**.
- **Construction**: Built on the **confluence of Tawa and Denwa Rivers**, completed in **1978**.
- **Purpose**: Primarily for **irrigation, hydropower generation, and aquaculture**.
- **Size**: Covers **20,500 hectares** with a catchment area of **598,290 hectares**.
- **Ecological Importance**:
 - Forms the **western boundary** of **Sapura Tiger Reserve**, **Sapura National Park**, and **Bori Wildlife Sanctuary**.
 - Habitat for **aquatic and terrestrial species**, including birds and wild animals.
- **Tawa River**:
 - **Longest tributary** of the **Narmada River**, spanning **172 km**.
 - Originates from the **Mahadeo hills** in **Chhindwara district** and joins the **Narmada** in **Narmadapuram**.

About Ramsar Convention

- **Introduction**: An **intergovernmental treaty** established in **1975** in **Ramsar, Iran**.
- **Objective**: Provides a framework for the **conservation and sustainable use of wetlands**.
- **Global Membership**: Currently, **172 countries** are parties to the Ramsar Convention.
- **India's Participation**: India joined the Ramsar Convention in **1982**.

Importance of Wetlands

- **Biodiversity**: Among the **most productive ecosystems**; host a diverse range of **microbes, plants, insects, birds, fish, and mammals**.
- **Climate Regulation**: Assist in **carbon sequestration**, helping mitigate **climate change** by storing carbon in plant communities and soil.
- **Buffer Against Climate Events**: Act as **natural buffers** during extreme events (e.g., floods and storms) by absorbing excess precipitation, crucial as climate change increases the frequency of such events.

Threats to Wetlands

- **Global Wetland Loss**: According to the **Global Wetland Outlook (2018)** by the Ramsar Convention, **35% of global wetlands** were lost between 1970 and 2015, primarily due to human activities.
- **Key Threats**:
 - **Unsustainable Development**: Around **87% of global wetlands** have been lost in the last 300 years due to land conversion for **housing, industry, and agriculture**.
 - **Pollution**: **80% of wastewater** from factories, agriculture, and other sources is discharged into wetlands untreated, causing severe ecological damage.
 - **Invasive Species**: Human activities have introduced **invasive alien species** that harm biodiversity.
 - **Climate Change**: Extreme weather events and changing rainfall patterns damage wetlands and their ecosystems.
 - **Eutrophication**: Caused by **chemical runoff**, which increases nutrient levels in wetlands, often leading to algal blooms.
 - **Encroachment**: Wetlands are being encroached upon for **urbanisation and infrastructure development** to accommodate a growing population.

NEW PARLIAMENTARY COMMITTEES CONSTITUTED BY LOK SABHA SPEAKER

Lok Sabha Speaker Om Birla has set up six new Parliamentary Committees for a one-year tenure.

COMMITTEE NAME	CHAIRPERSON
Public Accounts Committee (PAC)	K.C. Venugopal
Committee on Estimates	Sanjay Jaiswal
Committee on Public Undertakings	Baijayant Panda
Committee on Welfare of OBCs	Ganesh Singh
Committee on Welfare of SC/ST	Faggan Singh Kulaste
Joint Committee on Office of Profit	Eatala Rajender

Overview of the Committees**1. Public Accounts Committee (PAC)**

- **Established:** 1921 under the **Government of India Act, 1919**.
- **Composition:**
 - **22 members: 15 from Lok Sabha and 7 from Rajya Sabha.**
 - **Chairman** from the **Opposition** party, appointed by the Lok Sabha Speaker.
- **Functions:**
 - Examines **public expenditure**.
 - Reviews **Comptroller and Auditor General (CAG) reports**.
 - Ensures the **prudent use of public funds**.

2. Committee on Estimates

- **Origin:** First constituted in **1921**, restructured in **1950** (recommended by **John Mathai**).
- **Composition:**
 - **30 members**, all from **Lok Sabha**.
 - **Elected annually** through proportional representation; Ministers cannot be members.
- **Functions:**
 - Examines **budget estimates**.
 - Recommends **economic efficiencies** and **alternative policies**.
 - Suggests improvements in the organization and efficiency of administration.

3. Committee on Public Undertakings

- **Established:** 1964, based on the **Krishna Menon Committee's recommendation**.
- **Composition:**
 - **22 members: 15 from Lok Sabha and 7 from Rajya Sabha.**
 - Chairman appointed by the Speaker, chosen from **Lok Sabha members**.
- **Functions:**
 - Examines **accounts and reports of Public Sector Undertakings (PSUs)**.
 - Reviews **CAG reports on PSUs**.
 - Ensures PSUs operate on **sound business principles** without interfering in their operations.

4. Committee on Welfare of Other Backward Classes (OBCs)

- **Established:** June 2012.
- **Composition:**
 - **30 members: 20 from Lok Sabha and 10 from Rajya Sabha.**
- **Functions:**
 - Focuses on **implementation of policies** for **OBC welfare**.
 - Evaluates **reservation policies** and suggests improvements.

5. Committee on Welfare of Scheduled Castes (SC) and Scheduled Tribes (ST)

- **Established:** 1968
- **Composition:**
 - **30 members: 20 from Lok Sabha and 10 from Rajya Sabha.**
- **Functions:**

- Ensures **implementation of safeguards** for SCs and STs.
- Reviews **welfare programs** and recommends enhancements.

6. **Joint Committee on Office of Profit**

- **Established: Second Lok Sabha, 1959**
- **Composition:**
 - **15 members: 10 from Lok Sabha and 5 from Rajya Sabha.**
- **Functions:**
 - Examines **cases of MPs/MLAs holding offices of profit.**
 - Determines qualifications and ensures **legislative integrity.**

INDIA-MALAYSIA COMPREHENSIVE STRATEGIC PARTNERSHIP

India and Malaysia upgraded their bilateral relationship to a **Comprehensive Strategic Partnership** on **August 20, 2024.**

Key Agreements and Areas of Cooperation

- Talks between the **Prime Ministers of India and Malaysia** highlighted an enhanced focus on overcoming past tensions and building new partnerships across sectors.
- The **Comprehensive Strategic Partnership** builds on the **Enhanced Strategic Partnership of 2015.**
- **Multiple agreements and Memoranda of Understanding (MoUs)** were signed, covering:
 - **Worker mobility, digital technology, culture, tourism, sports, and education.**
- Both nations prioritized **cooperation in digital technologies, trade, investments, agriculture, construction, and military collaboration.**
- Focus areas include **semiconductors, fintech, defense industry, artificial intelligence (AI), and quantum technologies.**
- **India committed to providing Malaysia with 200,000 metric tons of white rice** to address Malaysia's need for additional food imports.

BRICS Membership Support

- **India agreed to support Malaysia's interest in joining BRICS.**
- The Malaysian Prime Minister views BRICS membership as strategic for **enhancing Malaysia's global economic position.**

Geopolitical and Indo-Pacific Cooperation

- Discussions emphasized **geopolitical stability in the Indo-Pacific.**
- **India reaffirmed its commitment to freedom of navigation** and peaceful dispute resolution based on international law.
- Malaysia praised **India's multi-aligned approach to global conflicts** and expressed interest in adopting similar strategies.

India-Malaysia Bilateral Relations

- **Historical Ties:**
 - Diplomatic relations date back to **1957.**
 - Malaysia is home to **2.95 million people of Indian origin**, the second-largest Indian diaspora community globally after the United States.
- **Economic Relations:**
 - Malaysia ranks as one of **India's significant trading partners**, positioned 13th in trade volume.
 - The **Comprehensive Economic Cooperation Agreement (CECA)** has been in effect since **2011**, covering goods, services, and investments.
 - **Bilateral trade** reached a record high of **US\$19.5 billion.**
 - Key **Indian exports:** mineral fuels, aluminum, meat, iron, and steel.
 - Key **Malaysian exports:** palm oil, electrical machinery, vegetable fats, and oils.

- **Defense and Security Cooperation:**
 - Defense ties have grown since the **1993 Memorandum of Understanding on Defense Cooperation**.
 - **Joint military exercises:** **HARIMAU SHAKTI** and **Samudra Laksamana (Bilateral Maritime Exercise)**.
 - Both nations collaborate on **navigational safety and environmental protection** in the **Straits of Malacca and Singapore**.

Comparison: Normal Partnership vs. Comprehensive Strategic Partnership

POINT OF DIFFERENCE	NORMAL PARTNERSHIP	COMPREHENSIVE STRATEGIC PARTNERSHIP
Definition	Involves two countries working together on specific goals	Involves countries collaborating on broad domains and objectives
Scope	Focused on particular projects , joint ventures, or resources	Includes economic, technological, cultural, political cooperation
Level of Commitment	Moderate	High
Duration	Can be short-term or long-term	Generally long-term , with regular high-level dialogues and planning
Formalities	Formalized through agreements or MOUs	Involves detailed agreements or treaties with state visits
Example Agreements	May include economic agreements or cultural exchanges	Includes defense pacts, economic agreements, cultural exchanges

VOICE OF THE GLOBAL SOUTH SUMMIT (VOGSS) - THIRD EDITION

India hosted 3rd Voice of Global South Summit in August, 2024.

- **Theme of 3rd VOGSS (2024):** "An Empowered Global South for a Sustainable Future".
- **India** hosted the **inaugural VOGSS in January 2023** and the **second in November 2023**; both were held **virtually**.
- VOGSS is a **new India-led initiative** that unites countries from the **Global South** on a single platform to share perspectives on a wide range of global issues
- Reflects India's **Vasudhaiva Kutumbakam** philosophy (meaning "**One Earth, One Family, One Future**") and the Prime Minister's vision of **Sabka Saath, Sabka Vikas, Sabka Vishwas, Sabka Prayas**.

India as a Voice of the Global South

- **India's Role:** Strong history in the **Non-Aligned Movement** and **G77** positions it as a leader for Global South countries.
- **Recent G20 Summit:** India successfully lobbied to include the **African Union as a permanent G20 member**.
- **COVID-19 Support:** India distributed **163 million vaccine doses** across **96 countries** through '**Vaccine Maitri**' (2021-2022).
- **Digital Infrastructure:** India's **UPI, RuPay, and India Stack** can aid **digital transformation** in other developing nations.

Key Outcomes of 3rd VOGSS 2024

1. **Global Development Compact (GDC):**
 - **Four Components** proposed by India:
 - **Trade for development**
 - **Capacity building** for sustainable growth
 - **Technology sharing**
 - **Concessional finance** and project-specific grants.
2. **Funding and Support Initiatives:**
 - India pledged:
 - **USD 2.5 million** for **trade promotion activities**.

- **USD 1 million for capacity building** in trade policy and negotiation.
- 3. **Healthcare Support:**
 - India will:
 - Facilitate **affordable generic medicines** for Global South countries.
 - Provide **drug regulator training**.
 - Share technology and expertise in **natural farming**.
- 4. **Global Institutions Reform:**
 - **Prime Minister of India** stressed:
 - Need for **inclusive global governance** to resolve conflicts and ensure Global South priorities.
 - Urged **developed countries** to honor their commitments to Global South.
- 5. **Sustainable Development Goals (SDGs) and Beyond:**
 - **Shared vision** for the Global South to achieve **SDGs** and progress rapidly post-2030.
 - Emphasis on **collective action** in addressing challenges like **development finance, health, climate change, governance, technology, energy, trade, and youth empowerment**.

UTTARAKHAND'S GROSS ENVIRONMENT PRODUCT (GEP) INDEX

Uttarakhand has become the **first state in India** and globally to launch a **Gross Environment Product (GEP) Index** aimed at assessing both ecological benefits and ecosystem growth.

- **Purpose of GEP:**
 - The GEP Index measures the **ecological wealth** of a region, combining traditional ecosystem services with **contributions to ecosystem enhancement**.
 - This metric could shift the understanding of **environmental health** and its relationship to economic growth.
- **Four Pillars of GEP:**
 - **Air:** Assesses **air quality** and human efforts to reduce pollution or enhance purification.
 - **Soil:** Evaluates **soil health**, including fertility, contamination, and conservation measures.
 - **Trees (Forests):** Goes beyond forest cover to account for **tree types, survival rates, and ecological importance**. Trees with **higher ecological value**, like broad-leafed species, are given more weight than others, like pine.
 - **Water:** Analyzes both **natural and man-made water bodies** for **quantity and quality** and evaluates conservation efforts, including reservoirs and natural water bodies.
- **GEP Calculation Formula:**
 - **GEP Index = (Air-GEP Index + Water-GEP Index + Soil-GEP Index + Forest-GEP Index)**
 - This formula allows for a **comprehensive assessment** of environmental health by integrating different factors.
- **Innovative Aspects:**
 - **Human Contributions:** The GEP Index also considers **human contributions to environmental health**, such as forest management quality and water conservation efforts.
 - **Detailed Forest Assessment:** Unlike satellite imagery methods that may broadly classify greenery as forests, GEP assesses **quality and value** of forests.
 - **Water Management:** Includes both **natural recharge** processes and **human interventions** aimed at water conservation.
- **Concerns and Criticisms:**
 - **Oversimplification:** Some critics argue that the GEP Index oversimplifies **complex environmental issues**.
 - **Categorization:** It is suggested that activities impacting the environment should be classified as **prohibited, regulated, or promoted**.
 - **Transparency and Scientific Rigor:** Concerns exist regarding the **methodological transparency** and **scientific accuracy** of the GEP formula. The values reported are sometimes unclear, and the feasibility of **national-level implementation** remains uncertain.
- **Potential Impact:**
 - **Valuing Natural Capital:** GEP has the potential to translate the **economic value of natural ecosystems** into a monetary format, highlighting their contributions to **human well-being** and **economic growth**.
 - **Government Support:** The **Uttarakhand government** supports the GEP Index, signaling a possible framework for **quantifying natural capital** in economic terms.

ONE NATION, ONE LOCATION INITIATIVE – KEY POINTS

The **Ministry of Roads, Transport and Highways** has announced plans to integrate **roadways, railways, airways, waterways, and ropeways** into **centralized transportation hubs** across India for enhanced passenger convenience.

- **Centralized Hubs:**
 - These hubs will function as **one-stop terminals** for connecting various transport modes, simplifying **passenger transfers** and promoting ease of travel.
 - Targeted to streamline **87% of passenger traffic**, which currently relies on road networks.
- **Benefits:**
 - **Reduces urban congestion** by creating interconnected city centers.
 - **Boosts economic activity** through efficient transport connectivity.
 - **Facilitates easy intermodal transfers** for smoother travel experiences.
- **Pilot Projects:**
 - **Four initial hubs** will be piloted in **Katra and Tirupati**, with two additional hubs in **Varanasi and Nagpur**.
 - These hubs will be managed by the **National Highways Logistics Management (NHLM)**, a subsidiary of the **National Highways Authority of India (NHAI)**.
- **Role of NHLM:**
 - **NHLM** oversees initiatives in **transport logistics, infrastructure, and asset monetization**.
 - Responsible for **enhancing connectivity and improving infrastructure** across India's transport networks.
- **Additional Information:**
 - The initiative is expected to support the **National Infrastructure Pipeline (NIP)**, which aims to provide high-quality infrastructure across the country.
 - Aligns with **India's Gati Shakti initiative**, which focuses on integrated planning and coordinated project implementation for seamless transport networks.
 - Part of India's goal to **reduce carbon emissions** by optimizing and consolidating transport routes and hubs, leading to more efficient fuel usage and lower pollution levels.

MULTIDIMENSIONAL VULNERABILITY INDEX (MVI)

The UN General Assembly introduced the *Multidimensional Vulnerability Index (MVI)* on **August 13, 2024**, aiming to assist **Small Island Developing States (SIDS)** and other developing nations in accessing **low-interest financing**.

- **Background and Purpose:**
 - **Origin:** Since the 1990s, SIDS with higher *GDP per capita* but vulnerable to external shocks have sought a metric to measure their unique challenges.
 - **First Conceptualized in 1992** at the *UN Conference on Environment and Development*.
 - The **2023 report by the High-level Panel of Experts** for SIDS finalized MVI's structure.
 - **UNGA Resolution A/78/L.98** emphasizes that the **use of MVI is voluntary** and tailored to each country's context, ensuring it doesn't restrict access to international aid for any developing nation.
 - **Objective:** MVI is designed to account for structural vulnerabilities and lack of resilience, providing a more holistic approach than traditional metrics like *Gross National Income (GNI) per capita*.
- **Structure and Components of MVI:**
 - **Two Main Components:**
 1. **Universal Level Quantitative Assessment:** Provides an overall *MVI score* ranking countries by structural vulnerability and resilience.
 2. **Vulnerability-Resilience Country Profiles (VRCP):** Detailed, country-specific profiles highlighting unique vulnerability and resilience factors.
- **Guiding Principles of MVI Index Construction:**
 - **Multidimensionality:** Covers **economic, environmental, and social** dimensions.
 - **Universality:** Includes all developing nations for comprehensive comparison.
 - **Exogeneity:** Differentiates between **policy-driven and inherent vulnerabilities**.
 - **Data Availability:** Relies on **recognized and reliable data**.
 - **Readability:** Designed to be clear and understandable.

- **Conceptual Framework of MVI:**
 - **Two Pillars:**
 1. **Structural Vulnerability:** Exposure to external shocks.
 2. **Structural Resilience:** Ability to withstand and recover from shocks.
 - **Three Dimensions Applied to Both Pillars:**
 - *Economic Vulnerability & Resilience:* Economic exposure to external shocks and the capability to recover.
 - *Environmental Vulnerability & Resilience:* Risks from climate and environmental hazards, with a focus on natural resources for resilience.
 - *Social Vulnerability & Resilience:* Risks from social issues, strengthened by social cohesion and human capital.
- **Indicator Selection and Methodology:**
 - **High-Quality Indicators:** Selected from **UN data** and aggregated into a single metric.
 - **Observations by MVI Panel:**
 - Countries with high vulnerability often show **low resilience**.
 - MVI scores show **no correlation with income levels**, making it a strong complement to GNI.
 - **70% of SIDS rank above median vulnerability**, underscoring their need for concessional support.
- **Recommended Uses of MVI:**
 - **Donor Adoption:** International donors and financial institutions encouraged to incorporate MVI into policies.
 - **Debt Assessment:** Could support evaluations of debt sustainability and concessional debt restructuring beyond income-based criteria.

BHARATMALA PARIYOJANA

An initiative by the **Ministry of Road Transport and Highways** to enhance **freight and passenger movement** efficiency by bridging infrastructure gaps through **Economic Corridors, National Corridor Improvements, Border and International Connectivity Roads, Coastal Roads, and Greenfield Expressways**.

- **Phase-I Details:**
 - Approved for **34,800 km** of national highways from **2017 to 2022**.
 - **Estimated cost:** ₹5,35,000 crore.
- **Project Goals:**
 - Improve **National Corridor** efficiency (Golden Quadrilateral and North-South, East-West corridors) by **decongesting choke points** using elevated corridors, ring roads, lane expansions, and logistics parks.
 - Establish **Border Roads** of strategic importance to enhance trade with **Myanmar, Bangladesh, Bhutan, and Nepal**.
 - Develop **26,200 km of Economic Corridors** for seamless, standardized heavy freight travel.
 - Address **infrastructure asymmetry** by creating Feeder Corridors.
- **Project Appraisal:** All projects are **technically, financially, and economically appraised** by a committee within the **NHAI and MoRTH**.
- **Technological Integration:**
 - Use of **satellite mapping** for corridor upgrades.
 - Emphasis on **scientific and technological planning** for project preparation and monitoring.
- **Budget Allocation:** Total **34,800 km** planned under Phase I:
 - **24,800 km** under Bharatmala Phase I.
 - **10,000 km** from remaining **NHDP works**.
- **Funding Sources:**
 - **Market borrowings**
 - **Central Road Fund**
 - **Monetizing government-owned road assets**
 - **Budgetary allocations**
- **Components of Bharatmala Project:**
 - **Economic Corridor: 9000 km** to stimulate economic development in designated areas.

- **Feeder Route or Inter Corridor: 6000 km** of roads connecting major corridors.
- **National Corridor Efficiency Improvement: 5000 km** to improve connectivity between existing corridors.
- **Border and International Connectivity Roads: 2000 km** of roads near borders for trade and strategic access.
- **Port Connectivity and Coastal Roads: 2000 km** along coastal areas and ports.
- **Greenfield Expressways:** New expressways on vacant land for improved traffic and freight management.
- **Brownfield Projects:** Development on sites with existing structures.
- **Balance NHDP Works:** Completion and maintenance of **10,000 km** of roads under previous National Highway Development Project.
- **Employment Generation:** Direct and indirect job creation in the **construction and infrastructure sectors**.
- **Regional Connectivity:** Plans to link **550 districts** through national highways for enhanced economic integration and mobility across India.

NATIONAL SPACE DAY

23rd August, 2024 was observed as the **First National Space Day** to mark the **successful soft landing of Chandrayaan-3's Vikram Lander** on the Moon's surface in 2023.

- **Significance:** The day celebrates India's achievements in space exploration, particularly its successful landing on the **Moon's southern pole**, making India the **fourth country** to land on the Moon and the **first to reach the lunar south pole**.
- **2024 Theme:** "Touching Lives while Touching the Moon: **India's Space Saga**".

Recent Findings from Chandrayaan-3

- **Terrain:** The area around the landing site shows a **uniform topography**.
- **Molten Rock Evidence:** Findings support the **Lunar Magma Ocean (LMO) hypothesis**, indicating that **molten rock** or magma once existed under the surface.
- **Lunar Crust Composition:** The **lunar crust** is layered, with **topsoil in the southern region showing higher-than-expected mineral concentration**.

LMO Hypothesis

- The Moon likely formed from a **giant asteroid impact** with Earth around **4.5 billion years ago**, resulting in a **molten surface** that cooled over time.
- **Mineral Layering:** Heavier minerals (e.g., olivine, pyroxene) formed the lower crust, while **lighter minerals** (e.g., calcium, sodium-based) formed the upper crust.

Highlights of Indian Space Missions (2023-2024)

- **Aditya-L1 Mission:**
 - India's first **solar observatory mission** to study the Sun from **Lagrange point L1**.
- **Gaganyaan TV-D1 Test:**
 - **ISRO's Flight Test Vehicle Abort Mission-1 (TV-D1)** tested the **Crew Escape System (CES)**, demonstrating safety features for **India's human spaceflight mission**.
 - The **crew module** was successfully recovered from the **Bay of Bengal** by INS Shakthi.
- **XPoSat Launch:**
 - Launched on **1st January 2024**, ISRO's **X-ray Polarimeter Satellite** studies **radiation polarization in space**.
- **RLV-TD Experiments:**
 - Conducted in **March and June 2024** using the **Reusable Launch Vehicle (Pushpak)**, with landing simulations from a **Chinook helicopter**.
- **SSLV Development:**
 - **Third and final development flight** of the **Small Satellite Launch Vehicle (SSLV)** launched in **August 2024**.
 - Successfully deployed **EOS-08** and **SR-0 Demosat**, completing SSLV development for transfer to industry.

Private Space Missions

- **Agnikul Cosmos:** Launched **SoRTeD-01** in **March 2024**, featuring a **semi-cryogenic engine**, marking a significant achievement from Indian soil.
- **Skyroot Aerospace:** Advancing towards the launch of **Vikram 1** vehicle.
- **Dhruva Space and Bellatrix Aerospace:** Conducted experiments on **PSLV-C58's fourth stage** in **January 2024**.

CHANDRAYAAN-3: INDIA'S LANDMARK LUNAR MISSION

Overview:

- **Launch Date:** July 14, 2023
- **Launch Site:** Satish Dhawan Space Centre, Sriharikota
- **Lunar Orbit Insertion:** August 5, 2023
- **Landing Date:** August 23, 2023
- **Landing Site:** Near the lunar south pole

Mission Objectives:

1. **Demonstrate Safe and Soft Landing:** Achieve a controlled descent and landing on the Moon's surface.
2. **Operate a Rover on the Lunar Surface:** Deploy and navigate a rover to conduct surface exploration.
3. **Conduct In-Situ Scientific Experiments:** Perform on-site scientific studies to analyze the lunar environment.

Mission Components:

- **Propulsion Module:** Transports the lander and rover to a 100 km lunar orbit. Equipped with the Spectropolarimetry of Habitable Planet Earth (SHAPE) payload to study Earth's spectral and polarimetric characteristics from lunar orbit.
- **Lander Module (Vikram):** Carries instruments to study the lunar surface and atmosphere, including:
 - Chandra's Surface Thermophysical Experiment (ChaSTE): Measures thermal conductivity and temperature.
 - Instrument for Lunar Seismic Activity (ILSA): Detects seismic activity around the landing site.
 - Langmuir Probe (LP): Estimates plasma density and its variations.
 - Laser Retroreflector Array (from NASA): Facilitates lunar laser ranging studies.
- **Rover Module (Pragyan):** Equipped with:
 - Alpha Particle X-ray Spectrometer (APXS): Determines elemental composition near the landing site.
 - Laser-Induced Breakdown Spectroscopy (LIBS): Analyzes surface elements.

Major Findings:

- **Surface Temperature:** ChaSTE recorded temperatures up to 70°C, exceeding the anticipated 20-30°C range.
- **Elemental Composition:** LIBS confirmed the presence of sulfur, aluminum, calcium, iron, chromium, titanium, manganese, silicon, and oxygen near the lunar south pole.

Significance for India's Space Program:

- **Technological Leadership:** India joins the U.S., Russia, and China in achieving a soft lunar landing, showcasing advancements in indigenous cryogenic engines and orbital management.
- **Strategic Applications:** Soft landing technology enhances capabilities in standard refueling, docking, and smart space robotics, supporting interplanetary missions and sample retrieval.
- **Scientific Contributions:** The mission's payloads provide insights into lunar geology, confirming water ice presence and studying the Moon's molten history.
- **Defense and Aerospace Insights:** Technologies developed may benefit missile defense systems and promote cost-effective reusable launch vehicles.
- **Commercial and Strategic Tools:** Developments in autonomous rovers have applications in disaster management and infrastructure monitoring.
- **Economic Opportunities:** The mission stimulates interest in space tourism and in-orbit manufacturing, supported by over 500 space-tech startups and industries in India.

India's Previous Lunar Missions:

1. **Chandrayaan-1 (2008):**
 - **Launch Date:** October 22, 2008

- **Achievements:** India's first lunar mission, it provided evidence of water molecules on the Moon's surface.
- **Mission Duration:** Operated for 10 months, concluding in August 2009.
- 2. **Chandrayaan-2 (2019):**
 - **Launch Date:** July 22, 2019
 - **Components:** Included an orbiter, lander (Vikram), and rover (Pragyan).
 - **Outcome:** While the orbiter continues to function and send data, the lander failed to achieve a soft landing.

Global Lunar Missions:

- **United States:**
 - **Apollo Program (1969-1972):** Achieved six manned lunar landings, with Apollo 11 marking the first human steps on the Moon in 1969.
 - **Surveyor Program (1966-1968):** Conducted seven robotic soft landings to prepare for manned missions.
- **Soviet Union (now Russia):**
 - **Luna Program (1959-1976):** Accomplished the first human-made object impact on the Moon (Luna 2) and the first soft landing (Luna 9).
 - The **Luna-25 lander** — the first Soviet or Russian moon probe since **Luna-24 in 1976** — crashed into the moon on **in August 2023**.
- **China: Chang'e Program:**
 - **Chang'e 3 (2013):** First Chinese soft landing on the Moon.
 - **Chang'e 4 (2019):** First mission to achieve a soft landing on the Moon's far side.
 - **Chang'e 5 (2020):** Successfully returned lunar samples to Earth.
 - **Chang'e 6 (2024):** Returned with the first rock and soil samples from the Moon's far side.
- **Japan: SLIM Mission (2024):** Japan's first moon lander, the Smart Lander for Investigating Moon (SLIM), survived multiple lunar nights despite not being designed for such conditions. It landed on Moon on January 20, 2024. SLIM's landing made Japan the fifth country to successfully land a spacecraft on the moon.
- **South Korea: Danuri (KPL0) Mission (2022):** South Korea's first lunar orbiter, aimed at mapping lunar resources and testing space technologies.

RESERVE BANK OF INDIA (RBI) GOVERNOR SHAKTIKANTA DAS' GLOBAL RECOGNITION

RBI Governor **Shaktikanta Das** ranked among the **top three central bank governors worldwide** in the **Global Finance Central Banker Report Cards 2024**.

- **Rating:** Das received an '**A+**' rating, marking the **second consecutive year** he has achieved this high honor.
- **Global Ranking:**
 - Das is placed **second** among the three central bankers rated 'A+', alongside:
 - **Christian Kettel Thomsen** from **Denmark** (1st position)
 - **Thomas Jordan** from **Switzerland** (3rd position)
- **Evaluation Areas:** The rating is based on **success in areas such as:**
 - **Inflation control**
 - **Economic growth targets**
 - **Currency stability**
 - **Interest rate management**
- **Global Finance's Statement:** The annual report evaluates and grades central bank governors on a scale from "**A+**" to "**F**", recognizing those who have demonstrated **originality, creativity, and resilience** in economic management.
- **Publication Background:**
 - Since **1994**, **Global Finance** has annually published these report cards, assessing central bank governors from nearly **100 countries, territories, and unions**, including the **European Union, Eastern Caribbean Central Bank, Bank of Central African States, and the Central Bank of West African States**.

- **Joseph Giarraputo's Comments:** Founder and editorial director of **Global Finance**, Giarraputo, highlighted that **central bankers' response to global inflation** through interest rate adjustments has significantly lowered inflation rates worldwide.

Reserve Bank of India (RBI)

- **Role:** RBI is the central bank of India, overseeing the financial system and regulating banking and money supply.
- **Ownership:** It is fully owned by the **Union Ministry of Finance**.

Objectives of RBI

1. **Regulate issuance of banknotes.**
2. **Maintain monetary stability** by holding reserves.
3. Operate the credit and currency system effectively.
4. Ensure **price stability** with a focus on growth.

Historical Background

- **1926:** The **Hilton Young Commission** recommended establishing a central bank.
- **1934:** The RBI Act was passed, giving statutory basis to RBI.
- **1935:** RBI commenced operations on **April 1 in Calcutta**.
- **1937:** RBI's central office moved to **Mumbai**.
- **1949:** RBI was **nationalized**, becoming fully government-owned.

Nationalization

- Initially, RBI was a **privately-owned entity** with share capital divided among private stakeholders.
- **1948:** RBI (Transfer to Public Ownership) Act nationalized the bank, making it a **government entity**.

Structure and Offices

1. **Central Office:** Located in Mumbai; headquarters for governance.
2. **Zonal Offices:** Represent the four regions:
 - **Kolkata** (East)
 - **Mumbai** (West)
 - **Delhi** (North)
 - **Chennai** (South)
3. **Regional Offices:** 22 regional offices, mainly in state capitals.
4. **Other Offices:** Focus on specialized roles like rural planning and training centers.

Structure of RBI

1. **Central Board of Directors:** Main governing body with 21 members.
 - **Official Directors:** Governor and up to 4 Deputy Governors.
 - **Non-Official Directors:** Includes 10 nominated by the government and 4 representing local boards (one from each zonal office).
2. **Local Boards:** Each of the four zones has a Local Board with 5 members to represent regional interests.

Key Facts

- **First Governor:** Sir Osborne Smith (1935-37).
- **First Indian Governor:** C.D. Deshmukh (1943-49).
- **Unique Prime Minister:** Manmohan Singh, only PM to have served as RBI Governor.
- **RBI Emblem:** Tiger and Palm Tree.
- **Subsidiaries:** Four fully-owned:
 - Deposit Insurance and Credit Guarantee Corporation (DICGC)
 - Bharatiya Reserve Bank Note Mudran Private Limited (BRBNMPL)
 - Reserve Bank Information Technology Private Limited (ReBIT)
 - Indian Financial Technology and Allied Services (IFTAS)

Functions of RBI

1. Monetary Functions

- **Issuer of Bank Notes:** Exclusive right to issue currency notes (except for ₹1 note and coins).
- **Banker to the Government:** Manages government accounts, lends short-term credit, and handles securities.
- **Bankers' Bank:** Maintains reserves, provides loans, and rediscounts bills.
- **Lender of Last Resort:** Provides financial assistance to banks in times of crisis.
- **Custodian of Foreign Exchange Reserves:** Manages forex reserves to stabilize exchange rates.
- **Controller of Credit:** Uses monetary policy to control money supply.

2. General Functions

- **Regulator of Banks:** Enforces regulations through the RBI Act (1934) and Banking Regulation Act (1949).
- **Promotional Functions:** Enhances the financial system through branch expansions, financial inclusion, and digital initiatives.

Currency and Coinage

- **Currency Notes:** Printed at four presses - **Nasik, Dewas, Mysore, and Salboni**.
 - Nasik and Dewas owned by the government; Mysore and Salboni by RBI.
- **Coins:** Minted in Mumbai, Hyderabad, Calcutta, and Noida; all government-owned.
- **Limits:** Coins up to ₹1000 denomination, currency notes up to ₹10,000.
- The **₹1 note** bears the **Finance Secretary's signature**; other notes bear the RBI Governor's.

Minimum Reserve System

- Adopted in 1957, RBI maintains **₹200 crore in gold and foreign currencies** for currency issuance, with a minimum of ₹115 crore in gold.

Publications of RBI

1. **Financial Stability Report (Half-Yearly):** Assesses financial sector risks and stability.
2. **Monetary Policy Report (Half-Yearly):** Guides policy rates for inflation control.
3. **Consumer Confidence Survey (Quarterly):** Assesses economic sentiments of households.
4. **Inflation Expectations Survey (Quarterly):** Gathers data on price expectations.
5. **Report on Foreign Exchange Reserves (Half-Yearly):** Details reserve movements and adequacy.
6. **Digital Payments Index (DPI):** Measures digitization in payments across five parameters.

SPACE SECTOR IN INDIA: CONTRIBUTIONS AND ECONOMIC IMPACTS

India's space sector, globally recognized for cost-effective and innovative missions, began in **1962** with the formation of the **Indian National Committee for Space Research (INCOSPAR)** under Dr. Vikram Sarabhai.

- **1969:** INCOSPAR evolved into the **Indian Space Research Organisation (ISRO)**.
- Over decades, India has advanced in **satellite technology, launch vehicles, space exploration, and space applications**.

Contributions of the Space Sector:

1. Satellite Technology:

- **Communication Satellites:** INSAT and GSAT series support telecommunications, broadcasting, weather forecasting, and disaster management.
- **Remote Sensing Satellites:** The IRS series aids in resource management, agriculture, urban planning, and environmental conservation.

2. Launch Vehicle Technology:

- **PSLV (Polar Satellite Launch Vehicle):** Known for its versatility and reliability in placing satellites into various orbits.
- **GSLV (Geosynchronous Satellite Launch Vehicle):** Especially the GSLV Mk III, which launches heavier satellites and supports India's human spaceflight initiatives.

3. Space Exploration:

- **Chandrayaan Missions:** Chandrayaan-1 (2008), Chandrayaan-2 (2019), and Chandrayaan-3 (2023) have made significant contributions to lunar science.

- **Mars Orbiter Mission (Mangalyaan):** Launched in 2013, it made India the first nation to reach Mars on its maiden attempt.
- 4. **Navigation Systems:**
 - **NAVIC (Navigation with Indian Constellation):** India's regional satellite navigation system provides accurate positioning within India and nearby regions.

Role of Private Players:

1. **NewSpace India Limited (NSIL):** Established in 2019 as ISRO's commercial arm, NSIL transfers technology to the private sector, manufactures launch vehicles, and offers satellite launch services.
2. **Indian National Space Promotion and Authorization Center (IN-SPACe):** This regulatory body facilitates and authorizes private sector participation in India's space activities.
3. **Private Companies:**
 - Emerging companies such as **Skyroot Aerospace**, **Agnikul Cosmos**, and **Pixxel** are active in satellite manufacturing, launch services, and other space applications.

Key Findings from ISRO's Report (2014-2023)

- **Report Details:** Conducted by **econONE** and **Novaspac**, and presented on **August 23, 2024** (National Space Day).
- 1. **Economic Impact:**
 - **\$24 billion (₹20,000 crore)** contributed directly to India's **GDP** over the last decade.
 - **96,000 jobs** supported across public and private sectors.
 - Each dollar produced by the space sector had a **multiplier effect of \$2.54** on the economy.
 - Productivity in space was **2.5 times higher** than India's broader industrial workforce.
- 2. **Position in Global Space Economy:**
 - India ranks as the **8th largest space economy**, investing **\$13 billion** in the last decade.
 - **Satellite communications** accounted for **54%** of the space economy, with **navigation (26%)** and **launches (11%)** following.
- 3. **Diverse and Growing Sector:**
 - The space sector now includes **700 companies**, with **200 start-ups**.
 - Revenues reached **\$6.3 billion in 2023**, which is **1.5% of the global space market**.

Future Outlook:

- The Indian space sector has elevated India's **global leadership** in space and enhanced **national prestige** and **sovereignty**.
- Despite these achievements, the impact on the profitability of companies remains limited due to historically political motives.
- A shift toward commercial priorities is emerging, though regulatory reforms and an underdeveloped **venture capital ecosystem** present challenges for space tech startups.

OVERHAUL OF INCOME TAX ACT, 1961

Why the Review?

- **Complexity:** The Income Tax Act, 1961, is often criticized for its complexity and outdated provisions.
- **Modernization Need:** Aims to align tax laws with current economic realities and global practices for greater clarity and ease of compliance.
- **Enhanced Compliance:** Simplified laws are expected to improve compliance and reduce taxpayer confusion.
- **Dispute Resolution:** Revising reassessment periods and setting higher monetary thresholds are measures intended to ease taxpayer-department disputes.

Key Aspects of the Income Tax Act, 1961

- **About the Act:** Foundational statute governing income tax in India, with **298 sections and 23 chapters**, covering taxation for individuals and corporations.
- **Objectives:**
 - **Economic Stability:** Ensures stable economic management by controlling private spending.

- **Progressive Taxation:** Taxes based on income levels for fairness.
- **Revenue Collection:** Provides structured guidance for income taxation, aiding revenue efficiency.
- **Key Provisions:**
 - **Tax Slabs:** Defines income brackets with corresponding tax rates.
 - **Deductions:** Allows for deductions under sections like **80C (investments)**, **80D (medical insurance)**, and **80G (donations)**.
 - **Assessment Procedures:** Includes processes for assessing income, filing returns, and conducting audits.
 - **TDS (Tax Deducted at Source):** Simplifies tax collection for certain transactions.
 - **Capital Gains:** Regulates taxes on asset sales, covering both short- and long-term gains.

Recent Reforms

- **Corporate Tax Reduction:** Effective corporate tax rate dropped from **29.49% in 2017-18 to 23.26% in 2021-22**; the corporate tax rate for foreign companies now at **35%**.
- **Angel Tax Abolished:** For startup funding and growth support.
- **Simplified Personal Income Tax:** Fewer income slabs and lower rates for individual taxpayers, leading to an increase in taxpayers from **89.8 million (2019-20) to 93.7 million (2022-23)**.

Benefits of the Overhaul

- **Conciseness and Clarity:** Removing outdated clauses for a streamlined, easier-to-understand Act.
- **Enhanced Taxpayer Experience:** Reduced ambiguity and more straightforward processes.
- **Capital Gains Tax Reform:** Includes aligning with global norms by adjusting taxes on equity capital gains and securities transactions.
- **Broader Tax Base:** Simplified compliance can broaden the tax base and boost revenue through better enforcement.
- **Investment-Friendly Environment:** A predictable tax regime can attract foreign and domestic investment, supporting economic growth.
- **Long-Term Economic Stability:** A modernized tax system promotes India's goal of developed-country status by **2047**, with improved efficiency and reduced compliance costs.

Central Board of Direct Taxes (CBDT)

- **History:**
 - Originated under the **Central Board of Revenue Act, 1924**.
 - In **1964**, split into two entities: **CBDT** for direct taxes and **Central Board of Excise and Customs** for indirect taxes, formalized by the **Central Boards of Revenue Act, 1963**.
- **Structure:**
 - **Leadership:** Headed by a **Chairman** with **six members** acting as Special Secretaries to the Government of India.
 - **Selection:** Chairman and members chosen from the **Indian Revenue Service (IRS)**.
- **Functions:**
 - **Policy Formulation:** Designs policies for direct taxes such as income and corporate tax.
 - **Tax Department Management:** Oversees the Income Tax Department to ensure effective tax administration.
 - **Policy Advice:** Proposes legislative changes to align direct tax laws with government priorities.

CSR EXPENDITURE 2023

India is among the first countries globally to legally mandate **Corporate Social Responsibility (CSR)** for companies under **the Companies Act, 2013**.

- It is likely the only nation that requires corporations to both spend on CSR activities and report their CSR compliance.
- **Overall CSR Expenditure:**
 - Increased from **₹26,579.78 crore in FY22 to ₹29,986.92 crore in FY23**.
 - Total projects rose from **44,425 to 51,966**.
 - Non-PSUs accounted for **84%** of the total CSR spending.
- **Sector-wise Expenditure:**

- **Education** received the highest share, around **₹10,085 crore**, roughly one-third of the total CSR spending.
- **Vocational skills** funding rose slightly to **₹1,164 crore in FY23** from **₹1,033 crore** the previous year.
- **Technology incubators** received the least funding, dropping to **₹1 crore in FY23** from **₹8.6 crore** in FY22.
- Health, rural development, environmental sustainability, and livelihood enhancement also received notable funds.
- CSR on **animal welfare** increased significantly from **₹17 crore in FY15** to **₹315 crore in FY23**.
- Funding to **PM Relief Fund** reduced to **₹815.85 crore in FY23** from **₹1,698 crore in FY21**.
- Contributions to **disaster management** and **slum development** fell by **77%** and **75%**, respectively.
- **Region-wise Expenditure:**
 - States like **Maharashtra, Karnataka, and Gujarat** received the highest CSR funds.
 - North-Eastern states, **Lakshadweep, and Leh and Ladakh** received the least, highlighting regional disparity.

What is Corporate Social Responsibility (CSR)?

- **Definition:** CSR is a corporate initiative for companies to assess and take accountability for their environmental and social impacts.
- **Global Comparison:**
 - India is the first country to mandate CSR spending through **Section 135 of the Companies Act, 2013**.
 - Most countries have voluntary CSR frameworks; **Norway and Sweden** recently shifted to mandatory CSR, starting with voluntary models.
- **Applicability:**
 - CSR applies to companies meeting at least one of the following:
 - **Net worth** over ₹500 crore.
 - **Turnover** over ₹1,000 crore.
 - **Net profit** over ₹5 crore.
 - Such companies must spend **2%** of their average net profits from the last three years on CSR activities.
- **Types of CSR Initiatives:**
 - **Corporate Philanthropy:** Charitable donations.
 - **Community Volunteering:** Employee participation in social work.
 - **Socially-responsible Business Practices:** Ethical product manufacturing.
 - **Cause Promotions:** Advocacy for social causes.
 - **Cause-based Marketing:** Donations based on product sales.
 - **Corporate Social Marketing:** Campaigns for behavioral change.

Issues with CSR Compliance

- **Geographical Disparity:** Industrial states like **Maharashtra (₹5,375 crore)** receive a substantial share, while areas like Mizoram (**₹6.9 crore**) get minimal funds, showing a regional imbalance.
- **Sectoral Allocation:**
 - **75% of CSR funds** are concentrated in three sectors: education, health (including sanitation and water), and rural poverty alleviation.
 - Livelihood enhancement initiatives received less funding, with **₹1,654 crore** allocated.
- **Public Sector (PSU) vs. Private Sector (Non-PSU) Spending:** Non-PSUs contribute **84%** of CSR spending, while PSUs contribute **16%**, creating a disparity in sectoral support.
- **Strategic Misalignment:** Many companies integrate CSR into business strategies, prioritizing profit over genuine social impact, thus diluting CSR's purpose.
- **Challenges in Partnering:** Difficulties in finding suitable CSR partners and impactful, scalable projects that are sustainable in the long term.
- **Transparency Issues:** Local implementing agencies often lack transparency regarding program details, fund utilization, and impact assessment.

Recommendations to Improve CSR Effectiveness

- **Enhancing CSR Engagement and Oversight:**

- Align CSR projects with government initiatives like **Aspirational Districts Programme (ADP)** to increase community involvement.
- Strengthen government oversight on CSR implementation, possibly through AI tools.
- NGOs can collaborate with companies to ensure CSR effectiveness in rural and underserved areas.
- **Addressing Disparities:**
 - Invest more in **higher education** and **tech-friendly** projects to promote skill-building and job creation.
 - Focus on CSR programs in underserved regions; provide incentives or enforce mandatory spending in these areas.
- **Balancing PSU and Non-PSU Spending:**
 - Encourage **PSUs** to increase CSR contributions and foster collaboration with private sector companies.
- **Governance:**
 - Regular reviews and updated Standard Operating Procedures (SOPs) for fund utilization and impact assessments can strengthen CSR compliance and accountability.

PRADHAN MANTRI JAN DHAN YOJANA (PMJDY)

- **Launched on August 28, 2014**, PMJDY is a major financial inclusion initiative aimed at bringing unbanked individuals into the formal banking system.
- The scheme was introduced with **77,892 camps across India**, opening about **1.8 crore accounts** on the launch day.
- **Primary Objective:** To provide accessible banking services to all, particularly underserved communities.

Key Features of PMJDY

- **Universal Access:** Ensures at least one bank account per household.
- **Zero-Balance Accounts:** Accounts require no minimum balance, making banking accessible to low-income individuals while offering interest on deposits.
- **Overdraft Facility:** Provides an overdraft of up to **Rs. 10,000**, prioritizing women account holders.
- **Insurance Cover:** Accident insurance of **Rs. 1 lakh** (increased to Rs. 2 lakh for accounts opened after August 28, 2018) through the RuPay card.
- **Direct Benefit Transfers (DBT):** Enables benefits from schemes like PMJJBY, PMSBY, APY, and MUDRA to be directly transferred.
- **Financial Literacy:** Focuses on improving financial awareness among account holders.
- **Bank Mitras:** Utilizes banking correspondents (Bank Mitras) to provide branchless services, especially in remote areas.

Progress Under PMJDY

1. **Account Openings:** As of recent data, **53.1 crore accounts** have been opened, including **29.56 crore accounts for women**.
2. **Bank Distribution:**
 - Public Sector Banks: **41.42 crore accounts**
 - Regional Rural Banks: **9.89 crore accounts**
 - Private Sector Banks: **1.64 crore accounts**
 - Rural Cooperative Banks: **0.19 crore accounts**
3. **Regional Insights:**
 - **Highest Account Openings:** Uttar Pradesh (9.45 crore)
 - **Lowest:** Lakshadweep (9,256 accounts)
 - 15 other states have over **1 crore accounts each**.

Impact and Achievements

1. **Financial Inclusion:** Increased bank account penetration from **53% in 2014** to **78% in 2021** (World Bank Findex database).
2. **Rural Access:** Approximately **67% of accounts** are in rural or semi-urban areas, bridging the rural-urban divide.
3. **Gender Inclusion:** **56% of accounts** are held by women, reducing the gender gap in financial access.

4. **Banking Infrastructure Expansion:**
 - Branches: From **1,05,992 (2013)** to **1,54,983 (2023)**, a **46% increase**.
 - ATMs: Increased from **1,66,894** to **2,16,914**, a **30% increase**.
 - POS Machines: From **10.88 lakh** to **89.67 lakh**, an **82% increase**.
5. **Efficient DBT Mechanism:** Facilitates **Rs. 38.5 lakh crore in cumulative transfers** through the JAM trinity.
6. **Leakage Prevention:** DBT has saved **Rs. 3.48 lakh crore** in schemes like MG-NREGS and PM-Kisan.
7. **Crisis Support:** Used during emergencies, e.g., **Rs. 500 transferred to 20 crore women** during the COVID-19 pandemic.
8. **Digital Payments Growth:** The JAM framework supports UPI, enabling low-income households to participate in formal financial transactions.

Challenges with PMJDY

1. **Dormancy:** ~**86.3% of accounts** are active, leaving a portion dormant or inactive.
2. **Misuse as Mule Accounts:** Concerns over usage in fraud, e.g., **money laundering and black money storage** during demonetization.
3. **Infrastructure Gaps:** Rural areas face insufficient branches and ATMs, limiting accessibility.
4. **Technological Constraints:** Poor internet and inadequate banking tech hinder rural access.
5. **Financial Literacy Deficit:** Beneficiaries often lack awareness of scheme benefits, e.g., **overdraft and insurance cover**.
6. **Account Duplication:** Multiple accounts for individuals under various schemes lead to data management issues.
7. **Exclusion of Marginalized Groups:** Some groups, e.g., **tribal populations in Chhattisgarh and Jharkhand**, remain unbanked.
8. **Gender Disparity in Usage:** In conservative rural areas, women may face societal barriers to independent account usage.

NEW DISTRICTS IN LADAKH

The Union Home Minister announced five new districts in **Ladakh: Zaskar, Drass, Sham, Nubra, and Changthang**.

- **Objective:** To improve governance and ensure that government services reach even the most remote areas.
- **Current Structure and Process**
- Ladakh previously had only **two districts, Leh and Kargil**, both with autonomous hill development councils.
- **Role of the Ministry of Home Affairs (MHA):**
 - MHA directed the Ladakh administration to form a **committee** to assess each district's headquarters, boundaries, administrative setup, and necessary posts.
 - The committee has a **three-month period** to submit its report, after which the final proposal will go to MHA for action.

Responses and Local Demands

- The announcement aligns with calls for new districts from some regions like **Zaskar and Nubra** but has sparked varying reactions.
- The **Leh Apex Body (LAB)**, along with the **Kargil Democratic Alliance (KDA)**, continues to push for:
 - **Statehood for Ladakh**
 - **Sixth Schedule inclusion** for tribal protections
 - **Job reservations for locals**
 - **Dedicated parliamentary seats**
- Local leaders emphasized that the new districts are beneficial but should not replace demands for **Sixth Schedule status** and **statehood**.

Official Justifications

- **MHA Statement:** The creation of districts aims to bring governance closer, ensuring **public welfare schemes** reach all parts of Ladakh.
- **Geographical and Demographic Challenges:** The **vast, sparsely populated** terrain has complicated administration, and smaller districts are expected to address these issues and foster development.

Background and Context

- Ladakh's new districts come after substantial political shifts:
 - In **August 2019**, Article **370** was revoked, bifurcating Jammu & Kashmir into Union Territories, including Ladakh.
 - Ladakh, with a **2011 Census population of 2.74 lakh**, has faced issues regarding governance and representation.
- **January 2023**: A high-level committee led by the **Minister of State for Home** was created to address Ladakhi grievances, with the new districts being seen as a partial response to these concerns.

Sixth Schedule and Ladakh's Inclusion Demand

- **Sixth Schedule**: Provides for **Autonomous District Councils (ADC)** in Assam, Meghalaya, Tripura, and Mizoram to protect tribal rights.
- Ladakh's inclusion in the Sixth Schedule would safeguard **tribal populations** by offering rights and protections. Local groups have actively campaigned for this inclusion through protests and rallies.

Process of District Creation in India

- **State Authority**: States have the power to create, alter, or abolish districts via an executive order or legislation.
- Many states opt for an executive order for **administrative efficiency**.
- **Example**: Assam's 2016 upgrade of **Majuli** from a sub-division to a district.
- **Role of the Centre**: The Centre's role is limited to approval of **district name changes** and **railway station renaming**, which involves consultations with other departments.

LAKHPATI DIDI SAMMELAN AND EMPOWERMENT THROUGH SELF-HELP GROUPS (SHGS)

The **Lakhpati Didi Sammelan** was attended by the Prime Minister in Maharashtra to promote rural women's empowerment through SHGs.

- **Certificates & Felicitations**: The PM awarded **certificates** and recognized **11 lakh women**, who became Lakhpati Didis under the current government.
- **Financial Support**:
 - A **revolving fund of ₹2,500 crore** was disbursed, benefiting **48 lakh SHG members** from **4.3 lakh SHGs**.
 - An additional **₹5,000 crore in bank loans** supported **25.8 lakh members** from **2.35 lakh SHGs**.
- **Economic & Cultural Focus**: The PM acknowledged women's essential role in India's rural economy and highlighted their contributions toward making India the **third-largest global economy** within three years.

Overview of the Lakhpati Didi Initiative

- **Concept**: A "Lakhpati Didi" refers to an SHG member with an **annual household income of ₹1 lakh or more**, achieved sustainably over at least **four agricultural seasons or business cycles** (monthly income $\geq$ ₹10,000).
- **Initiation**: Launched under the **Deendayal Antyodaya Yojana- National Rural Livelihoods Mission (DAY-NRLM)**, encouraging SHG members to engage in multiple livelihood activities for **annual sustainable income** above ₹1 lakh.
- **Purpose**: The initiative aims at **income improvement** and **life transformation** through sustainable practices, with these women emerging as **role models** in resource management and entrepreneurship within their communities.

Key Strategies of the Lakhpati Didi Initiative

- **Livelihood Diversification**:
 - Focus on **expanding and strengthening livelihood options** for SHG members.
 - **Community Resource Persons** assist SHG members with **digital tools** for livelihood planning and linking to resources.
- **Implementation Support**:

- SHG members receive timely access to **assets (inputs, equipment, infrastructure)**, **skills (knowledge and practical skills)**, **finances (bank linkage, departmental schemes)**, and **market support (branding, e-commerce)**.
- **Capacity Building:**
 - **Regular training** for Mission Staff, community institutions, and SHG members in diverse livelihood activities.
- **Convergence and Partnerships:**
 - **Integration with government schemes** and partnerships with the **private sector** to mobilize **technical, financial, and capacity-building resources**.

Achievements and Expansion

- **Progress Since 2023:**
 - Over **one crore women** have become Lakhpati Didis since the launch of the initiative.
 - The government has raised the **target for Lakhpati Didis to 3 crore**, recognizing the transformation brought about by **83 lakh SHGs** involving **9 crore women** in rural India.
 - **More than ₹6,000 crore** has been disbursed to Women SHGs across India, promoting rural socio-economic advancement.

INDIA'S FINANCIAL FUTURE AND GROWTH OPPORTUNITIES HIGHLIGHTED BY RBI AT GLOBAL FINTECH FESTIVAL 2024

Global Fintech Festival (GFF) 2024 was held in Mumbai, India. **RBI Governor Shaktikanta Das** presented five strategic priorities aimed at strengthening India's financial sector and establishing the country as a prominent global economy.

Five Key Priorities for India's Financial Future

1. **Financial Inclusion:**
 - The **RBI Financial Inclusion Index** rose significantly from **53.9 (March 2021)** to **64.2 (March 2024)**.
 - The **Pradhan Mantri Jan Dhan Yojana (PMJDY)** has been crucial, with **over 530 million bank accounts**, **66% in rural and semi-urban areas**, and **55% held by women**.
 - The RBI Governor emphasized using **technology and fintech** to meet the financial needs of underserved regions, ensuring inclusive financial services for all.
2. **Enhancing Digital Public Infrastructure (DPI):**
 - Highlighted DPI as essential for integrating advanced technologies into India's financial system.
 - Announced the RBI's pilot project on **Unique Lending Interface (ULI)**, soon to be launched at full scale.
 - Combined with the **JAM (Jan Dhan-Aadhaar-Mobile) trinity** and **Unified Payments Interface (UPI)**, DPI is set to revolutionize financial services in India.
3. **Strengthening Cybersecurity:**
 - Cybersecurity remains a core focus as digital transactions increase.
 - The **Digital Personal Data Protection Act 2023** empowers individuals with greater data control, fostering trust in digital financial services.
 - Banks, NBFCs, and fintech companies are urged to prioritize transparency and fair lending practices, along with vigilance against cyber threats.
4. **Promoting Sustainable Finance:**
 - RBI initiatives like **sovereign green bonds** and **green deposits** were highlighted as key sustainability measures.
 - Emphasis on using **AI and big data** to assess environmental risks, positioning fintech firms to lead India's sustainable finance initiatives.
5. **Reinforcing Financial Infrastructure:**
 - Focus on **cross-border payments** and expanding **UPI and RuPay** globally.
 - RBI aims to cautiously integrate **AI and Internet of Things (IoT)** to strengthen India's financial infrastructure through innovation.

About the Global Fintech Festival 2024 (GFF 2024)

- **Event Scale:** One of the world's largest fintech conferences, organized by the **Payments Council of India (PCI)**, **National Payments Corporation of India (NPCI)**, and **Fintech Convergence Council (FCC)**.
- **Global Fintech Awards (GFA):** Recognizes innovative fintech contributions globally.
- **Theme:** "Blueprint for the Next Decade of Finance: **Responsible AI | Inclusive | Resilient.**"
- **India's Fintech Landscape:** Showcased **11,000+ startups** with **\$6 billion in funding** over the past three years.

India's Financial Services Industry: Current State and Developments

- **Industry Overview:** Rapidly expanding, with diverse entities including **commercial banks, NBFCs, insurance companies**, etc.
- **Commercial Banks** hold over **64%** of total assets.
- **UPI Growth:** Recorded **12.1 billion transactions** worth **₹18.28 lakh crore** (Feb 2024).
- **IMPS:** **534.6 million transactions** worth **₹5.58 trillion** (Feb 2024).

Government Initiatives

- **Credit Guarantee Scheme:** Revamped with **₹9,000 crore** for collateral-free loans to support MSMEs.
- **International Payments:** **NPCI International Payments (NIPL)** has partnered to enable QR-based UPI payments in **10 countries**.
- **e-RUPI:** Launched in **August 2021** for one-time digital payments.
- **Financial Inclusion Programs:** Initiatives like **DAY-NRLM, Direct Benefit Transfer**, and **Atal Pension Yojana** have expanded digital financial access, especially in rural areas.
- **Inter-Ministerial Steering Committee (IMSC)** and **Joint Working Groups (JWGs)**: Established to address fintech development issues and boost regulatory flexibility.

Growth Opportunities in India's Financial Services Sector

1. **Growing Demand:**
 - **Insurance Sector:** Investment expected to rise to **\$1 trillion by 2025**.
 - **Insurtech Market:** India is **Asia-Pacific's 2nd largest** and is projected to grow 15x to reach **\$88.4 billion by 2030**.
 - **Life Insurance:** India is the world's **fifth-largest life insurance market**.
2. **Innovation:**
 - Startups like **PhonePe** are enhancing accessibility and customer engagement.
 - **Digital gold investments** and **Aadhaar-enabled payments** are expanding investor options.
 - The **digital lending market**, valued at **\$270 billion in 2022**, is expected to reach **\$350 billion by 2023**.
3. **Foreign Investment:**
 - Anticipated growth in **FDI and FPI** in infrastructure and other sectors.
 - With further relaxed FDI norms, India could attract more capital, especially with innovative financing models to mitigate investment risks.

AIR QUALITY LIFE INDEX (AQLI)

The latest **Air Quality Life Index (AQLI)** highlights severe air pollution issues in India, marking it as the **second most polluted country globally**.

- AQLI indicates that **air pollution reduces the average life expectancy in India by 5 years** compared to if **WHO standards for PM2.5** were met.
- **Delhi**, being the most polluted city worldwide, shows a reduction in life expectancy by nearly **10 years** due to air pollution, emphasizing the need for urgent government action.

What is Particulate Matter (PM)?

- **Particulate Matter (PM)** includes particles like **dust, dirt, soot, smoke, and liquid droplets** that remain airborne for extended periods.
- PM comes in **various sizes**:
 - **PM10** (particles <10 micrometers) can accumulate in the respiratory system.

- **PM2.5** (particles <2.5 micrometers) pose higher health risks, as they can penetrate deeply into the lungs.
- **Health Impact:** Short-term exposure to PM2.5 can cause **irritation of eyes, nose, throat**, and worsen conditions like **asthma**. Long-term exposure may lead to **chronic bronchitis, reduced lung function**, and increased mortality from **lung cancer and heart disease**.

Air Quality Life Index (AQLI) Overview:

- **Released by:** Energy Policy Institute at the University of Chicago (EPIC).
- **Purpose:** Translates particulate pollution levels into **impact on life expectancy**.
- **Latest report:** Based on **2020 data** and considers revised **WHO guidelines** reducing the safe PM2.5 limit to **5 µg/m³**.

Key Findings of AQLI:

- **Global Ranking:** India ranks **second in global pollution**, after Bangladesh.
- **Population Exposure:** Entire population lives in areas exceeding WHO's safe PM2.5 level, and **63%** reside in areas above **India's national air quality standard** of **40 µg/m³**.
- **Life Expectancy:** Particulate pollution reduces life expectancy in India by **5 years**, surpassing the impact of **malnutrition** (1.8 years) and **smoking** (1.5 years).
- **Regional Insights:**
 - In the **Indo-Gangetic plains**, 510 million people could lose **7.6 years** if current pollution persists.
 - In **Lucknow**, life expectancy might reduce by **9.5 years** under current pollution levels.

Health Risks of Particulate Matter:

- PM2.5 exposure has contributed to **over 7 million deaths globally** in 2019, with **80%** attributed to PM2.5 exposure.
- The life expectancy reduction from air pollution is **comparable to smoking** and **far exceeds the risks** from alcohol, unsafe water, and terrorism.

Significance of the AQLI:

1. Offers **unprecedented insights** into the true health costs of air pollution.
2. Illustrates potential life expectancy gains if **WHO air quality standards** are achieved.
3. Provides concrete data to **guide policies and community awareness** on the importance of air quality improvement.

Factors Contributing to India's Air Pollution:

1. **Vehicular Emissions:** Especially from diesel-powered trucks and tempos.
2. **Industrial Pollution:** Power plants and industries burning **dirty fuels** (pet coke, coal) emit hazardous pollutants.
3. **Open Burning:** Garbage burning, including landfills without proper disposal mechanisms.
4. **Construction Dust:** Road dust and construction sites increase particulate pollution.
5. **Agricultural Practices:** Use of **fertilizers** and large-scale **crop burning** in Punjab, Haryana, and UP add to pollution, especially during winters.

Steps Taken to Reduce Air Pollution:

- **National Clean Air Programme (NCAP):** Aims for a **20-30% reduction in particulate pollution by 2024** compared to 2017 levels.
- **National Air Quality Index (AQI):** Provides air quality ratings and links pollution levels to health impacts by monitoring **eight key pollutants**.
- **Air Act of 1981:** Regulates air pollution, establishing **Central and State Pollution Control Boards**.

KOSI-MECHI RIVER LINKING PROJECT

Recently, **flood victims in Bihar protested** against the **Kosi-Mechi River Linking Project**, part of India's **National Perspective Plan (NPP)** for river interlinking.

- The project aims to **enhance irrigation** in the region, but locals argue it doesn't address their critical **flood control needs**.

Key Facts About the Kosi-Mechi River Linking Project

- **Scope:** Links the **Kosi River** with the **Mechi River**, affecting regions in **Bihar and Nepal**.
- **Irrigation Benefit:** Expected to provide irrigation for **4.74 lakh hectares** (including **2.99 lakh hectares in Bihar**) and a **24 million cubic meter (MCM)** supply for domestic and industrial use.
- **Water Discharge:** Once operational, the project will release **5,247 cusecs** of additional water from the **Kosi barrage**.
- **Oversight:** Managed by the **National Water Development Agency (NWDA)** under the **Ministry of Jal Shakti**.
- **Focus:** Primarily designed for irrigation, covering **215,000 hectares** in the **Mahananda basin** during the **Kharif season**.
- **Flood Control Concerns:** The project does not offer substantial flood control; the added **5,247 cusecs** of water is minimal compared to the **900,000 cusec** capacity of the Kosi barrage.
- **Local Opposition:** Locals argue that the project's irrigation focus fails to address their **annual flooding issues** and **land erosion**, which disrupt homes and livelihoods.

Key Details About Kosi and Mechi Rivers

- **Kosi River:**
 - **Nickname:** Known as the "**Sorrow of Bihar**" due to frequent flooding.
 - **Origin:** Begins in the **Himalayas** near Mount Everest and Kanchenjunga.
 - **Path:** Flows through **China, Nepal, and India**, enters India near Hanuman Nagar, and merges with the **Ganga** near **Kursela, Bihar**.
 - **Tributaries:** Includes **Sun Kosi, Arun Kosi, Tamur Kosi**, and others like **Trijunga, Bhutahi Balan, Kamla Balan, and Bagmati**.
 - **Shift in Course:** Known for **westward course shifts** (112 km in the last 200 years), which have damaged agricultural lands in **Darbhanga, Saharsa, and Purnea**.
- **Mechi River:**
 - **Geography:** Flows through **Nepal and India**, joins the **Mahananda River** in **Kishanganj, Bihar**.
 - **Characteristics:** A perennial river that begins in the **Mahabharat hills** of the Himalayas and flows into Bihar.

Mahananda River:

- Part of the **Eastern Himalayan river system**.
- **Two Origins:**
 - One stream starts in **Nepal**, flows through **Bihar**, and meets the **Ganga**.
 - Another originates in **Darjeeling, West Bengal**, and flows into Bangladesh, merging with the **Ganga** near **Godagarighat**.
- **Catchment Area:** Extends across **Nepal and West Bengal**, one of India's highest rainfall regions.
- **Flood Issues:** During monsoons, streams converge, causing extensive **flooding in Bihar and West Bengal**.

National Perspective Plan (NPP) for Interlinking Rivers

- **Introduction:** Launched in **1980** by the Ministry of Irrigation (now **Ministry of Jal Shakti**).
- **Objective:** Develop water resources through **inter-basin water transfers**.
- **Components:**
 - **Himalayan Rivers Development** and **Peninsular Rivers Development**.
- **Projects:**
 - **30 projects** identified: **16 under Peninsular** and **14 under Himalayan** components.
 - **Key Peninsular Projects:** Mahanadi-Godavari, Godavari-Krishna, Par-Tapi-Narmada, Ken-Betwa (first to be implemented).

- **Key Himalayan Projects:** Kosi-Ghaghra, Ganga-Damodar-Subernarekha, Kosi-Mechi.
- **Significance:**
 - **Flood Management:** Focus on managing **flood risks** in the **Ganga-Brahmaputra-Meghna** basin.
 - **Water Shortage Solutions:** Aims to support **water-scarce western and southern states** (e.g., **Rajasthan, Gujarat, Andhra Pradesh**).
 - **Agricultural Boost:** Enhances irrigation for increased **food security** and aims to double farmers' income.
 - **Infrastructure Development:** Supports environmentally friendly **inland water transport infrastructure**.
 - **Groundwater Conservation:** Reduces groundwater depletion and limits freshwater outflow to the sea.

ICC APPOINTS NEW CHAIRMAN

Jay Shah has been **elected unopposed** as the next **Chairman of the International Cricket Council (ICC)**, marking him as the **youngest Indian** and only the **fifth Indian** to lead the ICC.

- **Official Transition:** He will assume office on **December 1, 2024**, following **Greg Barclay** of New Zealand, who steps down in November.

Profile of Jay Shah

- **Current Positions:**
 - **Secretary** of the **Board of Control for Cricket in India (BCCI)** since **October 2019**.
 - **Chairperson** of the **Asian Cricket Council (ACC)** since **2021**.
- **Cricket Administration Experience:**
 - Began in cricket administration as the **Joint Secretary** of the **Gujarat Cricket Association**.
 - Held the position of **ICC Director**, paving the way for his current role as **ICC Chairman**.
- **Historical Milestone:** At **35 years old**, Shah becomes the youngest Indian to hold the ICC Chairmanship, joining notable predecessors like **Jagmohan Dalmiya, Sharad Pawar, N. Srinivasan, and Shashank Manohar**.

Key Indians in ICC Leadership History

1. **Jagmohan Dalmiya** (1997-2000) - ICC President.
2. **Sharad Pawar** (2010-2012) - ICC President.
3. **N. Srinivasan** (July 2014 - November 2015) - First Indian as ICC Chairman.
4. **Shashank Manohar** (November 2015 - June 2020) - ICC Chairman.
5. **Jay Shah** (December 1, 2024 onwards) - ICC Chairman.

Vision and Future Plans for ICC Under Jay Shah

- **Leadership Goals:** Shah aims to:
 - Balance and promote **multiple cricket formats**.
 - Drive **technological adoption** in cricket.
 - **Expand cricket's reach** into new global markets.
- **Statement:** Shah committed to making cricket more **inclusive and globally popular**.

ICC Regulations and Transition Requirements

- As per ICC guidelines, the **Chairman must be Independent**; thus, Shah will **step down** from his roles with **BCCI and ACC** upon assuming the ICC chairmanship.

Timeline of Indian Chairmanship at ICC

- **N. Srinivasan:** July 26, 2014 - November 9, 2015.
- **Shashank Manohar:** November 22, 2015 - June 30, 2020.
- **Jay Shah:** Begins December 1, 2024.

About the International Cricket Council (ICC)

- **Established in 1909** as the **Imperial Cricket Conference**, later renamed to the **International Cricket Conference** in 1965 and finally to the **International Cricket Council (ICC)** in 1989 to reflect its global membership.
- **Membership:** 105 members divided into:

- **12 Full Members** with Test status.
- **37 Associate Members.**
- **56 Affiliate Members.**
- **First ICC Chairman: N. Srinivasan** (2014) after the ICC governance restructure; **Jagmohan Dalmiya** was the first non-white ICC President (1997-2000).
- **Major Tournaments:** The ICC organizes premier tournaments, including:
 - **Cricket World Cup (ODI)** every four years, with the first held in **1975** in England.
 - **T20 World Cup.**
 - **ICC Champions Trophy.**
- **Headquarters:** Located in **Dubai, UAE.**
- **Support for Women's Cricket:** Promotes women's cricket with events like the **Women's Cricket World Cup** and **Women's T20 World Cup.**
- **ICC Awards:** Annual awards celebrating the best cricketers, including **Cricketer of the Year**, **Test Cricketer of the Year**, **ODI Cricketer of the Year**, and **T20I Cricketer of the Year.**

U.S. SURPASSES UAE AS INDIA'S SECOND LARGEST LNG SUPPLIER

In 2023, the **United States** overtook the **UAE** as **India's second largest supplier** of liquefied natural gas (LNG), delivering **3.09 million tonnes (MT)**.

Detailed Insights from the World LNG Report 2024:

- **Growth in U.S. LNG Exports:** The **International Gas Union (IGU)** report shows that U.S. LNG exports to India increased from **1.8 MT in 2019** to **3.86 MT in 2021**.
- **Reasons for Shift:** Analysts note that **falling global LNG prices** and India's **shorter shipping route via the Cape of Good Hope** (compared to North Asia) have encouraged higher U.S. LNG shipments to India.
- **U.S. as Top Global LNG Exporter:** In 2023, the **U.S. emerged as the world's largest LNG exporter.**

Evolving Trade and Import Trends:

- **India's Changing Import Patterns:**
 - **India's Position:** India, currently the **fourth largest LNG importer globally**, reduced LNG imports in 2022 due to high prices, with **U.S. shipments dropping to 2.16 MT.**
 - **UAE's Increased Share:** The **UAE's share of LNG imports** by India grew from **2.6 MT in 2019** to **2.85 MT in 2023.**
 - **Qatar Remains the Largest Supplier:** **Qatar** has held the **top position** as India's largest LNG supplier for five consecutive years (2019-2023), with supplies exceeding **10 MT** annually, except in 2019, which was **9.7 MT.**

Rising U.S. LNG Exports:

- **Leading Global Exporter:** In 2023, the **U.S. became the largest LNG exporter**, surpassing **Qatar and Australia** due to **expanded liquefaction capacity** from investments made in previous years.
- **Increase in Export Volume:** Total U.S. LNG exports rose by approximately **15% year-on-year** to **89 MT.**
- **India as a Key Destination:** India is closer for U.S. LNG shipments via the **Cape of Good Hope**, making it a favorable market to reduce freight costs.
- **Long-term Contracts:** Long-term contracts signed between the **U.S. and Indian entities** have supported consistent LNG consumption in India.

Decline in African LNG Exports:

- **Challenges in Nigeria:** **Nigeria's LNG exports** have faced disruptions due to **force majeure at the Bonny export facility** since **October 2022**, caused by feedstock supply issues.
- **Shift to Europe:** Other **African countries** such as **Angola** redirected LNG to **Europe**, where prices have been higher, during **2022-2023.**

Continued Importance of Middle Eastern LNG:

- **Geographical Advantage:** Middle Eastern LNG remains crucial for India due to **geographical proximity** and **long-term agreements**.
- **Price Sensitivity in India:**
 - **Price Sensitivity:** Indian companies remain **price-sensitive**, using **alternatives** like **naphtha, fuel oil, LPG, and gasoline** based on cost-effectiveness.
 - **Future Imports:** LNG imports are projected to grow in **2024** if **prices stay competitive** for Indian refiners and industrial consumers.

NATIONAL GREEN HYDROGEN MISSION

The **National Green Hydrogen Mission (NGHM)** is focused on creating a supportive ecosystem for the development and application of green hydrogen, promoting a self-sufficient and sustainable energy framework, and reducing reliance on fossil fuel imports.

- **Green Hydrogen:** Produced by electrolyzing water using renewable sources like **solar and wind energy**, green hydrogen is central to the global shift towards a low-carbon economy. **India's renewable energy potential** and commitment to climate goals position it well to lead in green hydrogen technology.

Key Details of the National Green Hydrogen Mission

- **Launch:** Approved by the Union Cabinet in **January 2023** as part of India's sustainable energy and climate targets.
- **Budget:** The mission has a substantial budget of **Rs. 19,744 crore** and is spearheaded by the **Ministry of New & Renewable Energy**.
- **Primary Goals:** Establish India as a **global leader in green hydrogen** production, use, and export.

Core Components of the Mission

1. **SIGHT Program (Strategic Interventions for Green Hydrogen Transition):** Offers incentives for local production of electrolyzers and green hydrogen.
2. **Green Hydrogen Hubs:** Designated regions will be developed as Green Hydrogen Hubs for large-scale production and use.

Expected Results by 2030

- **Green Hydrogen Production:** Aims for a capacity of at least **5 million metric tonnes per year**.
- **Renewable Energy Capacity:** **125 GW** of additional capacity.
- **Investment and Jobs:** Projects over **Rs. 8 lakh crore** in investments and **6 lakh jobs**.
- **Reduced Imports:** Expected to reduce fossil fuel imports by more than **Rs. 1 lakh crore**.
- **GHG Emission Reductions:** Aims to prevent **50 million metric tonnes** of annual greenhouse gas emissions.

Current and Future Demand for Hydrogen

- **Present Consumption:** India's current hydrogen consumption is **6 million tonnes annually**, mainly used in fertilizers and refineries.
- **Projected Demand:** By **2050**, demand is expected to reach **28 million tonnes**, with 80% met by green hydrogen.

Implementation Phases

1. **Phase I (2022-23 to 2025-26):** Establish demand-supply channels, incentivize domestic electrolyser production, and implement initial projects in sectors like **refineries, fertilizers, and city gas**. Includes pilot projects in **steel, mobility, and shipping**.
2. **Phase II (2026-27 to 2029-30):** Anticipates green hydrogen's cost competitiveness with fossil fuels, expanding production into sectors like **aviation and railways**, with a focus on commercial-scale projects and deep decarbonization.

Mission Benefits and Targets

- **Decarbonization:** Supports substantial reduction in carbon emissions.
- **Fossil Fuel Reduction:** Reduces India's dependence on imported fossil fuels.
- **Domestic Manufacturing:** Builds indigenous manufacturing for green hydrogen technologies.

- **Employment:** Creates extensive job opportunities.
- **Export Potential:** Positions India as a key exporter of green hydrogen and its derivatives.

Challenges Facing NGHM

1. **Incentive Insufficiency:** Initial incentives of **Rs. 50 per kilogram**, declining annually, may be inadequate. Other countries offer more substantial incentives:
 - **U.S.:** Up to **\$3 per kilogram** in tax credits and **\$8 billion** in hydrogen hub development.
 - **Europe:** Offers about **€4 per kilogram** in some regions.
2. **Funding Gap:** The allocated **Rs. 5,400 crore** represents only 40% of total production costs.
3. **Global Competition:** India faces a competitive environment, especially from regions with more substantial government support.

India's First Green Hydrogen Plant in Stainless Steel Sector

- **Location:** Jindal Stainless Limited in Hisar, Haryana.
- **Unique Features:** The world's first off-grid green hydrogen plant for the stainless steel sector, utilizing both rooftop and floating solar.
- **Environmental Impact:** Expected to reduce carbon emissions by **2,700 metric tonnes annually** and **54,000 tonnes** over 20 years.

Additional Green Initiatives in India

- **Panchamrit Goals:** India's five-point climate commitment includes:
 - **500 GW** non-fossil energy capacity by **2030**.
 - **50% of energy requirements** from renewable sources by **2030**.
 - **1 billion tonne reduction** in projected carbon emissions by **2030**.
 - **45% reduction** in carbon intensity of the economy by **2030**.
 - Achieving **Net Zero by 2070**.
- **Mission LiFE (Lifestyle for Environment):** Promotes sustainable living as a **global movement**, encouraging individuals to adopt eco-friendly practices. Recognized as **Pro Planet People (P3)**, participants practice conscious consumption.

INDO-PACIFIC ECONOMIC FRAMEWORK (IPEF) & INDIA'S ROLE

India was elected as Vice-Chair of Supply Chain Council under the **14-member Indo-Pacific Economic Framework (IPEF)**.

Supply Chain Bodies Established Under IPEF

1. **Supply Chain Council (SCC)**
 - **Purpose:** Strengthen supply chains for sectors critical to **national security, public health, and economic well-being**.
 - **Leadership:** **USA (Chair)** and **India (Vice-Chair)**.
 - **First In-Person Meeting:** Scheduled for **September 2024** in **Washington**, on the margins of the Supply Chain Summit.
2. **Crisis Response Network (CRN)**
 - **Purpose:** Provides a platform for collective emergency response to **urgent or imminent disruptions**.
 - **Leadership:** **Republic of Korea (Chair)** and **Japan (Vice-Chair)**.
 - **Upcoming Activity:** Plans a **tabletop exercise** and first in-person meeting alongside the Supply Chain Summit.
3. **Labour Rights Advisory Board (LRAB)**
 - **Purpose:** Unites **workers, employers, and governments** to strengthen labour rights and workforce development in regional supply chains.
 - **Leadership:** **USA (Chair)** and **Fiji (Vice-Chair)**.
 - **Focus Areas:** Labour rights and provisions under the **IPEF Clean Economy Agreement** and **Fair Economy Agreement**.

Indo-Pacific Economic Framework (IPEF)

- **Launch Date:** May 2022 in Tokyo, Japan.
- **Member Countries:** Comprises 14 countries.
- **Objective:** Foster economic engagement and cooperation to promote **growth, economic stability,** and **prosperity** in the Indo-Pacific region.

IPEF's Four Pillars

1. **Fair and Resilient Trade:** Aims to promote **economic growth, peace,** and **prosperity.**
 2. **Supply Chain Resilience:** Focuses on building **resilient, robust,** and **well-integrated** supply chains.
 3. **Clean Economy:** Advances cooperation on **renewable energy** and **climate-friendly technologies.**
 4. **Fair Economy:** Emphasizes effective **anti-corruption** and **tax policies.**
- **India's Participation:**
 - Fully engaged in **Pillars II to IV** (Supply Chain Resilience, Clean Economy, Fair Economy).
 - Holds **observer status** in **Pillar I** (Fair and Resilient Trade).

SOVEREIGN GOLD BOND (SGB) SCHEME AND GOLD INDUSTRY IN INDIA

Union Budget 2024-25 Announcements:

- **Import Duty on Gold** reduced from **15% to 6%.**
- Government to finalize decision on the **future of Sovereign Gold Bonds (SGBs).**
- **Gold Reserves in India:**
 - **Total Reserves/Resources:** 501.83 million tonnes (National Mineral Inventory, 2015).
 - **Top Resource Locations:**
 - **Bihar:** 44% of total gold ore.
 - **Rajasthan:** 25%.
 - **Karnataka:** 21%.
 - **West Bengal and Andhra Pradesh:** 3% each.
 - **Jharkhand:** 2%.
 - **Gold Production:**
 - Karnataka contributes about **80%** of India's total gold output.
 - **Kolar Gold Fields (KGF)**, one of the world's oldest and deepest gold mines, is located in Karnataka.
- **Gold Imports in India:**
 - India is the **second-largest consumer** of gold globally.
 - **Imports for 2023-24:** Increased by **30%**, totaling **USD 45.54 billion.**
 - **March 2024 Decline:** Imports dropped by **53.56%.**
- **Sovereign Gold Bond (SGB) Scheme:**
 - **Launch:** Introduced in **November 2015** to reduce physical gold demand and promote financial savings.
 - **Issuance:**
 - Issued as **Government of India Stock** under the **Government Securities (GS) Act, 2006.**
 - Managed by the **Reserve Bank of India (RBI)** on behalf of the Government of India.
 - Available through **Scheduled Commercial Banks** (excluding Small Finance Banks, Payment Banks, Regional Rural Banks), **Stock Holding Corporation of India Limited**, **Clearing Corporation of India Limited**, **designated post offices**, **NSE**, and **BSE.**
 - **Eligibility:**
 - Available for **resident individuals, Hindu Undivided Families (HUFs), trusts, universities,** and **charitable institutions.**
 - **Features of SGBs:**
 - **Issue Price:** Linked to **24-carat gold** (999 purity) price, as published by the **India Bullion and Jewellers Association (IBJA), Mumbai.**
 - **Investment Limits:**
 - Can be purchased in **multiples of 1 gram.**
 - **Maximum Limit:** 4 kg for **individuals and HUFs**; 20 kg for **trusts/other entities** per financial year.
 - **Minimum Investment:** 1 gram.

- **Maturity Period:** 8 years with an exit option available after 5 years.
- **Interest Rate:** 2.5% per annum, paid semi-annually; interest is subject to income tax.
- **Collateral:** SGBs can be used as collateral for loans.
- **Capital Gains Tax:** Exempted on redemption for individuals.
- **Disadvantages:**
 - Long-term nature limits immediate liquidity; unlike physical gold, SGBs cannot be sold immediately.
 - Although SGBs are listed on exchanges, **low trading volumes** make it challenging to exit before maturity.
- **Green Bonds:**
 - **Purpose:** Issued by governments, companies, and multilateral organizations to fund projects with **positive environmental or climate benefits**.
 - **2024-25 Government Plan:** Sovereign green bonds worth Rs 20,000 crore to be issued for environmental projects.

PANGONG LAKE DISPUTE AND INDIA-CHINA BORDER INFRASTRUCTURE

Location and Construction: Connects the north and south banks near the LAC in the disputed Aksai Chin area.

- **Dimensions and Strategic Implications:** Nearly 400 meters long, facilitates quick military operations to the lake's southern banks, including Rezang La.
- **Operational Status:** Operationalized, facilitating PLA troop and tank mobilization.

Indian Military Actions and Strategic Context

- **2020 Manoeuvres:** Indian Army captured strategic heights on the southern bank in response to Chinese activities.
- **Reduction in Mobilization Time:** Bridge cuts PLA travel time between bases from 12 hours to about four.
- **Potential Countermeasures:** Bridge could be targeted by artillery or air strikes, though defended by PLA air defense systems.

Chinese Military Developments

- **PLA Base at Sirjap:** Headquarters for troops around the lake, includes bunkers for weapons and fuel, hardened shelters for vehicles.
- **Other Infrastructure:**
 - **Connectivity:** Road from north of Samzungling to the Galwan Valley.
 - **Defensive Structures:** Underground bunkers, shelters, artillery positions, radar sites, and ammunition dumps.
 - **Air Combat Capabilities:** Deployment of additional fighters, bombers, reconnaissance aircraft, and drones.
 - **Civil-Military Integration:** Construction of dual-use 'Xiaokang' border villages.
 - **Rear Area Enhancements:** Strengthened infrastructure in buffer zones on both banks of Pangong Tso.

Geographical and Geological Features of Pangong Tso

- **Pangong Tso Lake:** Situated over 14,000 feet in the trans-Himalayas of Ladakh, this long, narrow, deep, endorheic lake extends into Tibet.
- **Territorial Distribution:** India controls approximately one-third of the lake, while China controls two-thirds.
- **Formation:** Formed from the collision of the Indian subcontinent with the Asian landmass, creating the Himalayan range and filling a space once occupied by the Tethys Ocean.

Disputed "Fingers" Area

- **Location and Description:** Protrusions known as "fingers" on the northern bank.
- **LAC Claims:**
 - **India:** Extends to Finger 8, controls up to Finger 4.
 - **China:** Asserts LAC at Finger 2, blocks Indian access beyond this point.

Strategic and Historical Significance

- **Chushul Approach Path:** Serves as a potential route for Chinese offensives.
- **1962 War:** Site of major conflict; Indian troops defended Rezang La.

- **Infrastructure:** China has built roads along its portion of the lake and maintains a detailed scale model at its Huangyangtan military base.

India-China Border Overview

- **Length and Division:** The 3,488-kilometer border divided into:
 - **Western Sector:** Ladakh
 - **Middle Sector:** Himachal Pradesh and Uttarakhand
 - **Eastern Sector:** Arunachal Pradesh and Sikkim
- **Major Disputes:**
 - **Aksai Chin:** Administered by China, claimed by India as part of Ladakh.
 - **Arunachal Pradesh:** Known as "South Tibet" by China, claimed by India as an integral part.

MINISTRY OF MINES PUBLISHED MINERAL PRODUCTION DATA

Mineral production data for the first quarter of FY 2024-25 was released by the Ministry of Mines in August 2024.

- **Iron Ore and Limestone Production:** Dominated by iron ore (275 MMT) and limestone (450 MMT), these two accounted for about 80% of the total MCDR mineral production by value in FY 2023-24.
- **Global Production Rankings:**
 - India is the second-largest producer of aluminium.
 - India ranks third globally in limestone production.
 - India is the fourth-largest producer of iron ore.
- **Global Leaders:**
 - China is the leading producer of aluminium and limestone.
 - Australia is the top producer of iron ore.

State-wise Production in India

- **Odisha:** Top producer of aluminium ore and iron ore.
- **Rajasthan:** Leads in limestone production.

Economic Significance

- **Growth in Key Sectors:** Increase in production of aluminium ore, iron ore, and limestone indicates strong economic activity in sectors such as energy, infrastructure, construction, automotive, and machinery.

Mineral Production Distribution (Q1 FY 2024-25)

- **States Reporting Production:** Mineral production reported from 19 states.
- **Concentration of Production:** Approximately 97.04% of mineral production value was confined to 7 states.

Detailed Share of States in Mineral Production

- **Odisha:** 44.11%
- **Chhattisgarh:** 17.34%
- **Rajasthan:** 14.10%
- **Karnataka:** 13.24%
- **Jharkhand:** 4.36%
- **Madhya Pradesh:** 2.44%
- **Maharashtra:** 1.45%
- **Remaining States:** Cumulatively less than 3% of total value.

India's Mineral Production (April-February 2023-24)

- **Year-on-Year Growth:** 8.2% increase according to provisional data from the Indian Bureau of Mines.
- **Index for February 2024:** The index of mineral production for the mining and quarrying sector stood at 139.6.
- **Comparison with Previous Year:** This is 8.0% higher compared to February 2023.

Index of Industrial Production (IIP)

- Measures changes in the volume of production of industrial products during a given period.

- **Compiled and Published By:** National Statistical Office (NSO), Ministry of Statistics and Programme Implementation.
- **Frequency:** Monthly publication.
- **Role in Policy Making:** Used by government agencies such as the Ministry of Finance and the Reserve Bank of India for policymaking.
- **Role in Economic Analysis:** Crucial for calculating quarterly and advance GDP estimates.
- **Components of IIP**
- **Broad Sectors:**
 - Mining
 - Manufacturing
 - Electricity
- **Use-based Sectors:**
 - Basic Goods
 - Capital Goods
 - Intermediate Goods
- **Base Year:** 2011-2012.

Eight Core Sectors

- **Contribution to IIP:** These sectors comprise 40.27% of the weight of items included in the IIP.
- **Industries by Weightage:**
 - Refinery Products
 - Electricity
 - Steel
 - Coal
 - Crude Oil
 - Natural Gas
 - Cement
 - Fertilizers

RIGHT TO BE FORGOTTEN

The Supreme Court of India is set to hear a case that could reshape the concept of the "**right to be forgotten**" in India, where no official law currently governs this right.

Understanding the Right to Be Forgotten

- **Definition:** The right to be forgotten enables individuals to request the removal of their personal data from digital platforms if it becomes outdated, irrelevant, or harmful to their privacy.
- **Global Context:**
 - **European Union:** This right was established in the **2014 "Google Spain case"** by the Court of Justice of the European Union (CJEU), mandating search engines to address requests to remove information deemed irrelevant or excessive.
 - **GDPR:** In the EU, this right is enshrined in **Article 17 of the General Data Protection Regulation (GDPR)**, promoting individuals' control over their data.
 - **Other Countries:** Canada, the UK, Argentina, and Japan have adopted similar laws. In 2023, Canada upheld the right to demand search blocks on personal data.
 - **California:** The **Online Eraser law (2015)** allows minors to delete their posted information, with the **2023 DELETE Act** extending this right to adults, enabling them to remove data collected by brokers.

Interpretation of the Right to Be Forgotten in India

- **Current Status:** India lacks a specific law on the right to be forgotten, though the concept has been linked to privacy and digital rights.
- **Judicial Recognition:**

- **Justice K.S. Puttaswamy v. Union of India (2017):** Recognized the **right to privacy as a fundamental right** under the Constitution, including aspects of the right to be forgotten but clarified that this right is not absolute. It may be restricted in cases of public interest, public health, archiving, research, or legal claims.
- **Scope:** This implies that an individual should be allowed to remove personal data if it no longer serves a legitimate interest.
- **Relevant Legislation:**
 - **Digital Personal Data Protection Act, 2023:** Recognizes the right to “erasure,” but its application to public data or court records remains unclear.
 - **Information Technology Rules, 2021:** Requires intermediaries to remove privacy-violating content within **24 hours** of a complaint.

Judicial Precedents Related to the Right to Be Forgotten

- **Rajagopal vs. State of Tamil Nadu (1994):** Addressed the “**right to be let alone**” but distinguished it from the publication of public records, asserting that court records remain accessible for public comment.
- **Dharamraj Bhanushankar Dave vs. State of Gujarat (2017):** Gujarat High Court rejected the request to remove acquittal details from public records, citing the importance of accessible court orders.
- **Orissa High Court (2020):** While addressing a **revenge porn case**, the court emphasized the need for legal clarity on the right to be forgotten due to its complex implementation.
- **Delhi High Court (2021):** Supported the right to be forgotten in a criminal case, allowing removal of certain information from search results to protect the petitioner's personal and professional reputation.
- **Supreme Court (July 2022):** Directed the creation of a mechanism to remove personal details of individuals involved in marital disputes, broadening the interpretation of the right to be forgotten.
- **Kerala High Court (December 2023):** Ruled that the right to be forgotten does not apply to ongoing court proceedings, highlighting the importance of **open justice**. Suggested legislative clarity is needed but acknowledged the right may apply depending on case specifics and time passed.
- **Himachal Pradesh High Court (July 2024):** Ordered the redaction of names in a rape case, stressing that once acquitted, individuals should not bear the stigma of past accusations.

NATIONAL ORGAN AND TISSUE TRANSPLANT ORGANISATION (NOTTO) REPORT 2023-24

- **Release Date:** Annual report released on Indian Organ Donation Day (IODD), August 3, 2024.
- **Milestone:** India surpassed 1,000 deceased organ donors in a year for the first time in 2023.
- **Rankings:**
 - Third in the world for organ transplantation.
 - Second in the world for corneal transplantation.

Key Highlights from NOTTO Report

- **Gender Distribution:**
 - Living donors: 63% women.
 - Deceased donors: 77% men.
- **Transplants by Region:**
 - Delhi-NCR: 78% of transplants for foreign nationals.
 - Delhi: 4,426 total transplants; over 32% to foreign nationals.
 - Rajasthan: 116 transplants to foreign nationals.
 - West Bengal: 88 transplants to foreign nationals.
- **Deceased Donor Transplants:**
 - Increase from 837 in 2013 to 2,935 in 2023.
- **Transplants to Foreigners:**
 - Organs from deceased donors allocated to foreigners only when no Indian patients are available.
 - Nine transplants to foreigners from unrelated deceased donors across Tamil Nadu, Delhi, Maharashtra, and Gujarat.

Regulatory Framework in India

- **Transplantation of Human Organs and Tissues Act, 1994 (THOTA):**
 - Allows organ donations from deceased and living donors.
 - Permits altruistic donations from distant relatives and friends.
 - Unrelated donors need proof of long-term connection.
 - Illegal organ trade punishable by up to 10 years in jail and a fine of up to Rs 1 crore.
 - Brain stem death is legally recognized as death.
- **Transplantation of Human Organs and Tissues Rules, 2014:** Promotes donation from deceased donors.
- **National Organ Transplantation Guidelines:**
 - Removed age cap for organ recipients.
 - No state domicile requirement for registering as an organ recipient.
 - No fees for registration.
- **Organ Transport Policy:** Policy by Niti Aayog to expedite organ transport.

Indian Organ Donation Day

- **Observation:** Annually on August 3, started in 2010.
- **Purpose:** To increase awareness and dispel myths about organ donation.
- **2024 Initiatives:**
 - Launch of “Angdaan Jan Jagrukta Abhiyaan” for awareness.
 - July observed as Organ Donation Month.

WHO's Guiding Principles on Organ Donation

- **Principle 1:** Legal consent required for organ removal from deceased.
- **Principle 2:** Separation of duties for physicians involved in organ donation and transplantation.
- **Principle 3:** Maximization of therapeutic potential for deceased donations; living donors typically should have a close connection to recipients.
- **Principle 4:** Restrictions on organ donations from minors.
- **Principle 5:** Donations must be voluntary and without monetary compensation; sale or purchase of organs for transplantation prohibited.

POWER OF LG TO NOMINATE MCD ALDERMEN

The SC ruled that under **Section 3 of the Delhi Municipal Corporation Act, 1957 (DMC Act)**, the **Lieutenant Governor (LG) of Delhi has the explicit power to nominate aldermen** to the Municipal Corporation of Delhi (MCD) without requiring the **Council of Ministers' advice**.

- **Reference to Previous Judgment:** The SC referred to the **Government of NCT of Delhi v. Union of India, 2023**. In this case, it was held that **Parliament holds legislative power over the State List subjects** for the National Capital Territory (NCT) of Delhi, including laws on 'local government' under the **DMC Act, 1957**.

Issues in the Nomination of Aldermen

- **Constitutional Provision (Article 239AA):** Mandates that the **Council of Ministers and Chief Minister should "aid and advise" the LG** for matters within the Delhi Legislative Assembly's purview, except in cases where the LG must act independently.
- **Restricted Legislative Powers:** The Delhi Legislative Assembly cannot make laws on '**Public Order, Police, or Land**'.
- **LG's Action:** On **3rd January 2023**, the LG nominated **10 aldermen** under **Section 3 of the DMC Act**.
- **Legal Challenge:** The Delhi government challenged these nominations, referencing the **2018 SC decision in Government of NCT of Delhi Vs. Union of India**, which stated that the **LG must follow the Council of Ministers' advice** for matters under the State and Concurrent Lists.
- **LG's Argument:** The **DMC Act, 1957 grants the LG the power to nominate aldermen independently** of the Council of Ministers.

Role and Position of Aldermen in MCD

- **Definition:** An **alderman** is a member of a municipal body, traditionally seen as having **special knowledge or experience** in municipal administration.
- **Municipal Role:** Delhi has **12 zones**, each with a **Wards Committee** that includes **elected representatives and nominated aldermen**.
- **Eligibility:** Aldermen must be **at least 25 years old** and have **experience in municipal administration**.
- **Voting Rights:** Aldermen **cannot vote in MCD meetings** but have voting rights in **Wards Committees** and can stand for election to the **MCD Standing Committee**.
- **Standing Committee Importance:** This committee manages essential MCD functions, including **contract approvals over Rs. 5 crore, budget revisions, and appointing officers**. Without aldermen, **key MCD functions could halt**.

Governance Model of Delhi

- **69th Amendment Act, 1991:** Renamed Delhi as the **National Capital Territory (NCT)**, to be administered by the **LG with aid and advice of the Council of Ministers**.
- **Aid and Advice Limitation:** Applies only to subjects where the **Delhi Assembly has authority**—subjects in the **State and Concurrent Lists**, except **public order, police, and land**.
- **Discretionary Powers:** Article 239AA empowers the **LG to refer disputes with the Council of Ministers to the President**.

Judicial Interpretation on Delhi Governance

- **Purposive Construction:** In **Government of NCT of Delhi Vs. Union of India, 2018**, the SC interpreted **Article 239AA** to promote federalism and democracy, affirming Delhi's **unique status** among Union Territories.
- **LG's Role as Facilitator:** The LG is required to act as a **facilitator**, not an adversary, to the **elected Council of Ministers**.
- **Limited Referral Power:** The LG can refer matters to the President only in **exceptional cases**.
- **Denial of Statehood:** The SC ruled that the **NCT of Delhi cannot be granted Statehood**.

SIT REPORT ON TIGER DEATHS IN MP

A Special Investigation Team (SIT) reviewed **43 tiger deaths** in **Bandhavgarh Tiger Reserve** and **Shahdol Forest Circle** between **2021 and 2023**, raising concerns about wildlife protection.

- **Investigation Lapses:**
 - **Inadequate Probing:** Insufficient investigation in at least **10 tiger death cases**, with only **two arrests** made for unnatural deaths. Missing body parts noted in many cases due to lack of proper inquiry.
 - **Lack of Evidence Collection:** Missing **mobile forensics and electric trip data** in electrocution cases, and neglecting **land ownership checks** related to poaching.
 - **Misclassification of Death Causes:** Frequent attribution of deaths to **infighting** without substantial investigation, potentially masking **poaching incidents**.
 - **Post-Mortem Deficiencies:** Poor sample collection and documentation in post-mortem procedures.
 - **Negligence in Medical Treatment:** Instances of documented medical negligence, including failure to detect foreign objects in a tigress, leading to death.

Tiger Mortalities in India (2019-2024)

- **Tiger Deaths:** Rising tiger fatalities reported by the **National Tiger Conservation Authority (NTCA)**—**96 (2019), 106 (2020), 127 (2021), 121 (2022)**, and a peak of **178 in 2023**.
- **Total Mortality:** **628 tigers died in India** between **2019 and 2024**.
- **Tiger Population:** In 2022, the tiger population in India was **3,682**, constituting about **75% of the global wild tiger population**.
- **Project Tiger:** Launched in **1973** to promote tiger conservation.
- **Tiger Reserves:** India has **55 tiger reserves** covering **78,735 square km**, around **2.4%** of the country's land area.

Bandhavgarh Tiger Reserve (BTR)

- **Location:** Situated in the **Umaria district of Madhya Pradesh**, within the **Vindhya hills**.
- **Distinct Areas:** Consists of **Bandhavgarh National Park, Panpatha Wildlife Sanctuary (Core Area)**, and the **Buffer Area** across **Umaria, Shahdol, and Katni** districts.
- **Established:** Declared a national park in **1968** and a tiger reserve in **1993** under **Project Tiger**.
- **Wildlife:** Species include **Tiger, Leopard, Dhole (Indian Wild Dog), Bengal Fox, Sloth Bear, Smooth-coated Otter, Indian Rock Python, Rusty Spotted Cat, Fishing Cat, Gaur, and Wild Elephant**.
- **Tiger Density:** Known for the **highest density of Royal Bengal Tigers** in India and globally.

Central Empowered Committee (CEC) Recommendations for Sariska Tiger Reserve (STR) - 2024

- **Traffic Impact:** Heavy vehicular traffic from **temple pilgrims** affecting habitat and causing pollution.
 - **Recommendation:** Ban on **private vehicle entry** by **March 2025** and use of **electric shuttle buses. Tramways, elevated roads, or ropeways** to be explored based on feasibility studies.
- **Special Tiger Protection Force:** Proposal to create a dedicated force to handle **man-animal conflicts and poaching risks** due to the increasing tiger population and proximity to villages.

About 'Tiger' Species:

- **Subspecies of Tiger:** Includes the Continental Tiger (*Panthera tigris tigris*) and the Sunda Tiger (*Panthera tigris sondaica*).
- **Habitat:** Tigers are found in diverse environments such as tropical rainforests, evergreen forests, temperate forests, mangrove swamps, grasslands, and savannas.
- **Global Distribution:** Tigers exist in 13 Tiger Range countries (India, Nepal, Bhutan, Bangladesh, Myanmar, Russia, China, Thailand, Malaysia, Indonesia, Cambodia, Laos, Vietnam) with extinctions noted in Cambodia, Laos, and Vietnam.
- **Protection Status:** Tigers are listed as Endangered on the IUCN Red List, included in CITES Appendix I, and protected under Schedule I of WPA 1972.
- **Conservation Efforts:** Efforts include the International Big Cats Alliance (IBCA), Tx2 campaign by WWF, establishment of the National Tiger Conservation Authority (NTCA), initiation of Project Tiger in 1973, and conducting a Tiger Census every 4 years.
- **Threats:** Major threats to tigers include habitat loss, poaching and illegal trade, and human-wildlife conflict.
- **Tigers in India:** India has the largest tiger population globally, hosts 55 tiger reserves including the largest Nagarjun Sagar in Andhra Pradesh and the smallest Orang in Assam, and had a recorded population of 3,167 tigers as of 2022. Largest population found in the Central Indian Highlands & Eastern Ghats Landscape.

FIJI'S HIGHEST CIVILIAN AWARD TO PRESIDENT OF INDIA

President Droupadi Murmu was awarded the Companion of the Order of Fiji, the highest civilian honor from Fiji.

- **Significance:** This award recognizes the strong ties between India and Fiji and was conferred during her historic visit to Fiji, marking the first time an Indian President has visited the island nation.

Contributions and Historical Context

- **Indian Diaspora Contributions:** The President acknowledged the contributions of the Indian diaspora in Fiji, particularly the Girmitiya laborers.
- **Girmitiya Laborers:**
 - **Origin of 'Girmitiya':** Derived from 'girmit', meaning 'agreement'.
 - **Background:** Indian indentured laborers known as Girmitiyas were transported to places like Fiji and Mauritius.
 - **Conditions:** Although not technically slaves, Girmitiyas were subjected to "blackbirding," a practice involving deception or coercion to work as slaves or poorly paid laborers.

Fiji

- Fiji is an archipelago in the **South Pacific Ocean**, north of Auckland, New Zealand.
- The island Comprises over **300 islands**, with only about **100 inhabited**.

- **Coral Reefs:** Known as the "soft coral capital of the world," with over 4,000 square kilometers of vibrant coral reefs.
- **Economy:** Sugarcane was historically a major economic driver.
- **Government:** Fiji operates under a parliamentary democracy.
- **Population:** Includes a mix of Indigenous Fijians, Indians, Europeans, and other ethnicities.
- **Cultural Landmark:** Home to the largest Hindu temple in the Southern Hemisphere, the Sri Siva Subramaniya Swami Temple.

President Droupadi Murmu's Background and Career

- **Office Assumption Date:** July 25, 2022.
- **Historical Significance:** First tribal President of India and the second female president after Pratibha Patil.
- **Previous Roles:**
 - Former Governor of Jharkhand.
 - Former Cabinet member of the Government of Odisha.
- **Succession:** Succeeded Ram Nath Kovind as the President of India.
- **Personal Background:**
 - **Original Name:** 'Puti Tudu', later renamed Droupadi by a school teacher.
 - **Birth:** June 20, 1958, in a Santhali family.
 - **Political Affiliation:** Joined Bharatiya Janata Party.
 - **Political Career:**
 - Elected as Councilor of Rairangpur Nagar Panchayat in 1997.
 - MLA from Rairangpur Assembly constituency in 2000 Odisha Vidhan Sabha election.
- **Ministerial Positions in Odisha:**
 - Minister of Commerce and Transportation from 2000 to 2002.
 - Minister of Fisheries and Animal Resources Development from 2002 to 2004.

LATERAL ENTRY IN THE BUREAUCRACY

Indian Government's Recent Decision on Lateral Entry

- **Cancellation of Lateral Entry:** The government recently canceled the **lateral entry process** for government posts, primarily due to the absence of **reservation quotas for SCs and STs**.
- **Social Justice and Representation:** This move underscores the government's focus on **social justice** and representation in government recruitment.

Lateral Entry in Indian Bureaucracy

- **Definition:** Lateral entry is the process of recruiting **experts from the private sector, academia, or PSUs** for specific government roles, contrasting with the traditional promotion-based system.
- **Appointments:** Typically made at levels like **Joint Secretary, Director, or Deputy Secretary**.
- **Purpose:** To bring in **specialized expertise** and **fresh perspectives** to tackle complex governance and policy issues.
- **Contractual Nature:** Hires are **contract-based**, usually for **3-5 years**, with possible extensions based on performance.
- **Eligibility:** Candidates generally need **at least 15 years of relevant experience** in their field, with requirements varying by position.

History of Lateral Entry in India

- **Early Instances (1950s):** Practiced since **Prime Minister Jawaharlal Nehru's tenure**, with notable cases like **IG Patel** (later RBI Governor) and **Manmohan Singh** (Economic Adviser in 1971).
- **2005 Recommendation:** The **Second Administrative Reforms Commission (ARC)**, chaired by Veerappa Moily, recommended lateral entry to fill specialized knowledge gaps.
- **NITI Aayog Proposal (2017):** Proposed lateral entry at **middle and senior levels** in the central secretariat.

- **Formal Recruitment (2018-2023):** The central government initiated lateral entry recruitments for **Joint Secretary** roles in 2018, receiving **over 6,000 applications**. By **August 2024**, **63 appointments** had been made, with **57 actively serving**.

Benefits of Lateral Entry in Indian Bureaucracy

- **Specialized Expertise:** Lateral entry brings domain experts to fill skill gaps, e.g., **R.V. Shahi** as Power Secretary in 2002 for electricity reforms, **Bimal Jalan** in economic policy, and **Vijay Kelkar** on indirect tax reforms. This expertise supports policy in critical areas like **emerging technologies, climate change, and the digital economy**.
- **Innovation and Efficiency:** Professionals from the private sector bring a **results-oriented approach**, modern technology, and management practices, enhancing efficiency. Examples include insights on **AI and cybersecurity** in the Ministry of Electronics & Information Technology. Initiatives like **UIDAI** and **ONDC** also stem from private sector insights.
- **Public-Private Sector Bridge:** Lateral entrants facilitate **public-private partnerships** by understanding both sectors, enabling practical policy creation. This is especially valuable in **urban development** and **infrastructure**.
- **Global Perspective:** Professionals from multinational backgrounds bring **global insights** essential for India's policies on **climate change** and **international trade**, improving India's **international competitiveness**.
- **Effective Policy Implementation:** Lateral entrants bridge gaps between **policy formulation and execution**. For instance, experts in renewable energy can aid in scaling up solar and wind power, enhancing **India's clean energy transition**.
- **Mitigating Bureaucratic Inertia:** Fresh perspectives from lateral entrants can challenge traditional practices and stimulate innovative thinking. For example, a lateral entrant in **agriculture** might introduce new ideas on **precision farming**. This dynamic approach promotes a **performance-oriented culture**.
- **Economic Reforms:** Experienced lateral entrants are valuable in complex **economic reforms**. Experts like **Montek Singh Ahluwalia** contributed significantly during the **1991 economic liberalization**. Lateral entrants can help navigate digital economy regulations and sustainable finance, strengthening **India's global economic position**.

MONTREAL PROTOCOL

New scientific findings indicate that atmospheric levels of certain ozone-depleting chemicals, used as **refrigerants, foam blowing agents, and solvents**, peaked in **2021** and are now decreasing as nations enforce Montreal Protocol restrictions.

About the Montreal Protocol

- The **Montreal Protocol on Substances that Deplete the Ozone Layer** is a major multilateral environmental agreement regulating nearly **100 man-made ozone-depleting substances (ODS)**.
- **ODS** are commonly found in items like **refrigerators, air conditioners, fire extinguishers, and aerosols**.
- These chemicals, when released, damage the **stratospheric ozone layer**, which protects life on Earth from harmful **ultraviolet (UV) radiation** from the sun.
- The Montreal Protocol functions under the **Vienna Convention for the Protection of the Ozone Layer**, adopted on **16 September 1987**, and is among the few treaties with **universal ratification**.
- **India** became a signatory to the Montreal Protocol on **June 19, 1992**.
- The protocol phases out ODS production and consumption in a **step-wise manner** with tailored timelines for developed and developing countries (known as **Article 5 countries**).
- Under this treaty, all member countries have specific duties, including:
 - **Phasing out** various groups of ODS.
 - **Controlling ODS trade** and reporting data annually.
 - Implementing **national licensing systems** for ODS import and export.
- Although developed and developing nations have different responsibilities, all commitments are **binding, time-targeted, and measurable**.

- The **Meeting of the Parties** serves as the treaty's governance body, supported by an **Open-ended Working Group** and the **Ozone Secretariat**, based at **UN Environment Programme headquarters in Nairobi, Kenya**.

Kigali Amendment to the Montreal Protocol

- In **2016**, the **Kigali Amendment** was adopted to regulate **hydrofluorocarbons (HFCs)**, which are potent greenhouse gases and a substitute for ODS like CFCs and HCFCs.
- India ratified the Kigali Amendment to the Montreal Protocol on September 27, 2021.
- Global adoption of this amendment is projected to prevent up to **0.5°C of global warming** by 2100.
- The amendment aims to phase down **HFC production and consumption** by **80-85% by 2045**, measured in **carbon dioxide equivalent (CO₂e)**.

Understanding Ozone

- **Ozone (O₃)** is a gas made of three oxygen atoms and occurs both naturally and from human activities, found in **Earth's stratosphere and troposphere**.
- **Stratospheric ozone** is produced naturally when solar **UV radiation** interacts with molecular oxygen (O₂), forming the **ozone layer** about **6 to 30 miles above Earth**.
- This layer is essential as it reduces the harmful UV radiation reaching Earth.

Key Facts on Ozone and Its Depletion

- **Ozone (O₃)** is a unique form of oxygen, while **O₂** is the form we breathe.
- About **90% of atmospheric ozone** exists in the **stratosphere** between **10 and 40 km above Earth**, forming a protective layer.
- **Man-made ODS** like **CFCs, HCFCs, halons, methyl bromide, carbon tetrachloride, and methyl chloroform** are gradually depleting this "good" ozone layer.
- **Chlorine and bromine atoms** from these chemicals destroy ozone molecules, with a single chlorine atom capable of destroying **over 100,000 ozone molecules** before exiting the stratosphere.
- Ozone is depleting faster than it is formed, leading to increased rates of **skin cancer** and **cataracts** in humans.

GINGEE FORT NOMINATED FOR UNESCO WORLD HERITAGE SITE

Gingee Fort in Tamil Nadu's Villupuram district has been nominated for **UNESCO World Heritage status**.

- The nomination is part of the "**Maratha Military Landscapes**" initiative, aiming to preserve **12 significant forts** showcasing Maratha military architecture.

Key Facts About Gingee Fort

- **Location:** Located on three hillocks – **Rajagiri, Krishnagiri, and Chandragiri** – making it a significant fort in Tamil Nadu.
- **Historical Importance:** Known as the "**Troy of the East**," Gingee Fort is considered one of **South India's strongest fortresses**.
 - Features a **60-foot-wide rampart** and an **80-foot-wide moat**, which played a vital role during the **Carnatic Wars** between the French and British.
- **Historical Timeline:**
 - **1200 CE:** Built by Ananta Kon of the Konar Dynasty; initially named **Krishnagiri**.
 - **Vijayanagar Empire:** Major renovations were undertaken.
 - **1677:** Captured by **Chhatrapati Shivaji**, remained under Maratha control until **1698** when taken by the Mughals.
 - Later ruled by **Raja Desingh (Tej Singh)**, then fell to the **Nawabs of Arcot** in **1714**.
 - **1750-1770:** Controlled by the **French**; subsequently passed to the **British**.
- **Architectural Features:**
 - Includes temples, shrines, **Kalyana Mahal**, stepped wells, durbar hall, armory, stable, granary, gymnasium, and **Sadathulla mosque**.
 - **Water Supply:** Advanced systems ensured water access at the fort's highest points.
- **Rajagiri Hill:** Tallest hill at **800 meters**, houses a citadel and **Ranganatha temple**.
- **Krishnagiri Citadel:** Indo-Islamic architecture with a domed audience hall.

- **Venkataramana Swamy Temple:** Situated in the Lower Fort, showcasing intricate carvings from Hindu epics.
- **Kalyana Mahal:** An eight-story structure serving as royal quarters for women.

UNESCO World Heritage Sites

- **Definition:** Recognized by **UNESCO** as having **distinctive cultural or physical importance** of outstanding value to humanity.
- **Types:** Can be a building, city, complex, desert, forest, island, lake, monument, or mountain.
- **Significance:** Recognized for special cultural or physical importance and preserved for future generations.
- **Global Context:** **Italy** has the highest number of World Heritage Sites.
- **India's Status:** Currently has **38 World Heritage Properties** under the Ministry of Culture.

Selection and Protection of World Heritage Sites

- **Criteria:** Sites must be unique and significant, showcasing cultural or physical importance.
 - They represent remarkable achievements and serve as evidence of human history.
 - The goal is practical conservation for posterity.
- **Committee:** The list is managed by the **World Heritage Program** under **UNESCO**.
 - Composed of **21 states parties**, elected by the General Assembly of States Parties.
- **UNESCO World Heritage Committee:**
 - Chooses sites for the **World Heritage List** and **List of World Heritage in Danger**.
 - Oversees conservation status and manages the **World Heritage Fund**.
 - Composed of **21 states** elected for a **four-year term**.
 - **India is currently not a member** of the UNESCO World Heritage Committee.

INDIA ACHIEVES TIER 1 STATUS IN GLOBAL CYBERSECURITY INDEX (GCI) 2024

India has achieved **Tier 1 status** in the **5th edition of the Global Cybersecurity Index (GCI) 2024**, published by the **International Telecommunication Union (ITU)**.

- The previous GCI report was published in 2020.

About the Global Cybersecurity Index (GCI)

- **Launch:** Established in **2015** by **ITU**.
- **Objective:** Measures the global development and commitment levels toward cybersecurity.
- **Approach:** Utilizes a multi-stakeholder model, leveraging expertise across organisations to ensure a comprehensive assessment.
- **Aim:** Focuses on improving survey quality, encouraging international cooperation, promoting knowledge sharing, and raising awareness of cybersecurity's importance.

Pillars of GCI Assessment

- **Legal Measures**
- **Technical Measures**
- **Organisational Measures**
- **Capacity Development**
- **Cooperation**
- Each country's performance in these areas is aggregated into an overall cybersecurity score.

5-Tier Country Classification in GCI

- **Tier 1 - Role-modelling:** Score of **95-100**
- **Tier 2 - Advancing:** Score of **85-95**
- **Tier 3 - Establishing:** Score of **55-85**
- **Tier 4 - Evolving:** Score of **20-55**
- **Tier 5 - Building:** Score of **0-20**

Key Highlights of GCI 2024

- **Global Overview:**
 - Evaluated **194 countries**, identifying critical threats like ransomware, breaches in key industries, system outages, and privacy issues.
 - Since 2021, global emphasis on cybersecurity has increased, raising the **average score to 65.7/100**.
 - **Tier 1** countries have grown from **30 in 2020 to 46 in 2024**.
 - Most countries fall in **Tiers 3 and 4**, indicating significant progress yet highlighting cybersecurity gaps in their digital strategies.

India's Performance in GCI 2024

- **Rank:** Placed in **Tier 1**, alongside countries like **the United States, Japan, and Australia**.
- **Score:** **98.49/100**, an improvement from 97.5 in the 2020 edition.
- **Legal Framework:** Strengthened by policies like the **Information Technology Act (2000)** and the **Digital Personal Data Protection Act (2023)**.

Key Issues Highlighted in the Report

- **Threats:** Rising cases of ransomware attacks, cyber breaches in critical sectors, and costly system failures.
- **Cyber Capacity Gaps:** Shortages in skills, personnel, tools, and funds for robust cybersecurity.
- **Implementation Hurdles:** Challenges in effectively operationalising cybersecurity agreements.

About the International Telecommunication Union (ITU)

- **Role:** United Nations agency specialized in **Information and Communication Technologies (ICTs)**.
- **Establishment:** Founded in **1865** to improve global communication network connectivity.
- **Headquarters:** Located in **Geneva, Switzerland**.
- **Responsibilities:**
 - Allocates **global radio spectrum** and satellite orbits.
 - Develops technical standards ensuring network interoperability.
 - Strives to improve ICT access, especially for underserved communities.
- **Membership:** Comprises **193 countries** and **over 900 entities** from the private sector and academia.
- **India's Membership:** India joined ITU in **1869** and has been on the **ITU Governing Council since 1952**.

SUPREME COURT JUDGEMENT ON POCSO AND CHILD PORNOGRAPHY

The Supreme Court of India has declared that watching or possessing child pornography, even without distribution, is a punishable offense under the Protection of Children from Sexual Offences (POCSO) Act, 2012.

- **Case Name:** Just Rights for Children Alliance v S. Harish, 2024.
- This ruling overturns a previous decision by the Madras High Court that had allowed private viewing without further dissemination as not criminal.
- **Supreme Court Ruling on Child Pornography:**
 - Watching or possessing sexually explicit material involving minors is illegal under the **Protection of Children from Sexual Offences (POCSO) Act, 2012**.
 - The Supreme Court overturned a previous Madras High Court ruling that private viewing of child pornography did not constitute an offence without further distribution.
 - Urged the Union government to replace the term "child pornography" with "**child sexual exploitative and abuse material**" (**CSEAM**).
 - Introduced a stricter interpretation of **Section 15** of the POCSO Act, focusing on possession, intent to transmit, and commercial possession of child sexual exploitative and abuse material.
 - Defined the offences under Section 15 as "**inchoate**" offences, involving preparatory actions towards committing further crimes.
 - Expanded the definition of "possession" to include "**constructive possession**", where control over material and awareness of such control are sufficient for culpability.

- **Educational and Awareness Measures:**
 - Recommended comprehensive sex education in schools covering consent, healthy relationships, gender equality, and respect for diversity.
 - Mandated promotion of widespread awareness of the POCSO Act through **Sections 43 and 44**, involving both central and state governments along with the **National Commission for Protection of Child Rights (NCPCR)**.
 - Suggested formation of an expert committee to devise programs for health and sex education and increase awareness among children.
 - Stressed on robust support systems for victims, including psychological counselling and cognitive behavioural therapy.
- **Status of Crimes Against Children:**
 - India leads globally in the upload of child sexual abuse imagery, with 25,000 images or videos reported uploaded between April and August 2024, as estimated by the **US-based National Centre for Missing and Exploited Children (NCMEC)**.
 - Highest uploads of child pornography reported in **Delhi**, followed by Maharashtra, Gujarat, Uttar Pradesh, and West Bengal.
 - The **National Crime Records Bureau (NCRB) report 2023** recorded 781 cases of creating or storing child porn in 2018, up from 331 cases in 2017.
 - 1,171 cases of disseminating inappropriate content featuring children were recorded in 2022.
- **POCSO Act, 2012:**
 - Aims to address sexual exploitation and abuse of children under 18, enacted following India's ratification of the **UN Convention on the Rights of the Child** in 1992.
 - Recognises both girls and boys as potential victims of sexual abuse, ensuring gender neutrality.
 - Mandates confidentiality of the victim's identity and compels individuals to report known or suspected abuse.
 - Identifies gaps in implementation, such as the lack of designated POCSO courts and specialized public prosecutors. As of 2022, only 408 POCSO courts have been established across 28 states.

SUPREME COURT'S CONCERN OVER WITNESS PROTECTION IMPLEMENTATION

Witness Protection Scheme's poor execution across India has raised serious concerns, with the **Supreme Court highlighting the importance of safeguarding witnesses** to ensure fair trials and prevent intimidation.

- Despite the scheme's **approval by the Supreme Court in 2018**, its implementation has seen significant delays, though it is legally binding.

Key Aspects

- **Who is a Witness?**
 - Defined as a person providing evidence or testifying in a judicial setting.
 - Witnesses are critical to the justice process, ensuring they can testify without fear or intimidation is essential.
 - While the term "witness" is not defined in the **Criminal Procedure Code, 1973 (CrPC)**, the court can summon individuals if their testimony is crucial.
 - In the **Ritesh Sinha vs. State of UP** case, the **Supreme Court clarified** that "witness" generally means providing oral testimony.
- **Witness Protection Scheme, 2018**
 - **Threat Classification:**
 - **Category A:** Threats to life of the witness or their family, before and after trial.
 - **Category B:** Threats to safety, reputation, or property.
 - **Category C:** Moderate threats, mainly involving harassment.
 - **Confidentiality Measures:** Ensures witness identity protection; testimony can be given through video conferencing or other secure means.

- **Witness Protection Fund:** Established to support scheme operations; funded by **state government allocations, court-imposed fines, and donations.**
- **Protection Types:**
 - Change of identity.
 - Relocation.
 - Concealing identity during court proceedings.
 - Security installations at residence.
 - Security escorts to and from the court.
- **Implementation Mechanism:** Managed at the **state level by a Witness Protection Cell** under each **District and Sessions Judge**; protection applications are assessed based on threat level.
- **Judicial Oversight:** The **Supreme Court oversees uniform application** of the scheme across states, which remains in effect until formal legislation is enacted.

Importance of the Scheme

- Aims to reduce **witness intimidation** in cases involving **influential individuals or organized crime.**
- Encourages witnesses to testify freely, **boosting conviction chances** in high-profile cases.

Challenges in Scheme Implementation

- **Insufficient Funding:** Many states allocate **inadequate financial resources**, affecting witness protection infrastructure.
- **Coordination Issues:** Lack of coordination between **police and judicial authorities** in providing timely protection.
- **Inconsistent State Implementation:** Varied implementation levels across states lead to **disparities in protection.**

Need for a Dedicated Witness Protection Law

- **High Threat Levels:** Witnesses in cases involving **organized crime, terrorism, or political figures** face threats or violence, leading many to refuse to testify.
- **Witness Hostility:** Studies reveal a high rate of witness hostility in India, which weakens prosecutions and leads to acquittals. A dedicated law could help prevent intimidation.
- **Judicial Endorsement:** The **Supreme Court** has stressed the need for witness protection, as seen in **Zahira Sheikh v. State of Gujarat (2004)**, recommending a comprehensive program to address witness intimidation.
- **International Examples:** Countries like the **USA and UK** have established robust witness protection laws providing anonymity, relocation, and financial support for witnesses. India could adopt similar approaches.
- **Lack of National Guidelines:** Absence of a uniform national law results in piecemeal and inconsistent witness protection measures.
- **Strengthening Law Enforcement:** A witness protection law would **support investigations** by encouraging witnesses to provide crucial evidence, improving **conviction rates.**

Notable Supreme Court Observations on Witness Protection

- **State of Gujarat vs. Anirudh Singh (1997):** The Court emphasized that every witness with knowledge of a crime has a statutory duty to aid the State with evidence.
- **Zahira Habibulla H. Sheikh vs. State of Gujarat (2004):** The Court noted that fair trials are compromised if witnesses face threats or are coerced into giving false testimony.

INDIA'S DAIRY INDUSTRY: TRANSFORMATION AND PATH TO WHITE REVOLUTION 2.0

India transformed from a **milk-deficient nation** post-independence to becoming the **world's largest milk producer and consumer**.

- Challenges, however, have emerged, driving the need for a **White Revolution 2.0** to sustain growth.

Background: White Revolution (Operation Flood)

- **Initiated in 1970** by the **National Dairy Development Board (NDDB)**, led by Dr. Verghese Kurien, often hailed as the **"Father of the White Revolution"**.
- Key initiatives included crossbreeding indigenous cattle, improving animal nutrition, and establishing milk processing infrastructure.
- **Milk production surged** from **17 million tonnes in 1950-51** to **230.58 million tonnes in 2022-23**.
- **Top milk-producing states (BAHS 2023)**: Uttar Pradesh (**15.72%**), Rajasthan (**14.44%**), Madhya Pradesh (**8.73%**), Gujarat (**7.49%**), and Andhra Pradesh (**6.70%**); together, these states contribute **53.08%** of India's total milk output.
- **Milk production sources**: Indigenous buffaloes (**31.94%**), crossbred cattle (**29.81%**), nondescript buffaloes (**12.87%**), indigenous cattle (**10.73%**), nondescript cattle (**9.51%**), goat milk (**3.30%**), and exotic cows (**1.86%**).

White Revolution 2.0

- **Objective**: White Revolution 2.0 aims to expand milk procurement by **dairy cooperatives from 660 lakh kg per day in 2023-24 to 1,007 lakh kg per day by 2028-29**.
- **Strategy**: Led by the **Ministry of Cooperation**, the initiative focuses on widening the cooperative network and increasing their stake in the organized dairy sector to boost market access, create jobs, and empower women.

Targets

- Increase milk collection by **50% over five years**, primarily by providing market access to previously uncovered areas and strengthening dairy cooperatives in the organized sector.

NDDB's Action Plan

- **Expansion of Cooperatives**: The **National Dairy Development Board (NDDB)** will establish **56,000 new dairy cooperative societies (DCSs)** and enhance **46,000 existing ones** over the next five years.
- **Infrastructure**: Enhanced milk procurement and testing infrastructure will be prioritized in **Uttar Pradesh, Odisha, Rajasthan, and Andhra Pradesh**.

Funding and Support

- **National Programme for Dairy Development (NPDD) 2.0** will fund the initiative, supporting milk procurement, chilling facilities, and capacity-building programs at the village level.
- Additional support of **Rs 40,000** will be allocated to **1,000 Multipurpose Primary Agricultural Credit Cooperative Societies (MPACs)** for dairy infrastructure.

Pilot Project

- In **February 2023**, NDDB initiated a **Rs 3.8 crore pilot project** to establish dairy cooperatives in underserved areas of **Haryana, Madhya Pradesh, and Karnataka**.
- **Outcome**: This pilot has led to **79 new DCSs**, which collect **15,000 liters of milk daily** from approximately **2,500 farmers**.

Status of Dairy Cooperatives in India

- **Current Reach**: Dairy cooperatives operate in **70% of Indian districts**, with about **1.7 lakh cooperatives in 2 lakh villages**, covering 30% of all villages.
- **Milk Procurement**: Cooperatives procure **10% of total milk production** and **16% of the marketable surplus**.
- **Regional Disparities**: High coverage in **Gujarat, Kerala, Sikkim**, while regions like **West Bengal and Northeast India** have less than **10% coverage**. The government aims to close these gaps to broaden the cooperative network.

India's Milk Production Scenario

- **World Leader**: India is the **world's top milk producer**, with **230.58 million tonnes produced in 2022-23**.

- **Production Growth:** Output increased from **187.75 million tonnes in 2018-19** to **230.58 million tonnes in 2022-23**, although the **annual growth rate** slowed from **6.47% to 3.83%**.
- **Market Supply:** **63% of milk production** is available for the market, with two-thirds circulating in the unorganized sector. In the organized sector, cooperatives hold the largest share.

Average Milk Yield

- **Yield per Animal:** Exotic/crossbred animals yield **8.55 kg per day**, while indigenous/nondescript animals yield **3.44 kg per day**.
 - **Highest Yield:** Punjab at **13.49 kg per day** for exotic/crossbred, while **West Bengal** averages **6.30 kg per day**.

Per Capita Milk Availability

- The **national per capita milk availability** is **459 grams per day**, exceeding the global average of **323 grams per day**.
 - **Range:** From **329 grams per day in Maharashtra** to **1,283 grams per day in Punjab**.

Leading Milk Producing States

- The top five producers are **Uttar Pradesh (15.72%)**, **Rajasthan (14.44%)**, **Madhya Pradesh (8.73%)**, **Gujarat (7.49%)**, and **Andhra Pradesh (6.70%)**, collectively accounting for **53.08% of national production**.

Contribution of the Dairy Sector

- **Economic Impact:** The dairy sector contributed nearly **40% (Rs 11.16 lakh crore)** of the output value in the **agriculture, livestock, forestry, and fishing** sectors in 2022-23, surpassing cereals.
 - **Products:** Milk products include liquid milk, ghee, butter, and lassi produced for consumption and sale.
- **Employment:** The dairy industry provides livelihoods for over **8.5 crore people**, with a majority being women.

REPORT ON ATROCITIES AGAINST SCHEDULED CASTES AND SCHEDULED TRIBES

- **Concentration of Cases:**
 - **97.7% of atrocities against Scheduled Castes (SCs)** in 2022 occurred in **13 states**, with **Uttar Pradesh, Rajasthan, and Madhya Pradesh** reporting the highest incidents.
 - **98.91% of atrocities against Scheduled Tribes (STs)** were also concentrated in these states.
- **Statistics on Atrocities:**
 - **SC Cases:** A total of **51,656 cases** reported.
 - **Uttar Pradesh** contributed **23.78% (12,287 cases)**.
 - **Rajasthan** accounted for **16.75% (8,651 cases)**.
 - **Madhya Pradesh** recorded **14.97% (7,732 cases)**.
 - **ST Cases:** A total of **9,735 cases** reported.
 - **Madhya Pradesh** reported **30.61% (2,979 cases)**, the highest among states.
- **Investigation and Charge-Sheeting:**
 - **SC Cases:** **60.38% resulted in charge sheets**, while **14.78% ended in final reports** due to issues like false claims or insufficient evidence.
 - **ST Cases:** **63.32% of cases resulted in charge sheets** with similar conclusions for final reports.
- **Conviction Rates:** The conviction rate for atrocities under the Act declined to **32.4% in 2022**, down from **39.2% in 2020**, highlighting a drop in successful prosecutions.
- **Special Courts and Infrastructure:**
 - Out of **498 districts**, only **194 have special courts** dedicated to cases under the Act, indicating a shortfall in the required judicial infrastructure.

Overview of Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989

- **Purpose:** This Act is designed to prevent and penalize offenses of atrocities committed against SCs and STs by individuals from other communities.
- **Enforcement:** **State Governments and Union Territory Administrations** implement the Act with financial assistance from the **Central Government** under a Centrally Sponsored Scheme.

- **Scope of Offenses:**
 - The Act includes **37 offenses** aimed at protecting the dignity, rights, and self-respect of SC and ST communities.
 - It does not cover crimes committed between members of SC and ST communities.
 - Offenses encompass denial of **economic, democratic, and social rights** and misuse of the legal system against SCs and STs.
- **Investigation Protocol:**
 - All offenses under the Act are **cognizable**.
 - Investigations must be led by an officer **not below the rank of Deputy Superintendent of Police (DSP)** and completed within **30 days**.
 - Investigation reports must be submitted directly to the **Director of State Police**.
- **Special Courts:**
 - Each district must have a **Special Court** for expedited trial of cases under this Act, established by the **State Government with approval from the Chief Justice of the High Court**.
 - Cases in these courts must proceed on a **day-to-day basis**.
 - A **Special Public Prosecutor** with a minimum of seven years of experience is appointed to conduct trials in these courts.
- **Punishment Provisions:**
 - **Minimum punishment** for most offenses is **six months**, with a maximum of **five years** and a fine.
 - Certain offenses have an enhanced minimum sentence of **one year**, and some allow for **life imprisonment or death penalty**.
 - **Section 4** prescribes punishment of up to **six months** for public servants (non-SC/ST) who deliberately neglect their duties under the Act.
- **Immediate Relief to Victims:**
 - The **Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Rules, 1995** require the **District Magistrate, Sub-Divisional Magistrate, or other Executive Magistrates** to arrange immediate relief (cash or in kind) for victims, their families, and dependents.
 - Relief includes essential provisions such as **food, water, shelter, medical aid, and transport** for affected individuals.

UNION CABINET APPROVAL OF NEW SPACE PROJECTS BY ISRO

- **Newly Approved Missions:**
 - **Chandrayaan-4:** Aims to land on the moon, collect samples, store them in a vacuum container, and return them to Earth.
 - Requires **two launches of Launch Vehicle Mk III**, spacecraft development, deep space network support, and docking/undocking maneuvers.
 - India's first attempt at docking in space, which is crucial for **self-reliance in manned mission technologies**. India aims to send humans to the moon by **2040**.
 - **Venus Orbiter Mission (VOM):** Will orbit Venus to study its surface, subsurface, and atmosphere, analyzing the Sun's effects.
 - **Launch scheduled for March 2028** when Earth and Venus are closest.
 - This is **India's second interplanetary mission**, following the Mars Orbiter Mission of 2014.
 - **Bhartiya Antriksh Station (BAS):** India's planned space station for scientific research.
 - Scheduled for launch in **2028**, operational by **2035**, with a manned lunar mission target by **2040**.
 - It will join the **International Space Station** and China's **Tiangong** as operational space stations.
 - **Next Generation Launch Vehicle (NGLV):** A new launch vehicle with **three times the payload capacity** of LVM3, costing 1.5 times more.
 - Designed to transport up to **30 tonnes to Low Earth Orbit (LEO)**.
 - India's current launch vehicles (SSLV, PSLV, GSLV, and LVM3) support payloads from **500 kg to 10,000 kg to LEO and up to 4,000 kg to Geo-Synchronous Transfer Orbit (GTO)**.

- **Continuation of Gaganyaan Mission:** Approval includes **eight additional missions** required for building the space station, beyond the **two uncrewed and one crewed missions** already approved for India's first human spaceflight.

Challenges in Establishing and Operating a Space Station

- **Complex Design Requirements:** Developing structures to withstand space conditions and provide **radiation protection** and a stable environment for research.
- **Life Support Systems:** Autonomous, long-term systems for **air, water, and waste management** are technically challenging.
- **High Costs:** Building a space station is financially intensive; a national station could cost between **USD 10-30 billion**.
 - For reference, the **International Space Station (ISS)** cost over **USD 150 billion**.
 - ISRO's 2024-25 budget is approximately **USD 1.95 billion**, while NASA operates with **USD 25 billion**.
- **Global Competition:** Engaging with other space powers (US, Russia, China) could be challenging due to competitive interests.
- **Astronaut Health and Safety:** Extended time in microgravity can lead to **1% bone mass loss per month** and **vision issues** due to fluid redistribution.
- **Supply Chain Needs:** Requires regular supply missions for **food, equipment, and research samples**.
 - India currently lacks reusable rockets for cost-effective and frequent resupply missions.

International Space Station (ISS)

- **Overview:** The ISS is a collaborative project involving five space agencies: NASA (USA), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada). It orbits Earth at an average altitude of approximately 400 kilometers.
- **Construction and Modules:** Assembly began in 1998, comprising multiple interconnected modules for habitation, research, and logistics. Key modules include Zarya (Functional Cargo Block), Unity (Node 1), and Destiny (U.S. Laboratory Module).
- **Crew and Operations:** The ISS typically hosts a crew of seven astronauts from participating nations, conducting experiments across various scientific disciplines. It completes an orbit around Earth approximately every 90 minutes.
- **Future Plans:** The ISS is expected to remain operational until around 2030, after which plans for decommissioning or transitioning to commercial platforms are under consideration.

China's Tiangong Space Station

- **Overview:** Tiangong, meaning "Heavenly Palace," is China's modular space station, orbiting Earth between 340 and 450 kilometers in altitude. It represents China's significant advancement in independent human spaceflight capabilities.
- **Construction and Modules:** The station consists of three primary modules:
 - **Tianhe (Core Module):** Launched in April 2021, it serves as the control center and living quarters.
 - **Wentian (Laboratory Module 1):** Launched in July 2022, it provides additional space for scientific experiments.
 - **Mengtian (Laboratory Module 2):** Launched in October 2022, it further expands research capabilities.
- **Crew and Operations:** Tiangong is designed to accommodate three astronauts for extended missions, with provisions to host six during crew transitions. The station supports a wide range of scientific research, including studies on microgravity and space medicine.
- **Future Plans:** China aims to maintain Tiangong's operations for at least a decade, with plans to expand its capabilities and potentially collaborate with international partners.

Russia's Space Station Initiatives

- **Historical Context:** Russia has a rich history of space stations, notably the Mir Space Station, which operated from 1986 to 2001. Mir was the first modular space station and served as a precursor to the ISS.
- **Current Developments:** In recent years, Russia has expressed intentions to develop a new space station, tentatively named the Russian Orbital Service Station (ROSS). This initiative aims to ensure Russia's continued presence in low Earth orbit, independent of the ISS.

SUPREME COURT CLOSES CASE ON NAGALAND OPERATION UNDER AFSPA

The Supreme Court ended proceedings related to an FIR against **30 army personnel** accused of a **botched operation in Nagaland in 2021**, where **13 civilians were killed**.

- **AFSPA Requirement:** Nagaland falls under the **Armed Forces (Special Powers) Act (AFSPA), 1958**, which mandates **sanction from the Central government** (competent authority) to prosecute armed forces personnel.
- **Denial of Sanction:** In **February 2023**, the competent authority denied this sanction, leading to the Supreme Court's decision to close the case.
- **Disciplinary Action:** The court noted that its order does not prevent the Army from taking internal disciplinary measures.

Background of the Incident

- **Details of the 2021 Incident:** In **December 2021**, Army commandos were positioned in Nagaland's **Mon district**, mistakenly targeting coal miners as militants, resulting in **six villagers' deaths**.
 - Following this, a village search party clashed with soldiers, leading to **seven more civilian deaths** and one soldier killed.
 - **Mon District** is home to the **Konyak tribe**, historically known as fierce warriors and the last tribe in Nagaland to cease head-hunting practices.
- **Investigations Initiated:** The Nagaland government established a **Special Investigation Team (SIT)**, and the Army launched a **Court of Inquiry** into the incident.
 - The **SIT** filed a **chargesheet in May 2022**, indicting all 30 army personnel involved.
- **Prosecution Sanction Requirement:** Under AFSPA, security personnel in "disturbed areas" need **sanction from the Centre for prosecution** in actions performed during duty.

Present Case in Supreme Court

- **Petitions:** Two writ petitions were filed by the wives of Army officers to quash the FIR against their husbands and other personnel.
- **Charges:** The FIR included sections of the **Indian Penal Code**:
 - **302 (murder)**
 - **307 (attempt to murder)**
 - **326 (grievous hurt)**
 - **201 (causing disappearance of evidence)**
 - **34 (common intention)**
 - **120-B (criminal conspiracy)**

Armed Forces Special Powers Act (AFSPA), 1958

- **Historical Background:**
 - Introduced initially by the British colonial government in **1942** during the **Quit India Movement**.
 - **AFSPA 1958** followed the **Assam Disturbed Areas Act of 1955** to manage unrest in **Naga Hills**.
- **Key Provisions:**
 - Grants armed forces and Central Armed Police Forces (CAPFs) extensive powers in "disturbed areas."
 - Permits **use of force, arrest, and search without warrant**, with immunity from prosecution unless sanctioned by the Centre.
 - Both **state and Central governments** can declare areas as "disturbed" under **Section 3** of AFSPA.
- **Disturbed Area:**
 - **Definition:** A "disturbed area" is one where armed forces are deemed necessary to support civil power.
 - **Declaration:** The Centre, State Governor, or Union Territory Administrator can declare any area as "disturbed," typically lasting for a minimum of **3 months** under the **Disturbed Areas (Special Courts) Act, 1976**.

Committees and Recommendations on AFSPA

- **Jeevan Reddy Committee (2004):**

- Suggested **repealing AFSPA**, with provisions incorporated into the **Unlawful Activities (Prevention) Act (UAPA), 1967**.
- Recommended clear definition of armed forces' powers in the UAPA and establishment of **grievance cells in each district** with armed forces deployment.
- **Second Administrative Reforms Commission (ARC):**
 - The **5th ARC report** recommended repealing AFSPA to reduce alienation among locals; however, these recommendations remain unimplemented.
- **Santosh Hegde Commission:**
 - Suggested reviewing AFSPA every **6 months** to ensure continued necessity.
 - Proposed amending the UAPA for counter-terrorism, instead of relying on AFSPA, and allowing investigation of armed forces in "disturbed areas" for any misuse of powers.

Factors Contributing to Violence in North-Eastern States

- **Ethnic Diversity:** North-East India is highly diverse, with **213 tribal groups** among 40 million people. Unique tribal cultures lead to resistance against integration, fostering concerns about cultural erosion.
- **Economic Underdevelopment:** Limited economic growth and employment opportunities in the region contribute to discontent and insurgency.
- **Demographic Shifts:** Influx of refugees, especially from Bangladesh, has altered demographics, leading to friction and insurgency, especially with groups like **United National Liberation Front (ULFA)**.
- **Perceived Excesses by Armed Forces:** AFSPA's implementation is often viewed as harsh, causing local alienation. Activist **Irom Sharmila** protested against AFSPA for 16 years, demanding its repeal.
- **Political Instability in Neighboring Countries:** Ongoing unrest in **Bangladesh and Myanmar** complicates security in the North-East.
- **External Support:** Insurgent groups have historically received aid from **East Pakistan (now Bangladesh)** and **China** during specific periods.

Recent AFSPA Developments under PM Narendra Modi

- **AFSPA Removal from Several Areas:**
 - **Tripura:** AFSPA was lifted in **2015**.
 - **Meghalaya:** AFSPA was lifted in **2018**.
 - **Assam:** Removed in **2022** from **23 districts and partially in 1 district**.
 - **Manipur:** 15 police stations across 6 districts exempted from AFSPA in **2022**.
 - **Arunachal Pradesh:** Now limited to **3 districts and 2 police stations in 1 district**.
 - **Nagaland:** 15 police stations across 7 districts exempted from AFSPA in **2022**.

LOKPAL CONSTITUTES INQUIRY WING

The **Lokpal** has recently established an inquiry wing to conduct preliminary probes into corruption allegations against public servants, as mandated by its governing law.

Key Points from the Notification

- **Legal Provision:** Section 11 of the **Lokpal and Lokayuktas Act, 2013** requires the creation of an inquiry wing to investigate offenses under the **Prevention of Corruption Act, 1988** involving public officials.
- **Judicial Integration:** The inquiry wing will function as part of Lokpal's **judicial wing**.
- **Approved Organogram:** An approved "organogram" outlines staffing needs, detailing required officers and support staff for the inquiry wing.
- **Director of Inquiry:** This wing will operate under the Lokpal Chairperson with a **Director of Inquiry** at its helm.
- **Support Structure:** The Director will be assisted by three Superintendents of Police (SPs):
 - **SP (General)**
 - **SP (Economic and Banking)**
 - **SP (Cyber)**
 - Each SP will have inquiry officers and additional support staff.

About Lokpal

- **Establishment:** Lokpal is an anti-corruption statutory body created under the **Lokpal and Lokayuktas Act, 2013**.
- **Background:** Its formation was a result of the **India Against Corruption Movement** led by Anna Hazare, with the terms **Lokpal and Lokayukta** initially coined by Dr. L. M. Singhvi.
- **First Lokpal:** Former Supreme Court Judge **Shri. Pinaki Chandra Ghose** was appointed as India's first Lokpal.
- **Appointment Process:**
 - **Selection Committee:** Comprised of the **Prime Minister (Chairperson), Speaker of Lok Sabha, Leader of the Opposition, and Chief Justice of India**.
 - The President appoints members based on a search committee's recommendations.
- **Composition:**
 - Lokpal includes **one chairperson** and a maximum of **eight members (1+8)**.
 - **Chairperson:** Must be a former Chief Justice or Supreme Court Judge, or an expert in fields like anti-corruption, public administration, finance, law, and management, with **25 years of experience**.
 - **Members:** Half must be judicial, and **50% must belong to SC/ST/OBC/Minorities and women**.
 - **Judicial Members:** Former judges of the Supreme Court or High Courts.
 - **Non-Judicial Members:** Should have at least **25 years of experience** in anti-corruption, public administration, finance, law, or management.

About Lokayukta

- **State-Level Bodies:** States are required to set up **Lokayuktas** to handle corruption cases involving state public servants.
- **Appointment:** State legislatures appoint Lokayuktas through local law.
- **Tenure:** Lokpal members serve **5 years or until age 70**.

Jurisdiction of Lokpal

- **Scope:** Covers **Prime Minister, Ministers, MPs**, and Central Government officials across Groups A, B, C, and D.
- **Exception for Prime Minister:** Lokpal cannot investigate PM-related allegations involving international relations, security, public order, atomic energy, and space without approval from at least **two-thirds of the Lokpal bench**.

Powers and Functions of Lokpal

- **Preliminary Inquiry:** Lokpal can order an inquiry by its Inquiry Wing or refer cases to agencies like **CBI or CVC** for offenses under the Prevention of Corruption Act.
 - The inquiry wing has **60 days** to submit reports to Lokpal.
 - Lokpal decides on further investigation, departmental proceedings, or case closure.
- **Prosecution Wing:** A bench of at least **three members** can authorize the Prosecution Wing to proceed based on a charge sheet.
- **Search, Seizure, and Asset Attachment:** Lokpal is empowered for search, seizure, asset attachment, and other actions against corruption.
- **Supervision:** Lokpal has authority over central investigation agencies, including **CBI** for cases it refers.

Challenges in Lokpal's Functioning

- **Prosecution Wing Vacancy:** The **Director of Prosecution** position for managing public servant prosecutions is yet to be filled.
- **Member Vacancies:** Lokpal currently has **two vacant member positions** (one judicial and one non-judicial), including the posts of Director of Inquiry and Director of Prosecution.
- **Pending Investigations:** As of **July 2024**, Lokpal received **82 complaints** related to graft, with **32 resolved** and **52 pending**.

DEPUTY SPEAKER OF LOK SABHA

The current Lok Sabha **does not** have a deputy speaker, and the post has been vacant since 23 June 2019.

- **AIADMK's M. Thambidurai** was the last person to hold the post of Deputy Speaker of Lok Sabha (between 2014-2019).

Constitutional Provision

- **Article 93 of the Indian Constitution** mandates the Lok Sabha to elect from its members a Speaker and a Deputy Speaker.
- The Deputy Speaker is **not subordinate to the Speaker** but is directly responsible to the House.
- Entitled to a salary and allowances fixed by Parliament, charged on the **Consolidated Fund of India**.
- **Article 178** contains similar provisions for Deputy Speakers in **State Assemblies**.

Historical Background

- The roles of President (Speaker) and Deputy President (Deputy Speaker) in India began in 1921 under the Government of India Act of 1919.
- Frederick Whyte and Sachidanand Sinha were the first Speaker and Deputy Speaker, respectively.
- Vithalbhai J. Patel was the first Indian and elected Speaker in 1925.
- The Government of India Act of 1935 renamed these positions to Speaker and Deputy Speaker.
- G.V. Mavalankar and Ananthasayanam Ayyangar were the first Speaker and Deputy Speaker of the Lok Sabha.

Instances of Deputy Speaker filling in for Speaker

- 1956: After G.V. Mavalankar's death, Deputy Speaker M. Ananthasayanam Ayyangar served as Speaker until 1957.
- 2002: Following G.M.C. Balayogi's death, Deputy Speaker P.M. Sayeed presided until Manohar Joshi was elected.

Election of Deputy Speaker

- Governed by **Rule 8** of the Rules of Procedure and Conduct of Business in Lok Sabha.
- Elected by a simple majority of members present and voting, usually in the second session of Lok Sabha.
- The Speaker fixes the date of election.
- The opposition held the Deputy Speaker post continuously from 1990 through 2014.
- No Deputy Speaker for the entire duration of the 17th Lok Sabha (2019-24) and during the 1997-1998 government.

Oath and Tenure of Deputy Speaker

- No separate oath upon assuming office.
- Tenure typically spans the life of the Lok Sabha (5 years) but can end earlier if:
 - They cease to be a member of the Lok Sabha.
 - They resign by writing to the Speaker.
 - They are removed by a resolution passed by a majority of all the then members of the Lok Sabha, with a 14-day advance notice required.

Powers of Deputy Speaker

- Has the same powers as the Speaker when presiding over the House.
- Cannot vote initially but may cast a deciding vote in the event of a tie.
- Presides over joint sittings of Parliament if the Speaker is absent.
- Acts as chairperson of parliamentary committees of which they are a member.

UN SUSTAINABLE DEVELOPMENT REPORT 2024

Published by the **Sustainable Development Solutions Network (SDSN)** on the eve of the UN Summit of the Future.

- **Theme:** The SDGs and the UN Summit of the Future.
- Introduces a new index of countries' support for UN-based multilateralism and discusses long-term pathways for sustainable food and land systems.
- Recommends key reforms to the UN system to address 21st-century challenges.

Global SDG Progress

- Only **16%** of SDG targets are on track to be achieved by **2030**.
- **84%** of targets show limited progress or reversals.
- Significant regressions in **obesity rates, press freedom, red list index, sustainable nitrogen management, and life expectancy**.
- Progress has stagnated especially in SDGs 2, 11, 14, 15, and 16.
- Slight positive trends noted in **SDG 9** (Industry, Innovation, and Infrastructure).

Food and Land Systems

- Targets are significantly off-track.
- Projected that **600 million people** will suffer from hunger by **2030**.
- GHG emissions from **Agriculture, Forestry, and Other Land Use (AFOLU)** make up nearly a quarter of global annual GHG emissions.

Regional and Country Group Variations

- **Nordic countries** lead in SDG achievement with **Finland** scoring **86.4**.
- **BRICS and BRICS+** countries demonstrating strong progress.
- **Bottom 3 countries:** South Sudan, Central African Republic, and Chad.

Investment Challenges

- **10%** of the global population lives on less than **USD 1.90** a day.
- Only **43%** of adults in low-income countries access formal financial services.
- IMF identifies a **USD 290 billion annual funding gap** for LICs' SDGs.
- UNESCO reports **262 million** children and youth are out of school.
- ILO notes **152 million children** are involved in child labor.

Global Cooperation

- **UN-Mi Index** introduced, ranking countries based on their commitment to UN-based multilateralism; **Barbados** ranks highest.
- **Bottom 5** in UN-Mi Index: United States, Somalia, South Sudan, Israel, and the Democratic Republic of Korea.

Performance of India in SDG Index

- Ranked **109th** with a score of **64.0**.
- Approximately **30%** of SDG targets are on track or achieved, **40%** show limited progress, and **30%** are worsening.
- Best performances observed in SDGs 1, 4, 12, and 13.

India's International Spillover and Statistical Performance Indexes

- Assesses the impact of national policies on other countries' ability to achieve the SDGs.
- **Statistical Performance Index** score of **74.5**, indicating a robust national statistical system.

About Sustainable Development Solutions Network (SDSN)

- Established in 2012 by then UN Secretary-General Ban Ki-Moon and Jeffrey Sachs.
- Aims to mobilize global scientific and technological expertise to promote sustainable development, including the SDGs and the Paris Agreement.
- Focuses on global cooperation through education, research, policy analysis, and public awareness.

KAVACH TRAIN COLLISION AVOIDANCE SYSTEM (TCAS) & RAILWAY SAFETY

In 2022-23, **six collisions** occurred, increasing from **two in 2021-22**.

- **Four collisions** have already occurred in 2023-24, most involving casualties and injuries.
- **Railway Safety Initiatives and Financial Aspects**
 - Implementation of **Rashtriya Rail Sanraksha Kosh (RRSK)** and the Rail Safety Fund to finance safety-related works.
 - Over **Rs 2.5 lakh crore allocated** for capital expenditure in both 2023-24 and 2024-25.
 - Annual contribution to RRSK has been reduced to **Rs 1,000 crore**, while appropriations from Gross Budget Support exceeded **Rs 50,000 crore in 2023-24**.
- **Infrastructure and Growth**
 - Indian Railways network spans over **1,00,000 running track kilometers** and is nearing full electrification.
 - Notable growth in passenger and freight traffic, facilitated by a cross-subsidy mechanism.
- **Safety Performance and Comparisons**
 - Indian Railways reported **0.03 significant accidents per million train km in 2022**.
 - Comparatively, the UIC (International Union of Railways) 2023 report shows 35 countries had **1,888 significant rail accidents**, equating to **0.39 accidents per million train km**.
- **Kavach: Anti-Collision System**
 - Developed by the **Research Design and Standards Organisation (RDSO)** in collaboration with **Indian industry**.
 - Features **Safety Integrity Level-4 (SIL-4)** standards, aiming to prevent collisions by stopping trains from passing signals at red and activating brakes automatically if speed restrictions are violated.
 - Over **1,465 kms implemented**, covering **77 locomotives and 135 stations** as of March last year, particularly in the SCR limits.
 - Ongoing training provided by **IRISET** in Secunderabad.
- **Causes of Railway Accidents**
 - **Derailments** account for **70% of accidents**, as noted by a **2020 government safety report** and corroborated by a **2022 Comptroller and Auditor General report**.
 - **Human errors** including fatigue, negligence, and corruption among railway staff.
 - **Signalling failures** due to technical glitches or power outages.
 - Accidents still occur at manned level crossings (MLCs) despite the elimination of all unmanned level crossings on broad gauge routes.
 - **Infrastructure defects** due to poor maintenance, ageing, vandalism, sabotage, or natural disasters, exacerbated by over-capacity operations.
- **Operational Challenges and Solutions**
 - Following a collision involving the Kanchenjunga Express due to a loco pilot surpassing an automatic signal, enhanced focus is on deploying KAVACH on critical routes like Delhi-Howrah and Delhi-Mumbai, aiming to cover **10,000 route kilometers**.
 - The Railway Board focuses on tackling challenges at closed level crossings, stray obstacles, and communication issues in tunnels and ghat sections.

REMITTANCE INFLOW

India received **USD 120 billion in remittances in 2023**, with a growth rate of **7.5%**.

- **Projected growth** for 2024 is **3.7%**, reaching **USD 124 billion**; for 2025, growth is expected to be **4%**, reaching **USD 129 billion**.
- India has been the largest recipient of remittances globally since 2008.
- In 2023, the top five remittance-receiving countries among LMICs were India, Mexico, China, the Philippines, and Pakistan.
- Remittances are financial or goods transfers by migrants to their home countries, mainly for family support.
- They are a significant source of income and foreign exchange for developing nations, particularly in South Asia.

- Benefits of remittances include reducing poverty, enhancing living standards, supporting education and healthcare, and stimulating economic growth.
- Approximately **36%** of India's remittances come from highly skilled migrants in the US, UK, and Singapore.
- Post-pandemic recovery in these countries has led to tight labor markets and wage hikes, boosting remittances.
- The Gulf Cooperation Council (GCC) countries, particularly UAE (18% of India's remittances), along with Saudi Arabia, Kuwait, Oman, and Qatar (11% collectively), are other significant sources.
- Strong economic conditions in developed regions like the US, UK, and Singapore have fostered favorable environments for skilled Indian professionals, enhancing remittance inflows.
- Economic stability in the GCC due to high energy prices and controlled food price inflation has supported employment and incomes for Indian migrants in less-skilled sectors.
- **Costs of Sending Remittances**
- The global average cost of sending **\$200** was **6.4%** in the fourth quarter of 2023.
- Costs were lower for digital remittances at **5%**, compared to **7%** for non-digital methods.
- **Technological Advances in Remittance Transfers**
- Implementation of systems like the **Unified Payment Interface (UPI)** enables real-time fund transfers.
- The National Payments Corporation of India (NPCI) has expanded UPI's accessibility to NRIs in countries including Singapore, Australia, Canada, Hong Kong, Oman, Qatar, USA, Saudi Arabia, UAE, UK, Sri Lanka, Bhutan, Mauritius, France, and Nepal.

Bilateral Economic Cooperation

- In 2023, India and the UAE established a **Local Currency Settlement System (LCSS)** to enhance the use of the Indian Rupee (INR) and UAE Dirham (AED) in cross-border transactions, which is expected to further boost remittance flows.

Economic Indicators

- India's foreign assets increased more than liabilities in the 2023-24 period, according to RBI data.
- In terms of remittances as a percentage of GDP, the top recipients in 2023 were smaller economies such as Tonga (41%), Tajikistan (39%), Lebanon (31%), Samoa (28%), and Nicaragua (27%).

Global Remittance Trends and Economic Impact

- In 2023, officially recorded remittance flows to low- and middle-income countries (LMICs) totaled **\$656 billion**.
- The growth rate was modest at **0.7%**, showing moderation after strong growth in the previous period.
- Remittances were a critical source of external finance in 2023, exceeding both foreign direct investment (FDI) and official development assistance (ODA).
- They are expected to grow by **2.3%** in 2024, though this will vary by region.
- Risks to these projections include economic downturns in migrant-hosting countries, fluctuations in oil prices, and currency exchange rate volatility.

Regional Remittance Flows

- **Latin America and the Caribbean:** Saw a **7.7% growth** in remittances, reaching **\$156 billion** in 2023, with a **2.7%** projected growth in 2024.
- **South Asia:** Experienced a **5.2% increase**, totaling **\$186 billion** in 2023, with a projected growth of **4.2%** in 2024.
- **East Asia and Pacific (excluding China):** Grew by **4.8%**, amounting to **\$85 billion** in 2023, with a **3.2%** projected growth in 2024.
- **Middle East and North Africa:** Saw a **15% decline**, falling to **\$55 billion** in 2023, with a projected recovery of **4.3%** in 2024.
- **Europe and Central Asia:** Declined by **10.3%**, falling to **\$71 billion** in 2023, with a **1.9%** projected decline in 2024.
- **Sub-Saharan Africa:** Slightly decreased by **0.3%**, reaching **\$54 billion** in 2023, with a projected growth of **1.5%** in 2024.

CONTAINER PORT PERFORMANCE INDEX (CPPI) 2023

- **Global Recognition of Indian Ports**
 - Nine Indian ports ranked in the **top 100** of the World Bank's Container Port Performance Index (CPPI) for 2023.
 - Visakhapatnam Port ranked **19th**, up from 115th in 2022.
 - Mundra Port improved to **27th** place from 48th last year.
 - Other Indian ports in the top 100 include:
 - Pipavav (41st)
 - Kamarajar (47th)
 - Cochin (63rd)
 - Hazira (68th)
 - Krishnapatnam (71st)
 - Chennai (80th)
 - Jawaharlal Nehru (96th)
- **Key Performance Metrics**
 - Visakhapatnam Port highlighted for its efficiency with **27.5 moves per crane hour**, a turnaround time (TRT) of **21.4 hours**, and minimal berth idle time.
- **Container Port Performance Index (CPPI) Details**
 - The CPPI is developed by the World Bank and S&P Global Market Intelligence.
 - It measures the resilience, efficiency, and performance of global container ports.
 - The index ranks 405 global container ports focusing on the duration of port stay for container vessels.
 - Aims to identify enhancement areas for stakeholders in the global trading system and supply chains.
 - The 2023 CPPI includes **57 new ports**, such as Muuga Harbour in Estonia and Port of Al Duqm in Oman.
- **Top Global Ports in CPPI 2023**
 - China's Yangshan Port holds the top position for the second consecutive year.
 - Oman's Port of Salalah is in second place.
 - The port of Cartagena in Colombia rose to third place.
 - Tanger-Mediterranean in Morocco is in fourth place.
 - Tanjung Pelepas Port in Malaysia is in fifth place.
- **Significance of Indian Ports' Performance**
 - Union Minister of Ports, Shipping & Waterways, Shri Sarbananda Sonowal, attributes the success of Indian ports to the Sagarmala programme.
 - The programme focuses on modernization, mechanization, and integration of advanced technologies to enhance port performance and efficiency.
 - Incorporation of new technologies and green infrastructure aims to improve the stability of global markets and the sustainability of India's maritime industry.
- **Additional Observations**
 - Despite a lower ranking, Dar es Salaam Port in Tanzania significantly reduced ship arrival times by 57%.
 - The CPPI serves as a reference for key stakeholders including national governments, port authorities, development agencies, and private operators in trade, logistics, and supply chain services.

NATIONAL MONETISATION PIPELINE

Asset monetisation involves a limited period transfer of performing assets or disposing of non strategic/underperforming assets to unlock "idle" capital.

- The process is distinct from privatisation, focusing on structured partnerships with the private sector under specific contractual frameworks.
- The primary goals are to unlock value from public investment in infrastructure and leverage private sector productivity.
- **National Monetisation Pipeline (NMP)**
 - The NMP was announced in the **Union Budget 2021-22** with a goal to monetise assets worth an estimated **Rs 6 lakh crore over four years (2022-2025)**.

- It targets brownfield public sector projects, tapping private sector capital and efficiencies to fund new greenfield infrastructure across India.
- Only core assets of the government are included; non-core assets are excluded from the NMP.
- **Key Characteristics of NMP**
 - Focuses on monetisation of '**Rights**' not '**ownership**', with the government retaining primary ownership and assets returning to public authority after the transaction.
 - The NMP encompasses sectors such as roads, railways, power, oil & gas pipelines, and telecom.
 - The top **five sectors represent approximately 83%** of the total estimated value of the pipeline: Roads (27%), Railways (25%), Power (15%), Oil & Gas Pipelines (8%), and Telecom (6%).
- **Implementation and Monitoring**
 - An empowered Core Group of Secretaries on Asset Monetization (CGAM) under the Cabinet Secretary oversees the implementation.
 - The pipeline supports investments under the National Infrastructure Pipeline (NIP).
- **Significance and Benefits**
 - Eases government fiscal constraints, enabling reallocation of resources towards greenfield projects and social sectors.
 - Creates a balanced risk-sharing framework between public and private partners.
 - Enhances operational optimization and service standards by involving private sector participation.
 - Promotes asset recycling, allowing the government to retain ownership while transferring operations and management to the private sector.
 - Aims to bring overall efficiency in infrastructure operations and improve the efficiency of Public Sector Undertakings (PSUs) by providing them with additional resources for restructuring, reinvestment, and expansion.

INTERNATIONAL NORTH-SOUTH TRANSPORT CORRIDOR (INSTC)

The INSTC is a 7200-km multi-modal connectivity project involving ship, rail, and road routes.

- It connects India, Russia, Iran, Europe, and Central Asia.
- The corridor provides an alternative, shorter trade route between South Asia and Northern Europe, connecting the Indian Ocean and the Persian Gulf to the Caspian Sea, and extending to Northern and Western Europe.
- **Historical Context**
 - The route was historically used by traders from Europe, India, and other regions to access Central Asian markets during the Safavid dynasty's rule in Persia (1501 to 1736).
- **Modern Development**
 - The modern INSTC project was initiated in September 2000 by Russia, India, and Iran in St. Petersburg.
- **Route Details**
 - The route includes freight movement from India through Iran, Azerbaijan, and Russia via Mumbai to Moscow, Tehran, Baku, Bandar Abbas, Astrakhan, Bandar Anzali, etc.
 - Primary route extends from Mumbai to Bandar Abbas in Iran by sea, then to Bandar-e-Anzali by road, and further to Astrakhan by ship across the Caspian Sea, and onwards into Europe by Russian Railways.
- **Member Countries**
 - Founding members: Russia, India, and Iran.
 - Additional members as of a meeting in New Delhi on January 18, 2012: Azerbaijan, Kazakhstan, Armenia, Belarus, Tajikistan, Kyrgyzstan, Oman, Syria, Turkey, Ukraine, and Bulgaria (observer status).
 - Turkmenistan is not a formal member but is likely to have road connectivity.
- **Key Developments and Additional Routes**
 - Azerbaijan and Armenia are enhancing connectivity by building new train lines and roads.
 - Development of Chabahar port in Iran to a full deep sea port to handle cargo ships larger than 100,000 tons and integrate with NSTC.
 - Kazakhstan-Turkmenistan-Iran railway link, known as the North-South Transnational Corridor.
 - Proposed Southern Armenia-Iran Railway Corridor to create a short route from the Black Sea to the Persian Gulf.

- Discussion of a Trans-Iranian canal to link the Persian Gulf with the Caspian Sea.
- **Objectives and Significance**
 - Increase the effectiveness of transport ties and organize goods and passenger transport.
 - Promote access to the international market and provide security of travel and safety of goods.
 - Harmonize transport policies and legislative frameworks among member countries.
 - Analysts predict that the corridor will enhance bilateral trade volumes between member countries and reduce transit times and costs compared to traditional routes.
 - Offers a strategic alternative to routes through Pakistan, potentially giving Indian exports a competitive advantage.
 - Serves as a counter to China's One Belt, One Road Initiative, enhancing India's strategic interests in Central Asia.
- **Economic Projections and Benefits**
 - Activation of the corridor is expected to connect India to Russia within 16-21 days at competitive freight rates.
 - Could eliminate the need for reefer containers for agro commodities, supporting supplies to Russia.
 - A study by the Federation of Freight Forwarders' Associations in India highlighted that the INSTC is 30% cheaper and 40% shorter than current traditional routes.
 - The corridor could reduce the shipping time from the Suez Canal route's 45-60 days to 25-30 days.

INDUS WATER TREATY

Signed on September 19, 1960, in Karachi, Pakistan by then-Indian Prime Minister Jawaharlal Nehru and then-Pakistani President Marshal Mohammad Ayub Khan.

- The treaty was facilitated by the International Bank for Reconstruction and Development (World Bank).
- Aimed to establish a partnership over the Indus River system and fix rights and obligations concerning the use of its waters.
- **About the Indus River**
 - Originates from Southwestern Tibet, near Lake Mansarovar.
 - Flows through Kashmir, the Punjab region, and spills into the Arabian Sea.
 - Major tributaries include the Jhelum, Chenab, Ravi, and Beas rivers.
- **Dispute Origins**
 - Began prominently in 1948 post-partition of India and Pakistan, with significant tension over water control, particularly of the Sutlej River which had headworks in Indian territory.
 - Both countries claimed rights over the river waters leading to heightened tensions.
- **The Treaty's Provisions**
 - Allocates water from three eastern rivers (Sutlej, Beas, and Ravi) to India.
 - Grants rights to water from three western rivers (Indus, Jhelum, and Chenab) to Pakistan.
 - Designed to provide equitable water distribution and ensure water security for both countries.
- **Recent Developments**
 - On August 30, India formally requested a "review and modification" of the treaty.
 - Pakistan considers the treaty crucial and emphasized adherence to its provisions.
- **Significance of the Treaty**
 - The Indus Water Treaty is notable as the only major cross-border water-sharing treaty in Asia.
 - It has played a crucial role in maintaining peace between India and Pakistan, surviving various conflicts and geopolitical tensions since its inception.
- **Contemporary Issues and Concerns**
 - Pakistan has raised objections to India's hydroelectric projects on the Jhelum and Chenab rivers, claiming they could affect water flow into Pakistan.
 - Climate change poses a significant threat to the treaty's effectiveness, with potential impacts from glacier melt, altered monsoons, and extreme weather patterns affecting water availability and flow in the Indus basin.

- **Scholarly Perspectives**
 - John Vater suggests that the treaty provides India with strategic advantages due to its upstream position on all six rivers.
 - He argues for a broader interpretation of the treaty that goes beyond technical stipulations to foster a community of peace and prosperity between the two nations.

SIPRI REPORT ON NUCLEAR ARSENAL

Total global nuclear weapons estimated at 12,121, with 9,585 in military stocks and ready for deployment.

- Approximately 2,100 warheads on ballistic missiles are maintained in a high operational alert state by major nuclear states, including the U.S., Russia, and recently China.

Country-specific Nuclear Arsenal Details

- **United States:** Leads in nuclear capabilities, continuously updating its arsenal along with deploying new nuclear-capable weapon systems.
- **Russia:** Similar to the U.S. in terms of modernizing and adding to its nuclear arsenal.
- **United Kingdom, France, China:** Listed among the top nuclear-armed states, engaged in modernizing their nuclear capabilities.
- **India:**
 - Nuclear arsenal included 172 warheads as of January 2024.
 - Has a growing nuclear triad that includes aircraft, land-based missiles, and nuclear-powered ballistic missile submarines (SSBNs).
 - Historically separates nuclear weapons and launchers in peacetime, but recent changes indicate a shift towards mating some warheads with launchers.
 - Estimated nuclear program cost for 2023 is \$2.7 billion.
 - Focuses on long-range missile development targeting China, alongside traditional focus on Pakistan.
 - Maintains a No-First-Use (NFU) policy, modified in 2003 to allow nuclear response to non-nuclear attacks.
- **Pakistan:**
 - Does not follow a No-First-Use policy; reserves the right to first nuclear strike, particularly under its preventive nuclear attack doctrine against India.
 - Emphasizes non-strategic nuclear weapons to counter India's military strategies.
 - Estimated nuclear program cost for 2023 is \$1 billion (\$1,924 per minute).
- **North Korea and Israel:** Also involved in modernizing their nuclear arsenals.

SIPRI Report Insights and Analysis

- SIPRI (Stockholm International Peace Research Institute) highlights the regional and international security implications of nuclear arsenal developments.
- Major focus on the modernization of nuclear arsenals which signifies increasing significance in geopolitical stability.
- Notes that political considerations often influence Western assessments of South Asia's nuclear capabilities.

Technological Advancements and Strategic Shifts

- Development and deployment of new technologies such as multiple independently targetable reentry vehicles (MIRVs) by countries like North Korea, Pakistan, and India.
- This capability increases the number of deployable warheads and potential for greater devastation in conflict scenarios.

Geopolitical and Regional Security Dynamics

- The ongoing modernization and enhancement of India's military and nuclear capabilities are seen as a move to emerge as a regional hegemon.
- Pakistan's military developments are often viewed as countermeasures to India's growing military capabilities, raising concerns about a potential arms race in South Asia.
- The strategic stability of the region is considered at risk due to these developments.

RECIPROCAL EXCHANGE OF LOGISTICS AGREEMENT (RELOS)

Agreement is ready for conclusion with Russia approving the draft agreement.

- Facilitates military-to-military exchanges, training, port calls, and Humanitarian Assistance and Disaster Relief (HADR) efforts.
- Similar agreements have been signed by India with other countries, starting with the United States in 2016.
- Official order published on Russia's official legal information website on June 20, authorizes the signing.
- Agreement to be valid for five years with automatic renewal unless terminated by either party.
- **Defence Cooperation and Strategic Partnerships**
 - Defence cooperation is a major component of the India-Russia strategic partnership.
 - A new agreement on military technical cooperation for the decade from 2021 to 2031 was signed during the India-Russia 2+2 dialogue in December 2021.
 - The cooperation includes troop interactions and the supply and development of weapons and military equipment.
 - A Navy-to-Navy cooperation agreement is also under development.
- **Access and Benefits from the Logistics Agreement**
 - Will give India access to Russian facilities in the Arctic region.
 - Indian Navy benefits most from such logistics agreements, improving operational turnaround and increasing interoperability.
- **Historical and Ongoing Relations between India and Russia**
 - Began with the Indo-Soviet Friendship Treaty of 1971 during the Indo-Pak war.
 - Enhanced to a Declaration on the India-Russia Strategic Partnership in October 2000.
 - Elevated to a "Special and Privileged Strategic Partnership" in December 2010.
 - Conduct regular Tri-Services exercise 'INDRA'.
 - Collaborations in military programs including BrahMos missiles, 5th generation fighter jets, and the Sukhoi Su-30MKI program.
 - India purchases/leases military hardware from Russia, including the S-400 Triumf, Kamov Ka-226 helicopters, T-90S Bhishma tanks, INS Vikramaditya aircraft carrier, and AK-203 Rifles.
- **Economic and Trade Relations**
 - Bilateral trade reached approximately USD 13 billion in 2021-22.
 - Russia ranks as India's seventh-largest trading partner.
- **Science and Technology Cooperation**
 - Long-standing collaboration dating back to post-independence, including support for India's space program.
 - Current collaboration extends to advanced fields such as nanotechnologies, quantum computing, and the Gaganyaan manned spaceflight program.
- **Key Challenges in India-Russia Relations**
 - Russia's increasing military and economic ties with China.
 - Improved Russia-Pakistan relations influenced by strong US-India ties.
 - India's balancing act between its partnerships with the US and Russia.
 - Criticism of India in the West for its stance on the Russia-Ukraine crisis and continuing cooperation with Moscow.
 - Decline in India's defence purchases from Russia due to diversification efforts, increasing competition for Russia in the defense market.

HIGH COURT STRUCK DOWN BIHAR 65% QUOTA RULE

In November 2023, the Bihar government announced an increase in reservations for Backward Classes (BC), Extremely Backward Classes (EBC), Scheduled Castes (SC), and Scheduled Tribes (ST) from 50% to 65% in educational institutions and government positions.

- The increase followed a caste-based survey indicating the necessity for greater representation of these groups.
 - To enact this change, the Bihar Assembly passed the Bihar Reservation Amendment Bill, establishing a new 65% quota.
 - **Legal Challenge and Court Ruling:**
 - The reservation increase was challenged through a Public Interest Litigation (PIL) on the grounds that it exceeded the 50% limit established by the Supreme Court in the 1992 Indira Sawhney case.
 - The Patna High Court invalidated the increase, ruling it unconstitutional as it would elevate total reservations to 75% when including the 10% quota for Economically Weaker Sections (EWS).
Bihar's Socio-Economic Justification for Reservation Increase
 - **Economic and Educational Challenges:**
 - Bihar is characterized by the lowest per capita income in India, high fertility rates, and significant poverty, with 30% of its population living below the poverty line.
 - The state has the lowest density of colleges in the country and only 12% urban population compared to the national average of 35%.
 - **Population Demographics:**
 - The communities targeted for increased reservations (SC, ST, BC, EBC) make up 84.46% of Bihar's total population, highlighting a substantial underrepresentation in public sectors.
- Constitutional Framework and Judicial Decisions on Reservations in India
- **Constitutional Provisions for Reservations:**
 - Articles 15 and 16 of the Constitution provide the legal foundation for reservations in education and government employment, respectively.
 - Specific amendments and clauses within these articles allow for special provisions for socially, educationally, and economically backward groups, including provisions for reservation in promotions.
 - **Landmark Judgments and Legislative Amendments:**
 - **Indra Sawhney Judgment (1992):** Confirmed the 27% reservation cap for OBCs, establishing a general reservation ceiling of 50%.
 - **85th Amendment Act (2001) and M. Nagaraj Judgment (2006):** Introduced and refined provisions for consequential seniority and the creamy layer criterion in reservations for promotions.
 - **103rd Constitution Amendment Act (2019):** Instituted a 10% reservation for economically weaker sections, modifying the constitutional landscape to accommodate economic criteria alongside traditional caste-based reservations.
 - **Recent Developments in Reservation Policy:**
 - **Jarnail Singh vs Union of India (2018):** Removed the necessity for states to collect quantifiable data on the backwardness of SC/ST communities for reservations in promotions.
 - **Janhit Abhiyan v. Union of India (2022):** Upheld the 103rd Amendment, allowing for economic-based reservations alongside those for socially disadvantaged groups.

2024 KAVLI PRIZE WINNERS ANNOUNCED

The Kavli Prize honors contributions in **astrophysics, neuroscience, and nanoscience**.

- **Founder:** Named after **Fred Kavli**, a Norwegian-American entrepreneur and philanthropist, the prize is modeled after the Nobel Prize in recognizing major scientific achievements.
- **Prize Components:** Includes a **\$1 million cash award per field**, a **scroll**, and a **7 cm medal**.
- **Established:** First awarded in **2008** and given every **two years**.

Difference Between the Kavli Prize and Nobel Prize

- **Award Timing:** Nobel Prizes are awarded for achievements in the preceding year, while the Kavli Prize does not have such a time constraint.
- **Scope:** Kavli Prize is specific to **astrophysics, neuroscience, and nanoscience**.

- **Ceremony:** Held in Norway, it includes a red-carpet event attended by the **Norwegian Royal Family**.

Selection Process

- **Committees:** Independent committees review nominations in each of the three fields.
- **Institutions Represented:** Committees include members from prestigious institutions like the **Chinese Academy of Sciences, French Academy of Sciences, Max Planck Society (Germany), National Academy of Sciences (US), and Royal Society (UK)**.
- **Recommendations:** Each committee's unanimous selection is sent to the **Norwegian Academy of Science and Letters** for final approval.

Fred Kavli: The Founder

- **Background:** Born in **Eresfjord, Norway (1927-2013)**.
- **Career:** Moved to **California in 1956** and became a chief engineer for a sensor company.
- **Entrepreneurship:** Founded **Kavlico** in 1958, a leading manufacturer of pressure sensors.
- **Philanthropy:** Sold Kavlico in 2000 for **\$340 million** and established the **Kavli Foundation** to support basic research in astrophysics, neuroscience, nanoscience, and theoretical physics.

2024 Kavli Prize Winners

Astrophysics

- **David Charbonneau** (Harvard University) and **Sara Seager** (MIT)
 - **Contributions:** Developed methods for **exoplanet discovery and atmospheric analysis**.
 - **Achievements:** Introduced techniques to detect atomic species and thermal emissions in exoplanetary atmospheres, helping identify **molecular signatures**.

Nanoscience

- **Robert Langer** (MIT)
 - **Breakthrough:** Engineered materials for controlled release of bio-molecules, particularly for **drug delivery**.
 - **Applications:** Beneficial in treating diseases such as **brain cancer, prostate cancer, and schizophrenia**.
- **Armand Paul Alivisatos** (University of Chicago)
 - **Innovation:** Developed **quantum dots** (semiconductor crystals) used as **fluorescent probes** for bio-imaging.
 - **Impact:** Quantum dots have become essential in **diagnostic imaging** and medical research.
- **Chad Mirkin** (Northwestern University)
 - **Concept:** Created **spherical nucleic acids (SNAs)**, nucleic acids around a nanoparticle core.
 - **Uses:** SNAs have applications in **intracellular detection, gene regulation, and immunotherapy**.

The Royal Society Kavli Medal

- **Awarded By:** The **Royal Society**, biennially (in odd years), for contributions in **science and engineering** focused on **environment and energy**.
- **Eligibility:** Open to scientists from **Commonwealth countries or the Irish Republic** with up to **15 years of post-PhD research**.
- **Prize:** Recipients receive a **bronze gilt medal** and **£500**; they also deliver a public lecture at the Society.

Importance of the Kavli Prize

- Recognizes achievements in **frontline scientific fields** that do not have dedicated Nobel Prizes.
- Supports **basic research** that impacts areas such as **medicine, environmental science, and technology**.

REVIVAL OF BOREWELLS AND STEPWELLS UNDER AMRUT 2.0

Ten Indian cities are preparing to revive unused borewells, heritage stepwells, and shallow aquifers in a **pilot project** aimed at **groundwater recharge** and **flood mitigation**.

- This initiative will be implemented as part of **Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0**.

About AMRUT (Atal Mission for Rejuvenation and Urban Transformation)

- **Launch:** Initiated in **2015** to improve basic urban infrastructure and amenities, focusing on **water supply, sewerage, urban transport, and parks** for better living conditions, especially for disadvantaged groups.
- **Core Objective:**
 - Ensure **tap water access** and **sewerage connections** for all households.
 - Enhance **urban green spaces** to improve the amenity value of cities.
 - **Reduce pollution** by promoting public transport and non-motorized transport options like cycling and walking.
- **Coverage:** Initially covered **500 cities** with populations over one lakh and notified municipalities.
- **Achievements:** Added **1.1 crore water tap connections** and **85 lakh sewer connections**, benefiting **4 crore people** and improving water security.

AMRUT 2.0

- **Objective:** AMRUT 2.0 aims to:
 - Improve **sewage and septic management**.
 - Make cities **water-secure** and prevent **sewage discharge into rivers**.
- **Targets:**
 - Achieve **100% water supply coverage** for all households in **4,700 urban local bodies** by providing **2.68 crore tap connections**.
 - Cover **100% of sewerage and septage** in **500 AMRUT cities**, adding **2.64 crore sewer or septage connections**.
- **Guiding Principles:**
 - Promote a **circular economy** and rejuvenate surface and groundwater resources.
 - Emphasize **data-driven governance** in water management, supported by a **Technology Sub-Mission** to leverage modern global technologies.
 - **‘Pey Jal Survekshan’:** A survey to foster healthy competition among cities in water management.
- **Expanded Coverage:** AMRUT 2.0 extends to **4,700 cities and towns**, benefiting over **10.5 crore urban residents** with new water connections.

News Summary: Groundwater Recharge and Flood Mitigation

- **Cities Selected:** Jaipur, Gwalior, Dhanbad, Kolkata, Rajkot, Thane, Pune, Hyderabad, Bengaluru, and Chennai have been chosen due to their historical reliance on **shallow aquifers** and proactive local interest.
- **Technical Partners:** **National Institute of Urban Affairs (NIUA)**, **ACWADAM** (non-profit), and **Biome Environmental Solutions** will provide technical expertise.
- **Project Concept:**
 - Shallow aquifers, ranging from **3 to 5 meters in depth**, can be quickly recharged with low energy usage.
 - Once recharged, these aquifers can support local water needs, especially in informal settlements.
- **Project Need:**
 - Indian cities heavily depend on **surface water sources**, but **40% of water supply** comes from **groundwater**.
 - With **rapid groundwater depletion**, recharging becomes critical.
 - According to the **UN World Water Development Report 2022**, India is the **world’s largest groundwater user**.
 - This project can help tackle **water scarcity** and **flooding** through effective groundwater recharge.

SUPREME COURT REAFFIRMS NO FUNDAMENTAL RIGHT TO PROMOTION FOR GOVERNMENT EMPLOYEES

The **Supreme Court** has reiterated that **promotion is not a fundamental right** for government employees. The Constitution leaves criteria for filling promotional posts to the **legislature and executive**.

Key Dimensions

- **Article 15(6)**: Allows the State to make **special provisions for economically weaker sections (EWS)** of citizens, including **reservation in educational institutions**.
 - Applies to both government-aided and unaided private educational institutions, except for **minority institutions protected under Article 30(1)**.
- **Article 16(4)**: Permits the State to reserve **appointments or posts** for any **backward class of citizens** not adequately represented in public services.
- **Article 16(4A)**: Authorizes the State to provide **reservation in promotions** specifically for **Scheduled Castes (SCs) and Scheduled Tribes (STs)** if they are underrepresented in state services.
- **Article 16(4B)**: Allows the **carry-forward of unfilled SC/ST quota** from a particular year to subsequent years.
 - **Note**: Both **Articles 16(4A) and 16(4B)** were added through the **77th Constitutional Amendment Act, 1995**.
- **Article 16(6)**: Enables the State to create **reservation provisions in appointments** with a **10% ceiling for economically weaker sections**, in addition to existing reservations.
- **Article 335**: Recognizes the need for **special measures** to consider the claims of **SCs and STs** in services and posts to **promote equal opportunity**.
 - **82nd Constitutional Amendment Act, 2000**: Added a provision to **Article 335**, allowing relaxation of **qualifying marks for SC/ST** candidates in examinations as part of affirmative action.

Reservation Not a Fundamental Right

- The Supreme Court has consistently held that **reservations in jobs and promotions** under Article 16(4) and Article 16(4A) are **not fundamental rights** but **enabling provisions** (*Mukesh Kumar vs State of Uttarakhand*, 2020).
- **Article 46**: Directs the state to support the **educational and economic interests of weaker sections**, especially SCs and STs, influencing affirmative action.

Reservation Developments in India

- **Mandal Commission (1980)**: Recommended **27% reservation** for Other Backward Classes (OBCs), in addition to the existing **22.5% for SCs and STs**, later implemented by the V.P. Singh government in 1990.
- **Indra Sawhney Case (1992)**: The Supreme Court ruled that **reservation should only apply at entry-level positions** and not in promotions, allowing previously made reservations in promotions to continue for five years.
 - **77th Amendment (1995)**: Inserted Article 16(4A), enabling reservation in promotions for **SCs and STs** in cases of underrepresentation.
- **M. Nagaraj Case (2006)**: The Supreme Court upheld Article 16(4A), mandating states to gather data on **backwardness, representation inadequacy, and efficiency** before applying reservation in promotions.
- **Jarnail Singh Case (2018)**: Modified the Nagaraj judgment, ruling that **states do not need to collect backwardness data** for SCs/STs in promotions, as these groups are already recognized as backward.
- **103rd Amendment Act (2019)**: Introduced **10% reservation for Economically Weaker Sections (EWS)** in government jobs and education, irrespective of social background.
- **Dr. Jaishri Laxmanrao Patil vs Chief Minister (2021)**: The Supreme Court upheld the **Indra Sawhney ruling**, rejecting attempts by states to exceed reservation caps, particularly in the **Maratha reservation case**, emphasizing the importance of adhering to the reservation ceiling.
- **103rd Constitutional Amendment Act, 2019: Amendment Details**: Modified **Articles 15 and 16** by adding **Article 15(6) and Article 16(6)** to enable EWS reservations.
- Aims to support economically disadvantaged individuals **not covered under the 50% reservation policy for Scheduled Castes (SCs), Scheduled Tribes (STs), and Socially and Educationally Backward Classes (SEBC)**.
- **Implementation**: Allows both the **Central and State governments** to offer reservations for EWS individuals.

- **Janhit Abhiyan v. Union of India, 2022:** The **103rd Amendment** was contested, questioning the constitutionality of the **10% EWS reservation** in educational institutions and government jobs.
- **Supreme Court Verdict:** In a **3-2 majority**, the Court upheld the amendment, permitting **reservation benefits based on economic criteria** alongside existing reservations for socially disadvantaged groups.

CENTRE DIRECTS E-COMMERCE COMPANIES TO JOIN ONDC

The **Central Government** has asked e-commerce and food delivery companies to join the **Open Network for Digital Commerce (ONDC)**, a government-backed initiative.

What is ONDC?

- **Purpose:** ONDC promotes **open networks** for the exchange of goods and services through digital means, aiming to break the dominance of large platforms like **Amazon** and **Flipkart** in India's e-commerce sector.
- **Open-Source Approach:** Built on **open-source methodology**, using **open network protocols and specifications**, independent of specific platforms. Open-source implies making code or processes freely available for **reuse, modification, and redistribution**.
- **Promoters:**
 - ONDC is a **private, non-profit** company under the **Department for Promotion of Industry and Internal Trade (DPIIT)**, Ministry of Commerce and Industry.
 - Formed in **2021** with funding from the **Quality Council of India (QCI)** and **Protean eGov Technologies Ltd.** (formerly NSDL e-Governance).
- **What ONDC is Not:**
 - It is **not an app or intermediary** but a set of protocols to facilitate digital exchange between buyers, sellers, and platforms.
 - ONDC is not a government regulatory body, super-aggregator, or a tool to digitize businesses.

Reasons Behind ONDC's Creation

- **Self-Reliance in Technology:** Promotes India's technological independence.
- **Equal Opportunities:** Addresses small retailers' demand for a **level playing field** in digital commerce.
- **Encourages Open Ecosystem:** Facilitates the adoption of open digital networks across sectors.
- **Market Potential:** Targets the **\$810 billion** domestic retail market.
- **Address Non-Competitive Practices:** Counters the influence of **big e-commerce companies**.

How ONDC Operates

- **Network-Centric Model:** Transitions from a **platform-centric** to a **network-centric** model.
- **Central Role:** Acts as a middle layer connecting interfaces that host buyers and sellers, enabling interoperability across different e-commerce platforms.

Benefits of ONDC

For Sellers

- Access to a larger buyer base and better **product visibility**.
- **Autonomy in terms** due to various choices for digital visibility.
- Reduced **business costs** and more options for logistics and fulfillment services.

For Buyers

- Wider choice with access to more sellers.
- **Enhanced service and faster deliveries** through hyper-local retailers.
- Improved **customer experience** due to diverse seller options.

For Technology Platforms

- New opportunities for **start-ups** to innovate.
- Growth potential through participation on both **buyer and seller sides**.
- **Reduced time-to-market** with a focus on niche areas while relying on partners for other components.

Challenges Faced by ONDC

- **Awareness and Information Overload:** Small businesses often lack the technical know-how to participate, necessitating extensive awareness campaigns. Customers may face **information overload** while navigating options.
- **ONDC vs. UPI:** ONDC is more complex than **UPI** since e-commerce involves multiple stages like delivery, returns, and customer support, unlike the one-step UPI transaction process. Unlike UPI, ONDC lacks extensive government funding, as its stakeholders are banks and financial entities.
- **Viability:** Limited participation from large players raises doubts about ONDC's success without entities it seeks to challenge. Including big players on the network has stirred concerns about competition fairness, as they may outcompete smaller businesses on the same platform.

Nandan Nilekani Committee Recommendations for ONDC

- **Open Network Protocols:** Establish open standards for digital commerce operations.
- **Interoperability:** Enable seamless interaction between different e-commerce platforms.
- **Standardization:** Develop uniform standards across e-commerce processes.
- **Decentralization:** Limit dependence on a few dominant platforms.
- **Inclusivity:** Make the network accessible to small and medium enterprises.
- **Transparency and Security:** Safeguard data privacy and ensure fair operations.
- **Regulatory Framework:** Implement regulations for compliance and consumer protection.
- **Capacity Building:** Train small businesses for effective participation.
- **Consumer Choice:** Increase product options and service choices through competition.
- **Innovation:** Leverage advanced technologies to enhance digital commerce experiences.

WIPO TREATY ON INTELLECTUAL PROPERTY, GENETIC RESOURCES, AND TRADITIONAL KNOWLEDGE

A **WIPO treaty** was finalized, marking a significant achievement for **global South nations**, including India, in securing protections for **Genetic Resources (GRs)** and **Associated Traditional Knowledge (ATK)**.

- The treaty was adopted at a **multilateral level**, gaining consensus from over **150 countries**, including many developed economies.

Significance of the WIPO Treaty

- **Incorporation of Traditional Knowledge (TK):** For the first time, **traditional knowledge and wisdom systems** have been formally recognized within the **global Intellectual Property (IP) system**.
- **Global Standards for GRs and ATK:** The treaty sets new, global standards for countries that are **providers of GRs and ATK**.
- **Biodiversity Protection:** Balances the rights of countries rich in biodiversity and traditional knowledge with **global Intellectual Property Rights (IPR)**.
- **Inclusive Innovation:** Recognizes the relationship between **local communities and their GRs and ATK**, promoting inclusive growth.
- **Protection of Traditional Knowledge:** Aims to safeguard traditional knowledge in areas such as **medicinal plants and agriculture** from unauthorized exploitation.
- **Mandatory Disclosure:** Requires patent applicants to **disclose the origin or source of genetic resources** in cases where inventions are based on these resources, aiming to combat **biopiracy**.

World Intellectual Property Organization (WIPO)

- **Established:** WIPO was established in **1967** with the signing of **the WIPO Convention**.
- **Headquarters:** Located in **Geneva, Switzerland**.
- **Members:** WIPO has **193 member states**, including India, making it one of the largest UN agencies in terms of membership.
- **UN Agency:** It operates as a **self-funded agency of the United Nations, focusing on IP issues worldwide**.
- **Traditional Knowledge (TK):** Defined by WIPO as knowledge and practices developed and passed down through generations, integral to a community's **cultural or spiritual identity**.

Genetic Resources (GRs)

- Defined in the **Convention on Biological Diversity (CBD)**, 1992 as **genetic material of plant, animal, microbial, or other origin** with functional units of heredity that have economic or practical value, such as **medicinal plants and crops**.

Past Cases Related to Traditional Knowledge and Genetic Resources

Traditional Knowledge

- **Turmeric Case:** The US granted a patent for using **turmeric for wound healing** in 1995, which was later revoked after India's **CSIR** provided evidence of prior use.
- **Neem Case:** W.R. Grace's patent for using **azadirachtin (neem extract)** in pesticides faced opposition due to prior knowledge in **Ayurveda and Unani medicine**. Although upheld by the **USPTO**, it was later revoked by the **EPO** for lack of innovation.

Genetic Resources

- **Wheat Varieties Case (2003):** A European company patented **Indian wheat varieties (Nap Hal)**, but the patent was revoked after India's claim of prior origin.
- **Basmati Rice Case (2000):** A US company received a patent for **Basmati rice**, leading to objections and eventual narrowing of the patent scope after India provided evidence of its origin.

India's Initiatives for Protecting Traditional Knowledge and Genetic Resources

Traditional Knowledge

- **Traditional Knowledge Digital Library (TKDL):**
 - Established in **2001** to document medicinal formulations and protect **traditional knowledge**.
 - Created in response to frequent patent challenges involving **turmeric and neem**.
 - A collaborative initiative by **CSIR and the Department of AYUSH**, the TKDL helps prevent misappropriation of Indian medicinal knowledge.
- **Patents (Amendment) Act, 2005:** Requires **patent applicants to disclose the origin of biological resources** used in their inventions to protect indigenous knowledge.
- **Trademark Act, 1999:** Protects unique products based on **distinguishing marks** and helps indigenous groups differentiate their products, ensuring **authenticity and quality**.
- **Biological Diversity Act, 2002:** Focuses on **conserving biodiversity**, sustainable use of biological resources, and **equitable sharing of benefits** derived from such resources.
- **Geographical Indications (GI):** Labels products based on their **geographical origin**, linking quality and reputation to a specific region.

Genetic Resources

- **National Gene Bank:** Set up in **1996** to preserve seeds and **plant genetic resources (PGR)** for future use, with a capacity for storing up to **one million germplasm samples**.
- **Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001:** Ensures **fair commercial benefits** for plant breeders and farmers who provide genetic resources for new crop varieties.
- **National Bureau of Plant Genetic Resources (NBPGR):** Works under **ICAR** to preserve and protect the genetic diversity of cultivated plants and their wild relatives.
- **National Bureau of Animal Genetic Resources (NBAGR):** Part of **ICAR**, NBAGR aims to conserve and utilize **animal genetic resources** for sustainable livestock development, maintaining a **genbank repository**.
- **National Bureau of Agriculturally Important Insects (NBAII):** Manages the collection, conservation, and use of agriculturally significant insects, contributing to **microbial and insect biodiversity**.

INDIA'S ROLE AS CHAIR OF THE COLOMBO PROCESS (2024-26)

For the first time since the **Colombo Process's** inception in 2003, India has taken over as chair of the regional group for the period **2024-26**.

About the Colombo Process

- **Purpose:** The **Colombo Process** is a **regional consultative forum** comprising **12 Asian member states**. It fosters cooperation and the exchange of best practices in overseas employment among **South and Southeast Asian countries** that send migrant workers abroad.
- **Member States:** The 12 countries include **Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand, and Vietnam**.
 - **Founding Members:** Bangladesh, China, India, Indonesia, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand, and Vietnam.
- **Leadership History:** Past chairs include **Afghanistan, Nepal, Sri Lanka, the Philippines, Indonesia, and Bangladesh**.
- **Decision-Making:** Decisions are **non-binding** and reached by **consensus**.

Objectives

- **Experience Sharing:** Share **best practices, experiences, and lessons** learned among member countries.
- **Addressing Challenges:** Consult on issues faced by overseas workers and propose **practical solutions**.
- **Optimizing Development Benefits:** Enhance the development benefits from **organized overseas employment**.
- **Implementation Monitoring:** Review and monitor the progress of **ministerial recommendations**.

Administrative Support

- **Secretariat:** The **International Organization for Migration (IOM)** provides technical and administrative assistance.
- **Technical Support Unit:** The **Colombo Process Technical Support Unit (CPTSU)**, based in **Sri Lanka**, provides support for thematic areas of focus.

Five Thematic Priority Areas

1. **Skills and Qualification Recognition Processes:** Facilitates **mutual recognition** of skills and qualifications across countries.
2. **Fostering Ethical Recruitment Practices:** Promotes **ethical recruitment** to protect migrant workers.
3. **Pre-departure Orientation and Empowerment:** Ensures migrants are **prepared and informed** before leaving.
4. **Promote Cheaper, Faster, and Safer Remittance Transfers:** Focuses on improving the efficiency and **safety of remittance** flows.
5. **Labor Market Analysis:** Conducts **labor market analysis** to align migrant workers with overseas demand.

Key Achievements

- **Regional Workshop (2006):** Held in **Manila** for employment agencies in Asia, focused on placing workers in Europe and promoting **ethical recruitment**.
- **Feasibility Study:** Completed a study for establishing an **Overseas Workers Resource Centre (OWRC)** in a Gulf Cooperation Council (GCC) country to assist migrant workers.
- **Asia-EU Consultation on Labor Migration (2008):** Hosted the first consultation in **Brussels**, attended by **Colombo Process countries and 16 EU member states**.

About the International Organization for Migration (IOM)

- **Role:** IOM is the **leading inter-governmental organization** promoting humane and orderly migration.
- **Established:** Founded in **1951** and is part of the **United Nations System**.
- **Membership:** Includes **175 member states** and operates in **171 countries** worldwide.

UNESCO'S STATE OF OCEAN REPORT 2024

The **UNESCO Report** highlights that the **oceans play a critical role in climate regulation**, but there is insufficient knowledge to address ocean crises and evaluate **carbon dioxide removal technologies**.

- The report tracks progress of the **UN Decade of Ocean Science for Sustainable Development (2021-2030)** and calls for global action for a **sustainable ocean**.

Key Findings

Ocean Heat and Warming

- The **upper 2,000 meters** of the oceans have warmed at **0.32 ± 0.03 watts per sq.m.** from **1960 to 2023** and are expected to continue warming, leading to irreversible changes.
- Approximately **90% of Earth's energy imbalance** (difference between incoming and outgoing energy) is absorbed by the oceans, causing an increase in **Ocean Heat Content (OHC)**.
- **Increased OHC** can hinder ocean layers from mixing, reducing oxygen levels in high-latitude waters, a process called **deoxygenation**.
 - Deoxygenation affects **marine ecosystems** and coastal communities that depend on oceans.
- **Ocean Heat Content (OHC)**: Total heat stored in the oceans.

Ocean Acidification

- The report underscores a **global increase in ocean acidification** across all ocean basins and seas.
- **Causes of Acidification**:
 - **Natural**: Freshwater influx, biological activity, temperature fluctuations, and **El Niño-Southern Oscillation (ENSO)** events.
 - **Human-Induced**: Nutrient pollution from **agricultural and industrial activities**.

Marine Carbon Dioxide Removal (mCDR) Technologies

- **mCDR technologies** capture and store carbon dioxide from the air.
 - Examples include modifying seawater chemistry or adding nutrients to encourage plankton growth.
- Challenges include **technical, environmental, and regulatory hurdles**.
- The ocean currently absorbs about **25% of annual human-caused CO2 emissions**.

Marine Biodiversity

- The **UN 2030 Agenda** stresses marine biodiversity conservation for **food security**. This aligns with the **Kunming-Montreal Global Biodiversity Framework** goal to protect **30% of the ocean by 2030**.
- **Marine Protected Areas (MPAs)** cover **9% of the ocean** and house **50% of catalogued marine species**.
 - About **72% of endangered species** find protection in MPAs, with **54% in no-take zones** (strictly protected areas prohibiting resource extraction).

Case Study: Marine Protected Areas (MPA) Success in the Coral Triangle

- **Location**: The Coral Triangle, located in **Southeast Asia**, is renowned for its **rich marine biodiversity**.
- **Initiative**: A network of MPAs was established to protect coral reefs, fish stocks, and marine species.
- **Outcomes**: The MPA network has led to **coral reef recovery**, increased fish populations, and improved biodiversity within protected zones, benefitting local communities through sustainable practices.
- **Key Strategies**:
 - Collaborative governance involving **local communities, government agencies, and conservation organizations**.
 - Enforcement of fishing regulations.
 - Community engagement in conservation.

2024 KAZA-TFCA SUMMIT: CALLS TO LIFT CITES IVORY TRADE BAN

The **2024 Heads of State Summit** for the **Kavango-Zambezi Trans-Frontier Conservation Area (KAZA-TFCA)** took place in **Livingstone, Zambia**. Member states renewed calls to withdraw from **CITES** over repeated rejections to permit sales of their **ivory stockpiles** and other wildlife products.

Key Issues Discussed at the 2024 Summit

The KAZA-TFCA Initiative

- **KAZA-TFCA** spans **five southern African nations: Angola, Botswana, Namibia, Zambia, and Zimbabwe**, covering **520,000 square kilometers** along the **Okavango and Zambezi river basins**.
- **Conservation Focus:** Approximately **70% of KAZA land** is designated for conservation, including **103 wildlife management areas** and **85 forest reserves**.
- **Elephant Population:** The region harbors **over two-thirds of Africa's elephant population** (approx. **450,000 elephants**), with **Botswana (132,000)** and **Zimbabwe (100,000)** holding significant populations.

Summit Decisions on Ivory Trade

- **Opposition to CITES Ivory Ban:** KAZA leaders agreed to oppose the **ivory trade ban** at the upcoming **CoP 20 of CITES**.

Overview of CITES

- **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES):** An international agreement among **184 governments** to prevent wildlife trade from threatening species survival.
 - **Enforcement:** Established in **1975**, with **India joining in 1976**.
 - **Permit System:** Requires authorization for the import, export, and re-export of species covered under CITES.

CITES Appendix

1. **Appendix I:** Prohibits commercial trade of species threatened with extinction.
 2. **Appendix II:** Regulates trade of species to prevent over-exploitation.
 3. **Appendix III:** Protects species identified by national laws.
- **CoP Meetings:** Held biennially, where decisions on species listing under Appendix I or II are made based on scientific and trade criteria.

Issues with the Ivory Trade

- **Ivory Trade:** Refers to the commercial trade of elephant ivory.
 - **Threat to Elephants:** Approximately **20,000 African elephants** are illegally killed annually for ivory.
 - **Environmental and Social Impact:** Illegal ivory trade disrupts ecosystems, endangers communities, and poses security risks.
- **Market Dynamics:** Historically, ivory has been smuggled to **Asia**, particularly **China**, where it is valued for carving.

Reasons Behind Lifting the Trade Ban

- **Economic Gain:** Southern African countries hold an estimated **\$1 billion worth of ivory stockpiles**, with Zimbabwe's **166-ton stockpile valued at \$600 million**.
- **Conservation Funding:** Revenue from ivory sales could be directed towards **conservation** and supporting local communities.

Background on the Ivory Trade Dispute with CITES

- **Historical Disputes:** The threat to exit CITES is not new; similar discussions arose at **CoP19 in Panama (2022)**, where 10 African countries expressed concerns about CITES's shift from **science-based to ideological** conservation models.
- **Arguments by Southern African Nations:**
 - High elephant populations cause **habitat loss** and **human-wildlife conflicts**.
 - They argue that **controlled ivory trade** can fund conservation.

History of Ivory Trade Decisions

- **1989:** Global ban on ivory trade; all African elephants moved to Appendix I.
- **1997: Namibia, Botswana, and Zimbabwe** moved to Appendix II.
- **2000: South Africa** also moved to Appendix II.
 - These nations were permitted **one-time sales** of stockpiled ivory from natural elephant deaths and poaching seizures.
- **CoP17 (2016) and CoP18 (2019):** Proposals by Namibia to allow regular controlled ivory trade were rejected.
- **CoP19 (2022):** Zimbabwe's similar proposal was also denied.

Alternative Markets for Trophy Hunting

- **Zimbabwe** seeks **new markets for trophy-hunting exports** as Western countries, including the **EU and UK**, ban imports of hunting trophies from endangered species.
- **Eastern Markets:** Zimbabwe is exploring new opportunities in **Eastern markets** to sustain its trophy hunting industry and manage wildlife populations.

WORLD ENVIRONMENT DAY 2024: THEME, HISTORY, AND SIGNIFICANCE

World Environment Day (WED) is celebrated every **5th June** globally, focusing on environmental conservation and addressing urgent ecological issues. The theme for **WED 2024** is "**Land Restoration, Desertification, and Drought Resilience.**"

About World Environment Day 2024

- **Objective:** Raises awareness and promotes action for environmental protection and sustainable practices.
- **Organizer:** **United Nations Environment Programme (UNEP).**
- **Global Reach:** Celebrated in over **150 countries**, engaging governments, businesses, NGOs, and individuals.

Key Facts

- **Date:** 5 June
- **Inception:** Originated in **1972** by the **United Nations General Assembly (UNGA)** during the **Stockholm Conference on the Human Environment**.
- **Objective:** To increase global awareness and drive action for environmental protection.
- **Theme for 2024:** "**Land Restoration, Desertification, and Drought Resilience**"
- **Slogan for 2024:** "**Our land. Our future. We are #GenerationRestoration**"
- **Host Country 2024:** Saudi Arabia

History of World Environment Day

- **Establishment:** UNGA designated **June 5th** as World Environment Day during the **1972 Stockholm Conference**.
- **First Celebration:** Held in **1973** with the theme "**Only One Earth**".
- **Evolution:** Since 1973, WED has been marked annually with different host countries and themes, growing into a global environmental movement with millions participating worldwide.

Objectives of World Environment Day

1. **Public Education:** Spread awareness about critical environmental issues and sustainable practices.
2. **Global Participation:** Engage individuals, communities, and organizations in environmental protection efforts.
3. **Promote Sustainable Habits:** Encourage adoption of eco-friendly practices in daily life and industries.
4. **Highlight Global Issues:** Address climate change, deforestation, pollution, biodiversity loss, and more.
5. **Foster Collaboration:** Encourage cooperation among countries, organizations, and communities on environmental challenges.
6. **Policy Advocacy:** Promote policies and initiatives focused on environmental sustainability.
7. **Recognize Efforts:** Celebrate contributions of individuals, organizations, and countries in environmental conservation.
8. **Engage Youth:** Inspire young people to take part in environmental initiatives and assume responsibility for the planet.

World Environment Day 2024 Host Country

- Each year, a different **host country** is chosen to lead World Environment Day activities.
- In **2024, Saudi Arabia** is the host, coordinating national and international events in line with the theme “**Land Restoration, Desertification, and Drought Resilience**”.

World Environment Day 2024 Activities

Official Events

- Organized by **UNEP** in partnership with the host country, **Saudi Arabia**.
- Includes **conferences, forums, and panel discussions** involving government officials, environmental experts, activists, and international organizations to discuss the annual theme.

Public Events Worldwide

- **Educational Events:** Seminars, workshops, and lectures in schools, universities, and other organizations focusing on environmental topics.
- **Community Clean-ups:** Clean-up initiatives in neighborhoods, parks, beaches, and natural areas to reduce pollution.
- **Tree Planting Campaigns:** Drives to combat deforestation and expand green spaces.
- **Environmental Campaigns:** Campaigns by NGOs and environmental groups advocating for policies that protect the environment.
- **Art and Cultural Activities:** Exhibitions, film screenings, and cultural performances based on environmental themes.
- **Sustainable Practices Showcases:** Businesses and organizations display eco-friendly initiatives to encourage sustainable practices.
- **Social Media Campaigns:** Digital events using hashtags like **#Generation Restoration** to spread awareness and inspire participation.
- **Awards and Recognition:** Acknowledgment of significant contributions in environmental protection.

The Arab Forum for Environment

- Scheduled for **3-4 June 2024** in **Riyadh, Saudi Arabia**.
- Focuses on regional issues, such as **land degradation and drought**, promoting regional cooperation and dialogue.

Theme for World Environment Day 2024

“Land Restoration, Desertification, and Drought Resilience”

1. **Raising Awareness:** Highlights the critical impact of **land degradation and desertification** on food security, biodiversity, and climate.
2. **Urgency for Action:** Calls for action to address the **triple planetary crisis** of **climate change, biodiversity loss, and pollution**.
3. **Collective Responsibility:** Encourages individuals and communities to contribute to **ecosystem restoration**.
4. **Empowering Youth:** The hashtag **#Generation Restoration** emphasizes the role of young people in leading sustainable change.
5. **Alignment with Global Goals:** Supports the **UN Decade on Ecosystem Restoration (2021-2030)** and **Sustainable Development Goals**, promoting a comprehensive approach to environmental protection.

UNESCO RECOGNIZES GWALIOR AS 'CREATIVE CITY OF MUSIC'

Gwalior, Madhya Pradesh, has been added to the **UNESCO Creative Cities Network (UCCN)**, recognized for its cultural heritage and musical legacy. **Kozhikode, Kerala** was also included among the **55 new cities** joining the network.

Gwalior's Rich Musical Heritage

1. Gwalior Gharana:

- Gwalior is the **origin of the Gwalior gharana**, the oldest and one of the most respected **gharanas in Hindustani classical music**.
- **Gharana** in Indian classical music represents a distinct style and tradition linked to a specific teacher or region.
- The **Gwalior gharana** is often called the “**Gangotri**” (source) of the **Khyal raga** and played a pivotal role in transitioning Khayal singing from **dhrupad** by adding qawwali elements.

2. Patronage of Music by Royalty:

- **Raja Mansingh and the ScIndia family** of Gwalior have historically supported and promoted music.

3. Key Figures and Contributions:

- **Raja Dungarendra Singh Tomar:**
 - **Great-grandfather of Raja Mansingh**; a musician himself, he supported Indian classical music academically.
 - Authored two treatises in **Sanskrit – Sangeet Shiromani** and **Sangeet Choodamani** for Sultan Zain-ul-Abdin of Kashmir.
- **Raja Man Singh Tomar:**
 - Credited with inventing **dhrupad** in its classical form, he popularized **Vishnupadas** (hymns to Vishnu) in Hindi rather than Sanskrit.
 - Wrote **Manakutuhala** in **Hindi**, making Indian music more accessible.
 - Created large music halls for performances and collaborated with **Sufi musicians**.
- **Tansen:**
 - Born as **Ramatanu**, he trained under **Swami Haridas** and later **Sufi saint Mohammad Ghous** in Gwalior, mastering **dhrupad**.
 - Became the court musician of **Akbar** and is considered one of the greatest musicians in Indian history.
 - He joined Akbar's court at 60, having been recommended by his former patron, King Ram Chandra Singh of Rewa.
- **Baiju Bawra:**
 - Born in **Uttar Pradesh**, he moved to Gwalior to teach music under the patronage of Raja Mansingh.
- **Ustad Hafiz Ali Khan:**
 - Born in **1888**, he was a celebrated court musician in Gwalior, training many musicians, including his son **Ustad Amjad Ali Khan**.
- Other notable musicians include:
 - **Haddu Khan's son Bade Inayat Hussain Khan (1852-1922)**, **Vasudeva Buwa Joshi**, and **Balakrishnabuwa Ichalkaranjekar**.
 - Educator **BR Deodhar** and Pakistani singer **Farida Khanum**.

4. Cultural Significance:

- **Tansen Sangeet Samaroh:** Gwalior hosts this major annual music festival, celebrating its classical music legacy.
- **Dhrupad and Gwalior Gharana:** Gwalior is the birthplace of these classical music forms, fundamental to Indian classical music traditions.

Key Facts About UNESCO's Creative Cities Network (UCCN)

1. **Established in 2004** to foster creativity as a strategic driver for sustainable urban development.
2. **Categories:** Cities can join based on creativity in music, literature, crafts and folk art, design, film, gastronomy, or media arts.
3. **Gwalior and Kozhikode's Entry:** Gwalior joined as a **Creative City of Music**, celebrating its musical heritage.

NEW HOPE FOR SURROGACY IN INDIA: CENTRAL GOVERNMENT AMENDS SURROGACY RULES

The **Central Government** has amended the **Surrogacy (Regulation) Rules, 2022** to permit **use of donor gametes (sperm or ova)** in certain cases, a significant relief for couples facing medical complications in conceiving through surrogacy.

About Surrogacy

- **Surrogacy** involves a woman, also called a **gestational carrier**, who conceives, carries, and delivers a child for another couple or individual (intended parent/s), who then receive the child post-birth.

Types of Surrogacy

1. **Commercial Surrogacy:**
 - Involves financial compensation or rewards (beyond medical and insurance costs) to the surrogate.
2. **Altruistic Surrogacy:**
 - No monetary compensation other than essential medical expenses and insurance during pregnancy.

Surrogacy in India

- Surrogacy practices began in **India in 1978**. Over time, the country became a popular destination for “**reproductive tourism**”, with numerous low-cost fertility clinics.
- With **commercial surrogacy unregulated initially**, the Surrogacy Regulation Bill was eventually passed in 2021, prohibiting commercial surrogacy while regulating altruistic surrogacy.

Key Provisions of the Surrogacy (Regulation) Act, 2021

1. **Regulation of Surrogacy:**
 - Only **altruistic surrogacy** is permitted, subject to these conditions:
 - Available to **intended couples with proven infertility**.
 - Must not be for **commercial gains** or for any exploitative purpose.
 - Applicable for conditions or diseases specified in regulations.
2. **Eligibility for Surrogate Mothers:**
 - Surrogate mother must:
 - Be a **close relative** of the intending couple.
 - Be **married** and have at least one biological child.
 - Be between **25-35 years old**.
 - Not have previously served as a surrogate.
 - Obtain **medical and psychological fitness certificates**.
 - Surrogate mothers cannot provide their own gametes for surrogacy.
3. **Surrogacy Clinics:**
 - Clinics must be **registered** to conduct surrogacy and related procedures.
4. **Surrogacy Boards:**
 - **National Surrogacy Board (NSB)** and **State Surrogacy Boards (SSBs)** to be constituted by central and state governments, respectively.
5. **Offences and Penalties:**
 - Offences include:
 - **Commercial surrogacy or advertising** for it.
 - **Exploitation** of the surrogate.
 - **Sale/import of embryos or gametes**.
 - **Abandoning or disowning** a surrogate child.
 - **Penalties:** Up to **10 years imprisonment** and a **fine up to ₹10 lakh**.

Recent Amendment in Surrogacy Rules

- The **Surrogacy (Regulation) Act, 2021** initially mandated that **only couples' own gametes** could be used in surrogacy.

- **New Amendment:** Couples may use **donor gametes** if medically certified by a District Magistrate Board that one partner has a medical condition preventing use of their own gametes.
 - Only **one partner** (either husband or wife) may use a donor gamete.
 - **One gamete must come from an intending parent**, ensuring a biological link.

Background of the Amendment

- The **Supreme Court** questioned the restriction on donor gametes under the existing rules, following applications from women facing infertility due to medical issues.
- This amendment provides flexibility for those with certain health complications to still opt for surrogacy within a regulated framework.

66TH RAMON MAGSAYSAY AWARDS 2024 HIGHLIGHTS

The **Ramon Magsaysay Awards 2024** honored **five individuals** and **one organization** for transformative impact across Asia in fields like **environmental conservation**, **healthcare**, and **cultural preservation**.

- Known as **Asia's Nobel Prize**, the award recognizes exceptional service to communities.

2024 Winners

1. **Hayao Miyazaki (Japan):**
 - Celebrated **animator and Studio Ghibli co-founder**, recognized for works like **Spirited Away**, **My Neighbor Totoro**, and **Princess Mononoke**.
 - Explores themes of **pacifism** and **environmental stewardship** through art.
2. **Farwiza Farhan (Indonesia):**
 - Environmentalist focused on conserving Sumatra's **Leuser Ecosystem**.
 - Known for promoting **biodiversity conservation** and empowering **local communities**, especially **women**.
3. **Karma Phuntsho (Bhutan):**
 - Former monk and cultural scholar, honored for preserving **Bhutan's cultural heritage** and promoting **education**.
 - Founded the **Loden Foundation**, supporting **social entrepreneurship** in Bhutan.
4. **Dr. Nguyen Thi Ngoc Phuong (Vietnam):**
 - Recognized for advocating for **Agent Orange victims** affected by the Vietnam War.
 - Provides medical care and supports awareness of the **war's toxic legacy**.
5. **Rural Doctors Movement (Thailand):**
 - **Healthcare collective** transforming medical access in **rural Thailand** since the 1970s.
 - Resists healthcare commercialization and advocates for **accessible medical services**.

About the Ramon Magsaysay Award

- **Established:** Created in **1957** to honor **Ramon Magsaysay**, the 7th President of the Philippines, noted for **integrity** and **leadership**.
- **Purpose:** Awarded annually to individuals or organizations in Asia for **selfless community service**.
- **Categories:** Originally five categories (Government Service, Public Service, Community Leadership, Journalism & Literature, Peace & International Understanding), removed in 2009 to widen the award's scope.
- **Prize:** Recipients receive a **medallion, citation, and USD 50,000**.
- **Established by:** **Rockefeller Brothers Fund** in **1957**.
- **First Awards (1958):** Given to a Philippine organization and individuals from **India, Indonesia, Philippines, Taiwan, and Sri Lanka**.

Notable Features and Programs

- **Republic Act No. 3676 (1959):** Philippine Congress granted **land** to the **Ramon Magsaysay Award Foundation (RMAF)**.
- **Emergent Leadership Award:** Introduced for **young leaders under 40** or **organizations under 10 years old**, supported by the **Ford Foundation**.

- **Ramon Magsaysay Transformative Leadership Institute (RMTLI)**: Launched in 2009 to **expand the impact** of the award and its laureates' work.

Ramon Magsaysay Award Impact

- **Recipients**: **326 individuals and 27 organizations** from **23 Asian countries** have been awarded to date.
- **Legacy**: The award continues to honor contributions in **human development, social justice, and innovation** across Asia.

Notable Indian Recipients

- **First Awards (1958)**: Included Indian freedom fighter **Vinoba Bhave** for his **Bhoodan Movement** and others in fields like **public service**.
- **Mother Teresa (1962)**: Honored for work with the poor in **Kolkata**.
- **Satyajit Ray (1967)**: Recognized in **Journalism and Creative Communication**.
- **Ela Bhatt (1977)**: Awarded for **empowering women** through **SEWA**.
- **Arvind Kejriwal (2006)**: Received for **RTI activism**, enhancing **transparency** in governance.
- **Ravish Kumar (2019)**: Recognized in **Journalism** for promoting free speech.
- **Emergent Leadership Category**: Introduced in 2001, recognizing **young leaders** under 40.
- **India's Influence in Public Health**: **Ravi Kannan (2023)** awarded for his **cancer care initiatives** in Assam, emphasizing **low-cost and accessible treatment**.

NATIONAL SPORTS DAY

- **Established in 2012** to honor **Major Dhyan Chand** and his contributions to Indian hockey.
- Major Dhyan Chand led India to **three consecutive Olympic golds** in **1928, 1932, and 1936**; known as the **"Wizard of Hockey"**.
- His **birth anniversary, August 29**, is celebrated as **National Sports Day** to promote sports culture in India and recognize athletes.

India's National Sport Status

- **India has no officially designated national sport**.
- In response to a 2020 RTI query, the **Ministry of Youth Affairs and Sports** stated that no sport holds national status as the government supports a variety of sports.

Major Dhyan Chand's Legacy

- Born on **August 29, 1905**, in **Allahabad (Prayagraj), Uttar Pradesh**.
- Known for his **skillful ball control** and vision on the field; practiced at night under moonlight, hence the nickname **"Chand"** (moon).
- Represented India from **1926-1948**, playing **185 matches** and scoring **over 400 goals**.
- Instrumental in India's Olympic hat-trick in **1928, 1932, and 1936**.
- Retired as **Major** in the **Punjab Regiment** of the Indian Army in **1956**.
- Honored with the **Padma Bhushan** in **1956**.
- **National Sports Day** instituted on his birthday in **2012**.
- In **2021**, the **Rajiv Gandhi Khel Ratna Award** was renamed **Major Dhyan Chand Khel Ratna Award** in his honor.

RESET Programme Overview

- **Launched by**: Union Minister of Youth Affairs & Sports and Labour & Employment.
- **Inaugurated**: On National Sports Day in **New Delhi** to assist retired athletes in career transitions.

Aim and Objectives

- **Aim**:
 - To equip retired athletes with necessary **skills and knowledge** for post-sport career development.
 - **Enhance employability** and support smooth career transitions for retired athletes.
- **Objectives**:

- **Mentorship:** Link retired athletes with younger athletes, leveraging their experience to guide and nurture new talent.
- **Growth of Indian Sports:** Utilize retired athletes' expertise to **mentor** the next generation.

Eligibility Criteria

- **Age Range:** 20-50 years.
- **Athletic Achievements:**
 - Winners of **international medals** or participants in international events.
 - **National** and **state medalists** or competitors recognized by **National Sports Federations**, the **Indian Olympic Association**, or the **Ministry of Youth Affairs and Sports**.

Programme Structure

- **Education-Based Levels:**
 - **Level 1:** Participants with **Class 12th and above** qualifications.
 - **Level 2:** Participants with **Class 11th and below** qualifications.
- **Format:** **Hybrid** model combining online self-paced learning, practical training, and internships.

Key Features

- **Internship Opportunities:** Internships with **sports organizations, competitions, training camps, and leagues**.
- **Entrepreneurial Guidance:** Assistance for athletes interested in **starting ventures** in sports-related fields.
- **Placement Support:** Job placement assistance following programme completion.
- **Implementation:** Led by the **Lakshmibai National Institute of Physical Education (LNIFE)**, responsible for piloting the programme.

Sports Awards in India

- **Major Dhyan Chand Khel Ratna Award:** India's **highest sporting honor** for outstanding achievements in sports over four years. Awardees receive a **medallion, certificate, and cash prize**.
- **Arjuna Award:** Recognizes **consistent performance** over four years, awarded with a **statuette, certificate, and cash prize**.
- **Dronacharya Award:** Highest coaching honor in India for those producing **international medal winners**.
- **Major Dhyan Chand Award:** Lifetime achievement award in sports, also named after Dhyan Chand.
- **Maulana Abul Kalam Azad Trophy:** Given to the **top-performing university** in inter-university tournaments over the past year.
- **Rashtriya Khel Protsahan Puraskar:** Recognizes organizations, corporates, or individuals for sports promotion and development over three years.

WORLD WEALTH REPORT 2024

India's High-Net-Worth Individuals (HNWIs): Increased by **12.2% in 2023** compared to 2022, totaling **3.589 million** HNWIs (Capgemini Research Institute's World Wealth Report 2024).

About the World Wealth Report 2024:

- **Published by:** Capgemini Research Institute.
- **Coverage:** Includes **71 countries**, representing **over 98% of global gross national income** and **99% of world stock market capitalization**.

Key Global Highlights:

- **Global HNW Net Worth Growth:** Increased by **4.7% in 2023**, reaching **\$86.8 trillion**.
- **HNWI Population:** Expanded by **5.1% globally**, reaching **22.8 million**.
- **HNWI Definition:** Individuals with **investable assets of \$1 million or more** (excluding primary residence, collectibles, consumables, and consumer durables).
- **HNWI Categories:**
 - **Ultra-HNWIs:** \$30 million or more.
 - **Mid-Tier Millionaires:** \$5-30 million.

- **Millionaires Next Door:** \$1-5 million.
- Regional Performance Highlights:**
 - **India and Australia** in the APAC region saw substantial growth:
 - **India's HNWI Wealth Growth: 12.4%**
 - **Australia's HNWI Wealth Growth: 7.9%**
 - **India's HNWI Population Growth: 12.2%**
 - **Australia's HNWI Population Growth: 7.8%**
 - **Economic Drivers for India and Australia:** Growth fueled by a **resilient economy** and strong **equity market performance**.
- India-Specific Highlights in 2023:**
 - **HNWI Population:** Increased to **3.589 million**, up by **12.2%** from 2022.
 - **Financial Wealth of HNWIs:** Grew by **12.4%**, reaching **\$1,445.7 billion** (from \$1,286.7 billion in 2022).
 - **Unemployment Rate:** Declined to **3.1%** (from **7% in 2022**), with an economic growth rate of **7.3%** (up from **7% in 2022**).
 - **Market Capitalization:** Surged by **29.0%**, following a **6% rise in 2022**.
 - **National Savings (as % of GDP):** Rose to **33.4%** (up from **29.9% in 2022**), indicating an increase in savings rates.
- Other Key Findings:**
 - **North America:** Recorded the strongest global HNWI recovery with **7.2% wealth growth** and **7.1% population growth** year-on-year.
 - **Africa:** The only region with declines in HNWI metrics due to **falling commodity prices** and **decreased foreign investments**:
 - **HNWI Wealth Decrease: -1.0%**
 - **HNWI Population Decline: -0.1%**
- Investment Trends for HNWIs in 2024:**
 - **Investment in Private Equity:** Approximately **two-thirds of HNWIs** plan to increase investments in private equity.
- About Ultra-High-Net-Worth Individuals (UHNWIs):**
 - **UHNWIs Wealth Share:** They hold over **34% of total HNWI wealth** while constituting just **over 1% of the HNWI population**.
 - **UHNWIs Relationship with Wealth Management Firms:** Increased average relationships per UHNWI from **3 in 2020 to 7 in 2023**.

DRAFT EXPLOSIVE BILL, 2024

Draft Explosives Bill, 2024 introduced to replace the **Explosives Act, 1884**.

- Developed by the **Department for Promotion of Industry and Internal Trade (DPIIT)**.
- Aims to **increase fines** for violations and **improve licensing efficiency**.

Definition of Explosives:

- **Explosives** include **gunpowder, nitroglycerin, nitroglycol, dinitrotoluene, and picric acid** due to their **volatile nature** and risk to public safety.

Key Provisions of the Draft Explosives Bill, 2024:

- **Licensing Authority Designation:** Central government to designate the authority responsible for **granting, suspending, and revoking licenses**.
 - **Current Authority:** **Petroleum and Explosives Safety Organisation (PESO)** under DPIIT.
- **Quantity Specifications in Licenses:** Licenses to specify the **quantity of explosives** a licensee can **manufacture, possess, sell, transport, import, or export** within a specified period.
- **Penalties for Violations:**
 - **Manufacturing, Importing, or Exporting Violations:** **Imprisonment up to 3 years, a fine of Rs 1,00,000, or both.**

- **Possession, Use, Sale, or Transport Violations:** Imprisonment up to 2 years, a fine of Rs 50,000, or both.
- This is an increase from the **Rs 3,000** fine under the 1884 Act.
- **Enhanced Licensing Procedures:** Aims to streamline the process for obtaining licenses, ensuring **strict adherence to safety standards**.

Petroleum and Explosives Safety Organisation (PESO):

- **Established:** 1898 (formerly Department of Explosives).
- **Operates under:** Ministry of Commerce and Industry.
- **Mandate:** Regulates **safety of hazardous substances**, including **explosives, compressed gases, and petroleum**.
- **Primary Responsibilities:**
 - Enforces regulations under the **Explosives Act, 1884** and the **Petroleum Act, 1934**.
 - Provides **training to law enforcement and security personnel** in handling explosives safely.
 - Historically performed **anti-sabotage checks** and **VVIP security duties**.

Historical Background of the Explosives Act, 1884:

- **Colonial Origin:** Enacted to control the **manufacture, storage, possession, use, sale, import, and export** of explosives.
- **Safety Regulations:** Covers a variety of explosives like **gunpowder, dynamite, nitroglycerin**.
- **Regulatory Powers:** Empowers the Central Government to regulate the handling of explosives, specifying **license requirements, conditions, and fees**.
- **Prohibition Powers:** Allows the government to prohibit **particularly dangerous explosives** to ensure public safety.
- **Exemptions:** Explosives Act **does not override the Arms Act, 1959** but allows licenses to be valid under both acts.
- **Kodava Exemption:** **Kodavas of Kodagu (Coorg)** are permitted to possess guns without a license under a longstanding exemption.

Popular Explosives Types:

- **Dynamite:** Made by mixing **nitroglycerin** with absorbent material, stabilizing it for safer handling.
- **Ammonium Nitrate:** **Inorganic compound** used as both **fertilizer** and **explosive** under certain conditions.
- **TNT (Trinitrotoluene):** Derived from **toluene**; valued for its stability and use in **military and industrial applications**.
- **TNE (Trinitroethylene):** Less common but used in specific explosive applications.
- **RDX (Royal Demolition Explosive):** **Highly explosive** white powder, commonly used in **military and civilian settings**.

4TH SESSION OF INTERGOVERNMENTAL NEGOTIATING COMMITTEE

- **Event:** 4th Session of Intergovernmental Negotiating Committee (INC-4)
- **Location:** Ottawa, Canada
- **Dates:** 23 April - 29 April 2024
- **Participation:** Attended by **3,500 people**, including **170+ member states, lobbyists, business leaders, lawmakers, scientists, and environmental organisations**.

UN Global Plastic Pollution Treaty:

- **Inception:** At the **UN Environmental Assembly (UNEA)** in **2022**, 193 countries agreed to draft a **legally binding treaty** by **end of 2024** to combat plastic pollution.
- **Lifecycle Approach:** Treaty addresses **plastic production, usage, and disposal** stages.
- **Objectives:** To define **measures, timing, and implementation processes** across the plastic lifecycle.

INC Negotiation Sessions:

- **INC-1:** Punta del Este, Uruguay (28 Nov - 2 Dec 2022)

- **INC-2: Paris, France** (29 May - 2 June 2023)
- **INC-3: Nairobi, Kenya** (13 - 19 Nov 2023)
- **INC-4: Ottawa, Canada** (23 - 29 April 2024)
- **INC-5: Busan, Republic of Korea** (25 Nov - 1 Dec 2024)

Global Plastic Waste Crisis:

- **Production Growth:** Plastic production surged from **2 million tonnes in 1950** to over **450 million tonnes in 2019**.
 - **Future Projection:** Plastic production is expected to **double by 2050** and **triple by 2060** without intervention.
- **Annual Plastic Waste:** **400 million tonnes** of plastic waste generated each year, projected to rise by **62% between 2024 and 2050**.
- **Recycling Rate:** Less than **10% of plastic** has been recycled, leaving nearly **6 billion tonnes of plastic** polluting the environment.
- **Plastic Decomposition:** Plastics take **20-500 years** to break down, with large amounts turning into **microplastics** in oceans and rivers.
- **Environmental & Health Impact:** Plastics contain **16,000+ chemicals**, which are linked to **hormone disruption, cancer, diabetes, and reproductive issues**.

Climate Impact of Plastic Production:

- **Greenhouse Gas Emissions:** In 2019, plastics contributed **1.8 billion tonnes** of GHG emissions, or **3.4% of total global emissions**.
 - **Major Emissions Source:** **90% of emissions** stem from **fossil fuel-based plastic production**.
 - **Projected Growth:** GHG emissions from plastics could increase by **20% by 2050**.

Challenges and Stances at INC-4:

- **Production Caps Resistance:** **Saudi Arabia, Iran, and China** opposed **production limits** on plastic, suggesting a focus on post-production solutions like recycling.
- **High-Ambition Coalition:** **60 countries** including **EU nations, Japan, UAE, and island nations** call for an end to plastic pollution by **2040**, promoting stricter targets.
- **Business and Petrochemical Industry:** Advocate for **recycling** over production limits; propose **plastic-to-fuel technology** and **voluntary chemical disclosures**.
- **Corporate Involvement:** **200+ companies** (e.g., **Unilever, PepsiCo, Walmart**) formed the **Business Coalition for a Plastics Treaty**, supporting negotiation but focusing on **packaging recycling**.

Key Elements Proposed in the Global Plastic Treaty:

- **Global Objectives:** Combat **plastic pollution in marine and terrestrial environments** with binding commitments.
- **International Cooperation:** Framework for **financial and technical support** from wealthier to poorer nations to meet plastic reduction targets.
- **Production and Usage Bans:** Consideration of **bans on single-use plastics** and **harmful chemical additives**.
- **Chemical Testing:** Requirement for **safety testing of chemicals in plastics**.
- **Waste Worker Provisions:** Ensure a **just transition** for waste pickers and plastic industry workers in developing nations.
- **Regular Progress Assessments:** Mandatory **evaluation of countries' implementation** of treaty provisions to ensure accountability.

India's Position at INC-4:

- **Sovereignty Emphasis:** Advocates for **state rights to sustainable development** in the treaty's preamble.
- **Objective Focus:** Aims to protect **human health and environment** while upholding **sustainable development principles**.
- **Chemical Regulation:** Requests scientific evidence and **transparent processes** for designating "chemicals of concern" in plastics.

- **Production Limits Opposition:** Resists limits on **virgin plastic** production, citing **UNEA resolution 5/14** scope.
- **Downstream Responsibility:** Advocates for **Extended Producer Responsibility (EPR)**, emphasizing national measures over international mandates.
- **Waste Management Priority:** Focus on **waste management** over production cuts; calls for **financial and technical support** for effective implementation.

Global Initiatives on Plastic Management:

1. **UNEP Plastics Initiative (2022):**
 - **Goals:** Reduce **virgin plastic production**, promote **circular economy** by **2027**.
 - **Targets:** Improve plastics policies in **45 countries**; engage **500 private sector** actors in circular solutions.
2. **Global Tourism Plastics Initiative:**
 - **Objective:** Support tourism sector in **plastic reduction** by **2025**, led by **UNEP** and **UNWTO**.
3. **Circular Economy Action Plan (EU):**
 - **Initiation:** **2015** with a strategy to **reduce single-use plastics**.
 - **Outcome:** Directive issued in **2021** banning single-use plastic items with alternatives.
4. **Plastic Bans in Other Nations:**
 - **Bangladesh:** First country to ban **thin plastic bags** in **2002**.
 - **China:** **Plastic bag ban** implemented in **2020**.
 - **US:** **12 states** banned **single-use plastic bags**.
 - **EU Directive:** Ban on items like **straws, plates, cutlery** since **July 2021**.

WORLD PRESS FREEDOM DAY 2024

India's Score Decline: Score **dropped** from **36.62** in 2023 to **31.28** in 2024 in the **World Press Freedom Index**.

- **India's Rank Improvement:** India's rank improved slightly from **161 in 2023** to **159 in 2024** among **180 countries**.

About World Press Freedom Index 2024:

- **Publisher:** Released annually by **Reporters Without Borders (RSF)**, a global media watchdog.
- **Coverage:** **180 countries** ranked on the **freedom and independence** journalists have in each nation.
- **Evaluation Categories:** The **press freedom questionnaire** assesses **five key areas**:
 - **Political Context**
 - **Legal Framework**
 - **Economic Context**
 - **Sociocultural Context**
 - **Security**
- **Scope:** Focuses solely on **press freedom** and **does not assess journalism quality** or general **human rights**.

Highlights of the 2024 Index:

- **Global Decline:** Press freedom dropped by an average of **7.6 points globally**.
- **Top Rank:** **Norway** ranks 1st, followed by **Denmark** (2nd).
- **Worst Performers:** **Eritrea** at the bottom, with **Syria** just above it.
- **Regional Trends:** **European Union** countries lead in press freedom, supported by the new **European Media Freedom Act (EMFA)**.
 - **Lowest Freedom Regions:** **Maghreb** and **Middle East** where government forces impose severe restrictions on press freedom.

India's Position in the 2024 Index:

- **Current Rank:** 159 (previously 161).
- **Score Decline in Indicators:** India's scores worsened in **all categories except security**.
- **Comparison with Neighbors:**
 - **Turkey:** Ranked **158**

- **Pakistan:** Ranked 152
- **Sri Lanka:** Ranked 150

World Press Freedom Day 2024:

- **Date:** Observed annually on **May 3**.
- **2024 Theme:** “**A Press for the Planet: Journalism in the Face of the Environmental Crisis**”
- **Objective:** Highlights the role of **free journalism** in tackling the **environmental crisis** and encouraging **global action** on environmental issues.
- **Origin:** Proclaimed by the **UN General Assembly** in **December 1993**, following UNESCO’s recommendation, marking the anniversary of the **Declaration of Windhoek**.

Global Challenges and Violence Against Journalists:

- **UNESCO Report (2024):** An increase in **violence against environmental journalists** was noted, with **44 journalists killed in the past 15 years**.
 - **Highest Danger Region:** **Asia-Pacific** recorded the most journalist fatalities.

Additional Insights from the World Press Freedom Index:

- **Released Annually Since:** **2002** by RSF, headquartered in **France**.
- **Focus:** Solely on **press freedom levels**; does not evaluate general **human rights**.
- **Key Areas of Assessment:** Political context, legal framework, economic pressures, sociocultural factors, and security concerns for journalists.

India’s Press Freedom Situation:

- **Legal Constraints:** India has laws that regulate media, including:
 - **Telecommunications Act 2023**
 - **Draft Broadcasting Services (Regulation) Bill 2023**
 - **Digital Personal Data Protection Act 2023**
- **Detentions in 2024:** **9 journalists and 1 media worker** detained since January.
- **Economic and Political Pressures:** These factors are highlighted as major constraints to **media independence** in India.

Global Ranking Highlights:

- **Top Performers:** **Norway (1st), Denmark (2nd), Sweden (3rd)**
- **Lowest Ranks:** **Eritrea (180th) and Syria (179th)**.

Constitutional and International Frameworks Supporting Press Freedom:

- **Article 19(1)(a) of the Indian Constitution:** Guarantees **freedom of speech and expression**, which underpins press freedom.
- **Universal Declaration of Human Rights (Article 19):** Protects **freedom of opinion and expression** without interference, across borders.

Press Freedom Challenges in India:

1. **Legal Restrictions:** Laws on **defamation, sedition, and national security** are sometimes used to curb journalistic freedom.
2. **Government Influence:** Advertising budgets and other economic levers can impact **editorial independence**.
3. **Threats and Violence:** Journalists, particularly those covering **corruption, crime, or communal issues**, face risks of **physical harm**.
4. **Self-Censorship:** Fear of repercussions often leads to **self-censorship** among journalists and media outlets.
5. **Concentration of Ownership:** Media ownership is dominated by a few entities, reducing **editorial diversity**.
6. **Defamation Suits:** Frequent defamation cases are financially burdensome for journalists and media organizations.

Institutions Protecting Press Freedom in India:

- **Press Council of India (PCI):** Statutory body under the **Press Council Act, 1978**; monitors ethical standards in journalism.
- **Ministry of Information and Broadcasting:** Oversees **media regulations** and policies.
- **News Broadcasters Association (NBA):** Represents private TV news broadcasters, setting ethical standards.
- **Editors Guild of India:** Advocates for **journalistic rights** and freedom.
- **Legal System:** Courts play a critical role in **upholding press freedom** and addressing rights violations.

Key Judgments Supporting Press Freedom:

- **Romesh Thappar v. State of Madras (1950):** Supreme Court stated that **freedom of the press** is foundational to democracy.

RBI SURPLUS TRANSFER TO GOVERNMENT

Amount Transferred: Rs 2.1 lakh crore transferred by the **RBI to the Central Government** for the accounting year 2023-24.

- **Increase Over Last Year:** This transfer marks a **141% increase** compared to the previous year's surplus transfer.

RBI Surplus Transfer to Government:

- **Nature of Surplus Transfer:** Every year, RBI transfers surplus income to the central government. This income is generated from:
 - **Investments**
 - **Valuation fluctuations** in **foreign currency reserves**
 - **Revenue from currency printing** and management fees.
- **Legal Basis:** Governed by **Section 47 of the RBI Act, 1934**.
- **Economic Capital Framework (ECF):**
 - **Purpose:** Determines **risk provisions** and **profit distribution** for RBI.
 - **Established:** Initially in **2014-15**, operational from **2015-16**.
 - **2019 Update:** Revised by the **Bimal Jalan Committee** (formed in **2018** and accepted on **August 26, 2019**).
 - **Framework Components:**
 - **Contingent Risk Buffer (CRB):** Recommended range **5.5% to 6.5%** of RBI's balance sheet, to cover **unexpected contingencies**.

Contingent Risk Buffer (CRB):

- **Definition:** A **provision fund** held by RBI for **unforeseen contingencies**.
- **Current Rate:** Set at **6.5%** for FY 2023-24, as per the **Bimal Jalan Committee's recommendation**.

Implications of Surplus Transfer:

- **Fiscal Benefits:** Provides additional **fiscal space** for government budgets.
- **Fiscal Deficit Reduction:** Supports **reduction in fiscal deficit** and can potentially decrease the government's borrowing needs.
- **Capital Expenditure Boost:** Allows government flexibility to **increase capital expenditure** even if **disinvestment** targets are not met.
- **Impact on Bond Market:** Lower borrowing could soften **G-Sec yields**, reducing borrowing costs for the government.

Factors Behind Record Surplus Transfer:

- **Higher Foreign Exchange Earnings:** Increased income from **foreign exchange assets**.
- **Increased Interest Revenue:** Higher interest rates on **domestic and foreign securities**.
- **Gold Price Rise:** Value of **gold reserves** appreciated.

Sources of RBI's Earnings:

- **Foreign Currency Assets:** Interest from **bonds, treasury bills**, and central bank deposits.
- **Local Assets:** Interest on **government securities** and **short-term bank lending**.

- **Commission for Government Services:** Includes managing **central and state borrowings**, and **overseeing government transactions**.

Expenditure of RBI:

- **Currency Printing Costs**
- **Staff Salaries**
- **Bank Commissions** for handling government transactions.

Bimal Jalan Committee Recommendations:

- **Formation:** Six-member committee chaired by **Dr. Bimal Jalan** in **2018**.
- **Key Recommendations:**
 - **Separation of Capital:** Distinguish **Realised Equity (CRB)** from **Revaluation Reserves** (for foreign currency, gold, securities).
 - **CRB Range:** Maintain between **5.5% - 6.5%** of RBI's balance sheet.
 - **Surplus Distribution Policy:** Only transfer surplus after ensuring CRB is within recommended range.
 - **Review Frequency:** Recommended a **five-year review** for the ECF.

Global Central Bank Dividend Practices:

- **Global Practices:** Major central banks (e.g., **US Federal Reserve, Bank of England, Bank of Japan**) are mandated to transfer profits to their respective **treasuries** or governments.

Key Points on RBI's Status and Dividend Approach:

- **Ownership Structure:** Nationalised in **1949**, making **Government of India** its sole owner.
- **No Dividend Model:** Surplus transferred is not termed "dividend" as RBI operates differently from commercial entities.
- **Tax Exemption:** RBI's earnings are **exempt from income tax** under **Section 48 of the RBI Act, 1934**.

About RBI

Establishment and Structure:

- **Founded:** April 1, 1935, under the Reserve Bank of India Act, 1934.
- **Nationalisation:** Became fully government-owned in 1949.
- **Headquarters:** Mumbai, Maharashtra.
- **Central Board of Directors:** Comprises the Governor, up to four Deputy Governors, and other appointed members.

Primary Functions:

- **Monetary Authority:** Formulates and implements monetary policy to maintain price stability and support economic growth.
- **Issuer of Currency:** Sole authority for issuing Indian currency notes.
- **Regulator of Financial System:** Oversees and regulates banks and non-banking financial companies to ensure financial stability.
- **Manager of Foreign Exchange:** Manages the Foreign Exchange Management Act, 1999, to facilitate external trade and payments.
- **Developmental Role:** Promotes financial inclusion and development of financial markets.

Monetary Policy:

- **Policy Rates:** As of October 2024, the RBI's key policy rate, the repo rate, remains at 6.5%.
- **Inflation Targeting:** The RBI aims to maintain inflation around 4%, with a tolerance band of $\pm 2\%$.

Financial Stability:

- **Foreign Exchange Reserves:** As of March 2024, India's foreign exchange reserves stood at approximately \$646 billion.
- **Currency Management:** The RBI continues to monitor and manage the rupee's exchange rate to ensure stability.

Leadership:

- **Governor:** Shaktikanta Das has been serving as the Governor of the RBI since December 2018.

DAG HAMMARSKJÖLD MEDAL

Naik Dhananjay Kumar Singh from India will be posthumously awarded the **Dag Hammarskjöld Medal** on **May 30, International Day of United Nations Peacekeepers** for his service in the **UN Stabilisation Mission in the Democratic Republic of Congo (MONUSCO)**.

Dag Hammarskjöld Medal:

- **Background:** Named after **Dag Hammarskjöld**, the second UN Secretary-General (1953-1961).
- **Establishment:** Created by the **UN General Assembly** in **December 2000**.
- **Criteria:** Awarded posthumously to **military, police, and civilian UN personnel** who lose their lives during UN peacekeeping missions.
- **Design:** Features **Dag Hammarskjöld's image** with "IN THE SERVICE OF PEACE" inscribed, and the recipient's details on the reverse.
- **Recognition:** Recipients' names are added to the **UN Book of Remembrance** to honor their contributions to global peace.

UN Peacekeeping Mission Overview:

- **Initiation Year:** First mission in **1948** to monitor peace in **West Asia**.
- **Objective:** To support security, political stability, and peacebuilding in conflict zones.
- **Guiding Principles:**
 - **Consent of the Parties**
 - **Impartiality**
 - **Non-use of Force (except in self-defense or mandate defense)**

UN Military and Police Personnel - "Blue Helmets":

- **Definition:** UN military personnel who wear **distinctive blue helmets or berets**.
- **Responsibilities:** Protect civilians, monitor borders, support local security, assist in elections, and provide training.
- **Deployment Process:** Military officers are recruited and seconded by **UN member states** for defined terms.

MONUSCO (UN Mission in Democratic Republic of Congo):

- **Objective:** To protect **civilians, human rights defenders, and humanitarian personnel** in the DRC.
- **Major Contributors:** **Pakistan** (military) and **Senegal** (police).
- **Background:** Took over from a previous UN mission in **2010** to stabilize the DRC.

India's Contribution to UN Peacekeeping:

- **Historical Involvement:** Over **200,000 Indian personnel** have served in **49 UN missions** since **1948**.
- **Current Presence:** **5,581 Indian peacekeepers** currently deployed across multiple conflict zones.
- **Significant Milestones:**
 - **2007:** India deployed the **first all-women contingent** to a UN mission in **Liberia**.
 - **Female Engagement Teams (FETs):** Deployed in **Congo** and **Abyei** to enhance women's participation in peacekeeping.
 - **2023:** **Major Radhika Sen** was awarded the **UN Military Gender Advocate of the Year** for her contributions.

India's Concerns with UN Peacekeeping Missions:

- **UNMOGIP Relevance:** India questions the relevance of the **UN Military Observer Group in India and Pakistan (UNMOGIP)**, citing the **Simla Agreement (1972)**, which established the **Line of Control (LoC)**.

UN Peacekeeping Medals and Honors:

- **Captain Mbaye Diagne Medal for Exceptional Courage:** Awarded to those demonstrating **exceptional bravery** during peacekeeping.
- **UN Military Gender Advocate of the Year Award:** Established in **2016** to honor individual efforts in promoting gender equality within peacekeeping.

India-ASEAN Initiative for Women in UN Peacekeeping:

- **Objective:** Collaboration with **ASEAN** to train women personnel for peacekeeping.
- **Initiatives:**
 - **Specialized Training:** Courses at the **Centre for United Nations Peacekeeping (CUNPK)** in New Delhi.
 - **Tabletop Exercises:** Scenario-based training for ASEAN women officers.

UN Peacekeeping - Global Overview:

- **First Mission:** **UN Truce Supervision Organization (UNTSO)** in **1948** in the Middle East.
- **Scope of Service:** Over **2 million personnel** from **125 countries** have served in **71 missions**.
- **Current Deployment:** **76,000 peacekeepers** in **11 conflict zones**.

India's Additional Contributions to UN Peacekeeping:

- **Centre for UN Peacekeeping (CUNPK):** Located in **New Delhi**; provides training for over **12,000 troops** annually.
- **Sacrifices Made:** **179 Indian soldiers** have lost their lives during UN peacekeeping missions.

ICC ISSUES ARREST WARRANTS AGAINST ISRAEL AND HAMA'S LEADERS

The **International Criminal Court (ICC)** Chief Prosecutor has requested **arrest warrants** for **Israeli Prime Minister Benjamin Netanyahu** and **Hamas leaders** over actions in the **seven-month war** beginning on **October 7, 2023**.

Israel-Hamas War Overview:

- **Start Date:** Began on **October 7, 2023**, when **Hamas** launched an unprecedented attack on **Israel** from **Gaza**.
- **Casualties:**
 - **Israel:** **1,200 fatalities** (mostly civilians) and **250 hostages** taken.
 - **Gaza:** **35,000 Palestinians killed**, with **half** reportedly being **women and children**.

International Criminal Court (ICC):

- **Establishment:** **2002** under the **Rome Statute**, headquartered in **The Hague, Netherlands**.
- **Purpose:** To prosecute individuals for **genocide, crimes against humanity, war crimes, and crimes of aggression**.
- **Jurisdiction:** Applies to crimes in **member states** or cases referred by the **UN Security Council**.
- **Non-Members:** **Israel, United States, Russia, China, India, Qatar** are **not members** of the ICC.
- **Palestine Membership:** The ICC accepted "**The State of Palestine**" as a member in **2015**.

Rome Statute:

- **Adoption Date:** **July 1998**; took effect in **July 2002**.
- **Signatories:** **123 countries** are members.
- **Non-Retroactivity:** The ICC prosecutes only for crimes committed **after July 2002**.

Conditions for Arrest Warrants:

- **Judicial Process:** A panel of **three ICC judges** reviews evidence to decide on issuing warrants, generally within **two months**.
- **Implications for Non-Member States:** **Israel's non-membership** means immediate prosecution is unlikely, but travel restrictions may arise for its leaders.

Key Accusations and Humanitarian Concerns:

- **Charges Against Israeli Leaders:** **Starvation, willful killing, extermination** targeting Palestinian civilians.
- **Charges Against Hamas Leaders:** **Extermination, sexual violence, hostage-taking** related to attacks on Israeli civilians on **October 7, 2023**.
- **Humanitarian Crisis:** **80% of Gaza's population displaced**; severe malnutrition, dehydration, and rising fatalities, particularly among **children and women**.

- **Aid Obstruction:** UN and aid agencies accuse Israel of blocking **humanitarian aid**, affecting thousands at risk of starvation.

ICC's Past Actions:

- **Notable Cases:**
 - **2020:** ICC investigated **U.S. and allies' actions** in Afghanistan, prompting economic sanctions from the **U.S.**, later lifted by **President Biden**.
 - **2023:** **Arrest warrant for Russian President Vladimir Putin** over alleged child abductions from Ukraine.

UN's Geneva Conventions on War Crimes:

- **Definition:** War crimes involve **serious breaches** of international humanitarian law, such as **hostage-taking, torture, and willful killing**.
- **Geneva Conventions (1949):** Protects **civilians, medics, POWs**, and those not actively involved in conflicts.
 - **India:** A signatory to all four **Geneva Conventions**.

19TH SESSION OF UNITED NATIONS FORUM ON FOREST

India attended **UNFF19** held from **May 6 to 10, 2024**, in **New York**, focusing on **global forest goals** and **sustainable development by 2030**.

India's Initiatives in Forest Conservation and Management:

- **Forest Protection Network:** India's **protected areas** include over **1,000 wildlife sanctuaries, national parks, tiger reserves, and biosphere reserves**.
- **Green Credit Program:** Launched under the **LIFE (Lifestyle for Environment)** movement at **COP-28** and formalised under the **Green Credit Rules, 2023**, incentivizing **tree plantation** and **restoration of degraded lands**.
- **Species Conservation Milestones:**
 - **50 years of Project Tiger** and **30 years of Project Elephant**.
 - Establishment of the **International Big Cat Alliance** to protect **seven big cat species** globally.
- **Dehradun Initiative (2023):** India hosted a **country-led initiative** under UNFF in **Dehradun** with **40 countries** and **20 international organisations**, focusing on **forest fire management** and **forest certification**.
- **India's Global Rank:** India ranks **third globally** in **net gain of average annual forest area** (2010-2020).

Key Proposals and Technological Initiatives:

- **Forest Fire Management:** India presented strategies for **forest fire prevention** and management, such as **real-time fire monitoring** via remote sensing and **online fire reporting**.
- **Global Fire Management Hub:** India proposes operationalizing a collaborative effort by **UNEP** and **FAO** to enhance **global fire management**.
- **Forest Certification:** India suggested creating **Model Forests Act** standards for **consistent, responsible forest management** worldwide.

United Nations Forum on Forests (UNFF):

- **Establishment:** Formed in **2000** by **ECOSOC** to promote **sustainable management** and **conservation** of **all types of forests**.
- **Global Objectives on Forests (2006):** Includes reversing forest loss, enhancing forest-based benefits, and increasing sustainably managed forests.
- **UN Strategic Plan for Forests (2017-2030):** Provides a framework for actions on forest sustainability, contributing to the **2030 Agenda, Paris Agreement**, and other conventions.

United Nations Economic and Social Council (ECOSOC):

- **Founded:** Under the **UN Charter in 1945**.
- **Role:** Oversees **14 UN specialised agencies, 10 functional commissions, and 5 regional commissions**, coordinating **sustainable development** efforts globally.
- **Headquarters:** **New York, USA**.

Key Facts on Indian Forest Policy:

- **National Forest Policy, 1894:** Focused on **timber production** with a custodial approach.
- **National Forest Policy, 1952:** Addressed **land-use** and **resource management** for national needs.
- **National Forest Policy, 1988:** Prioritised **environmental stability** and **biodiversity conservation**.
- **Draft National Forest Policy, 2018:** Addresses **climate change** and promotes **public-private partnerships** in forest restoration.
- **India's Forest Cover:** **21.72%** of the country's area is forested, totaling **713,789 sq km** as per **ISFR 2021**.

SAHITYA AKADEMI FELLOWSHIP TO RUSKIN BOND

Ruskin Bond, an eminent Indian author, was recently awarded the **Sahitya Akademi Fellowship**, the **highest literary honour** bestowed by the Sahitya Akademi.

About Sahitya Akademi Fellowship

- **Significance:** This fellowship is the **highest literary honour** given by the **Sahitya Akademi**, reserved for "**immortals of literature**" with a maximum of **21 Fellows** at any time.
- **First Recipient:** The fellowship was first awarded in **1968** to **Dr. S. Radhakrishnan**, former President of India.

About Ruskin Bond

- **Birth:** Born on **May 19, 1934**, in **Kasauli, Himachal Pradesh**.
- **Career:** Over **50 years** in the literary field, with works spanning **short stories, novels, autobiographies, essays, and children's books**.
- **Key Works:** *Vagrants in the Valley, Once Upon a Monsoon Time, Angry River, Strangers in the Night, All Roads Lead to Ganga, Tales of Fosterganj, Leopard on the Mountain, The Night Train at Deoli, Time Stops at Shamli, and Our Trees Still Grow in Dehra*.
- **Adaptations:** His novel *A Flight of Pigeons*, set during the **Indian Rebellion of 1857**, was adapted into the Hindi film *Junoon* (1978). *The Blue Umbrella* was adapted into a film in 2005.
- **Literary Impact:** His works, including *The Night Train at Deoli* and *Our Trees Still Grow in Dehra*, have been included in **Indian school curricula**.

Major Honors and Awards

- **John Llewellyn Rhys Prize - 1957**
- **Sahitya Akademi Award - 1992**
- **Padma Shri - 1999**
- **Sahitya Akademi Bal Sahitya Puraskar - 2012**
- **Padma Bhushan - 2014**

About Sahitya Akademi

- **Establishment:** Formally inaugurated on **March 12, 1954**.
- **Autonomous Body:** Operates independently but registered under the **Societies Registration Act, 1860**.
- **Language Recognition:** Recognizes **22 constitutional languages** along with **English and Rajasthani**.
- **Annual Awards:** Presents **24 literary awards** each year.

Additional Sahitya Akademi Fellowships

1. **Sahitya Akademi Fellowship:** Highest honour, limited to **21 Indian literary icons**.
2. **Honorary Fellowship:** For **non-Indians** contributing to Indian literature; limited to **10 Fellows** at a time.
3. **Premchand Fellowship:** For **SAARC-region writers** researching Indian literature, provides **travel and stipend**.
4. **Ananda Coomaraswamy Fellowship:** For **Asian scholars** (excluding Indians) with support for **literary projects**.

SPAIN BECOMES 99TH MEMBER OF ISA

Spain recently became the **99th member** of the **International Solar Alliance (ISA)** by submitting its **Instrument of Ratification** at a formal event in New Delhi with officials from India's **Ministry of External Affairs (MEA)**.

Key Information on the International Solar Alliance (ISA)

- **Formation:** Jointly launched by **India and France** during the **UN Climate Change Conference (COP21)** held in **Paris** in **2015**.
- **Headquarters:** Gurugram, Haryana, India.
- **Membership:**
 - **116 countries** have signed the **ISA Framework Agreement**.
 - **94 countries** have ratified and are full members.
 - **Recent Members:** **Spain (99th)**, following **Panama (97th)** and **Malta (98th)**.
- **Primary Objective:** To **implement the Paris Climate Agreement** by driving extensive deployment of **solar energy** in member countries.

ISA's Strategic Vision and Objectives

- **'Towards 1000' Strategy:**
 - **Investment Target:** Mobilize **USD 1,000 billion** for solar energy by **2030**.
 - **Energy Access Goal:** Provide clean energy to **1,000 million people**.
 - **Capacity Installation Goal:** Achieve **1,000 GW** of solar capacity globally.
- **Focus Areas:**
 - **Least Developed Countries (LDCs)** and **Small Island Developing States (SIDS)**.
 - Support in achieving **low-carbon** and sustainable development.

ISA's Key Projects

1. **One Sun One World One Grid (OSOWOG):**
 - **Objective:** Create a **globally interconnected solar grid** that harnesses solar energy from different time zones.
 - **Concept:** "**The Sun Never Sets**" - solar energy can be available somewhere around the globe at all times.
 - **Support:** Technical assistance from the **World Bank**.
2. **ISA Solar Technology and Application Resource Centre (ISTAR C):**
 - **Purpose:** Build a network for **training, entrepreneurship, and research** on solar technology.
 - **Standardization:** Promote uniform **training programs and certification standards** across member countries.
3. **Indian Technical and Economic Cooperation (ITEC) Scheme:**
 - **Training Support:** ISA master trainers trained at the **National Institute of Solar Energy, Gurugram**.
 - **Duration:** 21 days, covering solar technology fundamentals.
 - **Participants (2018-2019):** **133 candidates** from **25 countries** trained.

India's Contributions and Initiatives in Solar Energy

- **National Solar Mission:**
 - **Launch:** Part of **National Action Plan on Climate Change**.
 - **Goal:** Make India a global leader in solar energy.
 - **Climate Pledge:** 40% electric power from non-fossil sources and a 33-35% reduction in **emission intensity** by **2030** (INDC targets).
- **Green Hydrogen Mobility Project:**
 - **Location:** **Ladakh**; developed by **NTPC Renewable Energy Ltd. (REL)**.
 - **Goal:** Produce **green hydrogen** using solar energy for **carbon-free mobility**.
- **Supporting Schemes:**
 - **Solar Park Scheme**
 - **Canal Bank & Canal Top Scheme**
 - **Grid-Connected Solar Rooftop Scheme**

Structure and Functioning of the ISA

- **Assembly of ISA:**

- **Apex Decision-Making Body:** Comprises representatives from each member nation.
- **Responsibilities:**
 - Approves budgets and major projects.
 - Sets strategic directions.
 - Monitors **ISA objectives** and **operational effectiveness**.
 - **Director General Selection:** Oversees the appointment and functions of the Director General.
 - Current Director General- **Ashish Khanna**
- **ISA Secretariat:**
 - **Role:** Supports implementation of ISA programs and provides resources to member states.
 - **Key Functions:**
 - Assists members with program design.
 - Provides **technical and financial guidance**.
 - Maintains global communications and partnerships with relevant stakeholders.

FOOD WASTE INDEX REPORT 2024

The **Food Waste Index Report 2024**, co-authored by the **United Nations Environment Programme (UNEP)** and **Waste and Resources Action Programme (WRAP)**, a UK-based non-profit, highlights global food waste statistics and offers insights for reduction.

Key Findings of the Food Waste Index Report 2024

- **Global Food Waste:**
 - In **2022**, approximately **1.05 billion tonnes** of food were wasted, amounting to **19%** of food available at the **retail, food service, and household levels**.
 - **Households** contributed the most, wasting around **631 million tonnes** or **60%** of the total food waste.
 - **Food waste breakdown:** Households (60%), Food Services (28%), Retail (12%).
- **Impact on Greenhouse Gas (GHG) Emissions:**
 - **Food loss and waste** generate **8-10%** of annual **global GHG emissions**—nearly **five times** that of the aviation sector.
- **Global Hunger and Food Insecurity:**
 - In **2022**, **783 million people** experienced hunger, while **one-third of the global population** faced **food insecurity**.
- **Temperature and Food Waste Correlation:**
 - **Hotter countries** report higher **food waste per capita** due to increased **fresh food consumption** and **lack of cold chains**.
- **Urban vs. Rural Disparities:**
 - **Rural areas** in middle-income countries show lower food waste, likely due to **repurposing** food scraps for **animal feed or composting**.
- **G20 and Tracking Progress:**
 - Only **four G20 countries** (Australia, Japan, UK, USA) and the **EU** have comprehensive **food waste tracking systems** aligned with **SDG 12.3** goals.

Definitions and Indicators

- **Food Waste:** Defined as **food and inedible parts** removed from the **human food supply chain**, measured at **retail, food service, and household levels**.
- **Food Loss:** Involves **post-harvest** losses across the supply chain, excluding retail, and covers **human-edible commodities**.
- **SDG Target 12.3:**
 - **Goal:** Halve **global food waste per capita** at **retail and consumer levels** by **2030** and reduce food losses along the **production and supply chain**.
 - **Indicators:**
 - **12.3.1(a) Food Loss Index** (custodian: **FAO**): Tracks food loss up to retail.

- **12.3.1(b) Food Waste Index** (custodian: UNEP): Measures food waste at retail and consumer levels, including inedible parts.

Food Waste in India

- **India's Food Wastage:**
 - **74 million tonnes** of food wasted annually, representing **22% of food grain output** and **10% of food grain and horticulture production** (2022-23).
 - **FSSAI** reports **one-third** of food produced in India is wasted before consumption.
 - India ranks **111 out of 125** on the **Global Hunger Index**.

Efforts Related to Food Waste and Loss in India

- **Legal and Constitutional Framework:**
 - **Right to Food** interpreted under **Article 21** (Right to Life) of the **Indian Constitution**.
- **National Food Security Act, 2013 (NFSA):**
 - A **rights-based approach** covering **75% of the rural** and **50% of the urban population**.
 - **Antyodaya Anna Yojana** and **Priority Households** receive food grains at subsidised rates.
- **Buffer Stock and Food Corporation of India (FCI):**
 - **FCI** ensures procurement and storage of **food grains** at **MSP** for distribution to state governments.

About WRAP and UNEP

- **WRAP (Waste and Resources Action Programme):**
 - **Founded:** 2000
 - **Headquarters:** Banbury, UK
 - **Focus:** Climate action, sustainable resource management, and tackling **global food waste**.
- **United Nations Environment Programme (UNEP):**
 - **Established:** 1972, **Stockholm Conference**
 - **Objective:** **Leadership** and partnerships to enhance **environmental standards**.
 - **Headquarters:** **Nairobi, Kenya**
 - **Six Focus Areas:** Climate change, ecosystem management, environmental governance, disaster management, harmful substances, and sustainable consumption.

INDIA WATER WEEK 2024

- **Date:** 17th - 20th September 2024
- **Event:** 4-day **conference and exhibition; India's premier international water resources event**
- **Established:** First held in **2012**, now conducted biannually by the **Ministry of Jal Shakti**
- **Objective:** To provide a **global platform** for discussions on water resource management, fostering innovation, and sharing knowledge on water-related challenges

Objectives of India Water Week 2024

- **Theme:** "**Partnerships and Cooperation for Inclusive Water Development and Management**"
 - Focus on collaborative approaches for sustainable water development, equitable distribution, and efficient management.
- **Global Participation:** Engaging decision-makers, policymakers, researchers, planners, and students globally to discuss water resources.
- **Exhibition and Conference:** 4000 sq. m. state-of-the-art exhibition showcasing technologies, with seminars, panel discussions, and study tours.

Key Sub-Themes and Discussion Topics

1. **Water Security and Cooperation**
 - **Collaboration** for water security in light of climate change
 - **Public-Private Partnerships (PPP)** for managing urban and rural water resources
 - **Transboundary Cooperation:** Moving from conflicts to cooperative frameworks
2. **Integrated Water Resource Development**

- **Conjunctive Use** of surface and groundwater
- **Inter-Basin Water Transfers** for regional water security
- **Inclusive Planning** to address water scarcity challenges
- 3. **Infrastructure and Technology**
 - Expansion of **micro-irrigation**
 - **Technological, ecological, and financial challenges** in water infrastructure development
 - **Wastewater management** emphasizing **recycling and circular economy**
- 4. **Climate Resilience and Groundwater Management**
 - **Advanced technologies** for water security under climate uncertainty
 - **Groundwater sustainability**: Tools, techniques, and local water security plans
- 5. **Water Governance and Financing**
 - **Financing models** for water infrastructure
 - Role of **policy** and **stakeholder convergence** for effective water governance
- 6. **Disaster Management in Water Sector**
 - **Flood and drought management**
 - Addressing risks from **glacial lake outbursts**
 - Policy and action plan alignment under **National Disaster Management**

International Participation and Events

- **Countries Involved**: Denmark, Israel, Australia, Singapore shared insights; **China and Bangladesh** did not participate.
- **International WASH Conference**:
 - **Theme**: "Sustaining Rural Water Supply"
 - Focused on achieving **SDG 6** (Clean Water and Sanitation)
 - Showcased India's initiatives like **Jal Jeevan Mission** and **Swachh Bharat Mission**

Current Water Scenario in India

- **Water Scarcity**: India holds **18% of the world's population** but only **4% of freshwater resources**
- **Groundwater Dependence**: Supports **80% of drinking water** and **two-thirds of irrigation**
- **Water Pollution**: 70% of India's water is contaminated; **India ranks 120 out of 122** on Global Water Quality Index 2024
- **Climate Impact**: Droughts and floods are exacerbating water scarcity, with projections showing demand may exceed supply by **2030**

INDIA STATUS REPORT ON ROAD SAFETY 2024

The report highlights **India's slow progress** toward reducing road accident fatalities in line with international targets.

- Focuses on the link between **road construction, mobility, and public health**.
- Analyzes **FIR data** from six states and audits compliance with **Supreme Court road safety directives**.
- FIR data from the following six states: Haryana, Jammu & Kashmir and Ladakh (counted as one unit), Punjab, Rajasthan, Uttarakhand and Uttar Pradesh

Key Findings

- **High Mortality and DALYs**:
 - In **2021**, road injuries ranked as the **13th leading cause of death** and **12th cause of health loss** in India, measured in **Disability-Adjusted Life Years (DALYs)**.
- **Inter-State Disparities**:
 - Significant variation in road traffic death rates; **Tamil Nadu** (21.9), **Telangana** (19.2), and **Chhattisgarh** (17.6) per 100,000 people had the highest death rates.
 - **West Bengal** and **Bihar** recorded the lowest, at **5.9 per 100,000**.
- **Global Comparison**:

- In 1990, an Indian was **40% more likely to die in a road accident** than in Scandinavian countries. By 2021, this disparity had escalated to **600%**.

United Nations Decade of Action for Road Safety

- **Goal:** To halve road traffic deaths and injuries by 2030.
- **Resolution Adopted:** August 2020 by the UN General Assembly (UNGA).
- Most Indian states are unlikely to meet this target due to **insufficient safety measures and infrastructure**.

Implications of Road Accidents

- **Demographic Impact:** Highest impact on individuals aged **15-64 years**.
- **Economic Cost:** Road crashes cost India **5-7% of its GDP** annually.
- **Healthcare Burden:** Road accidents create a significant **strain on healthcare systems**, with high treatment and rehabilitation costs.

Government Measures for Road Safety

1. **Motor Vehicle (Amendment) Act, 2019:** Introduced stricter traffic regulations, fines, and provisions for road safety.
2. **National Road Safety Policy, 2010:** Focused on improving **road infrastructure**, enforcing safety laws, and public awareness.
3. **Electronic Detailed Accident Report (e-DAR):** Provides a central repository for **road accident data**.
4. **Good Samaritan Law:** Offers protection to bystanders who assist accident victims.
5. **Vehicle Safety Standards:** Mandates features like **airbags, ABS, and crash-test standards** under the **Bharat NCAP**.

Global Road Safety Initiatives

- **Brasilia Declaration on Road Safety (2015):** India is a signatory; aims to halve road deaths by **2030**.
- **Decade of Action for Road Safety 2021-2030:** UNGA resolution with a target to **prevent 50% of road traffic deaths by 2030**.
- **International Road Assessment Programme (iRAP):** Works globally to **enhance road safety** through better infrastructure.

Supreme Court Interventions

- **Justice K.S. Radhakrishnan Panel:** Established in **2014**, with recommendations to ban the sale of alcohol on highways, enforce helmet use, and create public awareness.
- **Directives (2017):** State Road Safety Councils, **district committees**, and **trauma care centres**.

THIRD NATIONAL LOK ADALAT

- **Event Date:** September 14, 2024
- **Organised by:** National Legal Services Authority (NALSA)
- **Purpose:** To reduce the court case backlog by facilitating faster and accessible dispute resolution through alternative mechanisms.
- **Supervision:** Justice Sanjiv Khanna, Supreme Court Judge and Executive Chairman of NALSA.
- **Geographical Scope:** Conducted across **taluks, districts, and High Courts** in **27 states**.

Key Outcomes of the 3rd National Lok Adalat

- **Total Cases Resolved:** **1,14,56,529 cases**
 - **Pre-Litigation Cases:** **94,60,864** (~82.7% of total)
 - **Pending Court Cases:** **19,95,665** (~17.3% of total)
- **Total Settlement Amount:** **₹8,482.08 crore**

Types of Cases Resolved

1. **Criminal Compoundable Offences** – Minor criminal cases that allow settlement between parties.
2. **Traffic Challans** – Minor violations handled to ease the court burden.

3. **Revenue Cases** – Disputes regarding state revenue.
4. **Bank Recovery Cases** – Bank-related financial recoveries.
5. **Motor Accident Claims** – Settlement of compensation claims.
6. **Cheque Dishonour Cases** – Under Section 138 of the Negotiable Instruments Act.
7. **Labour Disputes** – Employment and worker-related issues.
8. **Matrimonial Disputes** (excluding divorce cases).
9. **Land Acquisition Cases** – Disputes on government land acquisition.
10. **Intellectual Property Rights (IPR)** – Resolution of IP-related disputes.
11. **Consumer Matters** – Issues under the Consumer Protection Act.
12. **Other Civil Disputes** – Including property disputes and contractual matters.

About National Lok Adalat

- **Definition:** Lok Adalat, or People's Court, is a platform that enables the settlement of disputes outside formal court proceedings. It is rooted in **Gandhian principles** and has been part of India's **Alternative Dispute Resolution (ADR)** framework.
- **Establishment of Lok Adalat:** Lok Adalats were initially voluntary, with **statutory status conferred by the Legal Services Authorities Act, 1987**.
- **Legal Authority:** Awards made by Lok Adalats are equivalent to a **civil court decree** and are **final and binding** with **no appeal** allowed.

Structure and Conduct of Lok Adalats

- **Organising Bodies:** Lok Adalats are organised by NALSA, along with **State and District Legal Services Authorities** and legal services committees.
- **Composition:** A Lok Adalat panel usually comprises a **judicial officer, a lawyer, and a social worker** to ensure fair proceedings.
- **Jurisdiction:**
 - Can address **pending court cases and pre-litigation matters**.
 - Handles **civil disputes, compoundable criminal cases, revenue issues, and traffic challans**.
 - Does not cover **non-compoundable criminal offences**, as these involve state prosecution and are ineligible for settlement.

Procedure and Powers

- **Flexible Procedure:** Lok Adalats determine their own procedural rules, allowing an **informal, quick, and flexible** approach to dispute resolution.
- **Binding Awards:** Decisions are final and enforceable as **decrees of civil courts**. No appeal can be filed, though litigation may be pursued if parties are dissatisfied.
- **Civil Court Powers:** Lok Adalats have powers equivalent to a civil court under the **Code of Civil Procedure, 1908**, including summoning witnesses, examining evidence, and requisitioning documents.

National Legal Services Authority (NALSA)

- **Establishment:** Constituted under the **Legal Services Authorities Act, 1987**.
- **Purpose:** Provides free legal services to vulnerable groups and organises Lok Adalats to offer amicable resolutions.
- **Leadership:** The **Chief Justice of India** serves as Patron-in-Chief, and the **second senior-most Supreme Court judge** is the Executive Chairman.

Free Legal Services Provided by NALSA

1. **Court fees and other charges** are covered.
2. **Legal representation and documentation** for those unable to afford it.
3. **Preparation and filing of appeals** and certified document copies.

Eligibility for Free Legal Aid

- Women and Children
- SC/ST individuals
- Industrial workers
- Victims of disasters
- Disabled persons
- Persons in custody
- Low-income individuals (income below ₹1 lakh for district courts, below ₹5 lakh for Supreme Court)
- Victims of human trafficking

Constitutional Provisions for Legal Aid

- **Article 39A:** Mandates free legal aid to ensure justice for vulnerable sections.
- **Articles 14 & 22(1):** Uphold equal access to justice and equality before the law.

10 YEARS OF MAKE IN INDIA

- **Launch Date:** September 25, 2014
- **Launched by:** Prime Minister Narendra Modi
- **Objective:** Boost domestic manufacturing, foster innovation, enhance skill development, facilitate foreign investment, and increase the manufacturing sector's GDP contribution to 25% by 2025.
- **Nodal Ministry:** Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry

Key Targets

- **Manufacturing Growth Rate:** 12-14% per annum
- **Job Creation:** 100 million new manufacturing jobs by 2025
- **GDP Contribution:** Raise manufacturing share to 25%

Pillars of Make in India

1. **New Processes:** Simplification for ease of doing business.
2. **New Infrastructure:** Development of industrial corridors, smart cities, and robust IPR infrastructure.
3. **New Sectors:** Opened FDI in key sectors like defence, insurance, and medical devices.
4. **New Mindset:** Shifted government role to facilitator for industry growth.

Make in India 2.0

- **Focus:** Enhanced sustainability, innovation, and self-reliance.
- **Sectors Covered:** 27 sectors, including 15 manufacturing and 12 services.

Key Initiatives (2014-2024)

- **Production Linked Incentive (PLI) Scheme:** Incentivized ₹1.32 lakh crore in investments, boosting manufacturing output to ₹10.9 lakh crore and creating 8.5 lakh jobs.
- **PM GatiShakti:** Aimed at \$5 trillion economy with multimodal connectivity infrastructure across seven sectors (Railways, Roads, Ports, etc.).
- **Semiconductor Ecosystem: Semicon India Programme** with an outlay of ₹76,000 crore to boost domestic chip manufacturing.
- **National Logistics Policy (NLP):** Enhancing logistics efficiency with a target top 25 rank in LPI by 2030.
- **Skill India Mission:** Trained over 400 million people to support manufacturing sector skill needs.
- **Startup India:** Created 148,931 DPIIT Recognized Startups, adding 15.5 lakh direct jobs.

Tax and Financial Reforms

- **GST Implementation:** Reduced production costs, enhancing local manufacturing.
- **Unified Payments Interface (UPI):** Handled ₹81 lakh crore in transactions (April-July 2024).

Achievements of Make in India (2014-2024)

- **FDI Growth:** India recorded **119% increase in FDI** (2014-2024); **\$667.41 billion** attracted.
- **Vaccination:** Supplied **60% of global vaccines** and led in COVID-19 vaccine exports.
- **Mobile Manufacturing:** India, now the **2nd-largest mobile phone manufacturer**, produced **99% of mobiles** used domestically, and mobile exports rose to **₹1.2 lakh crore** in 2024.
- **Defence Production:** **₹1.27 lakh crore** in defence production (2023-24), with **exports to 90+ countries**. Launched **INS Vikrant**, India's first domestically produced aircraft carrier.
- **Electronics:** Expanded to **\$155 billion** by FY23, nearly doubling from **\$48 billion in FY17**.
- **Renewable Energy:** **203.1 GW** capacity in 2024, making India the **4th largest global producer**.
- **Textile Industry:** Created **14.5 crore jobs**, majorly impacting employment.

46TH SESSION OF THE WORLD HERITAGE COMMITTEE MEETING IN INDIA

India hosted the **46th session of the World Heritage Committee Meeting** for the first time, held from **21st to 31st July, 2024** at **Bharat Mandapam in New Delhi**. This event marked an important milestone in India's relationship with the **World Heritage Convention**, which began with India's ratification in **1977**.

- **India's Participation:** India has served **four terms** on the **World Heritage Committee**, highlighting its commitment to **international cooperation** and **capacity-building** for heritage preservation.
- **Inaugural Announcement:** Prime Minister **Narendra Modi**, emphasizing his vision of "**Vikas Bhi, Virasat Bhi**," announced a **\$1 million grant** to the **UNESCO World Heritage Centre** to support **capacity building, technical assistance**, and **conservation efforts**, particularly for **Global South countries**.

India's Heritage and Development Stance

- **Development and Heritage:** India has achieved new heights in **modern development** over the past **10 years** while promoting a sense of **pride in heritage** ("**Virasat Par Garv**").
- **New World Heritage Site:** **Assam's Moidams** became India's **43rd World Heritage Site** and the first cultural site from **Assam** to gain this recognition.

World Heritage Convention Overview

- **Official Title:** The **Convention Concerning the Protection of the World Cultural and Natural Heritage**.
- **Adoption and Enforcement:** Adopted in **1972** at the **UNESCO General Conference in Paris**; came into effect in **1975**. India joined in **1977**.
- **Membership:** Currently, **195 State Parties** have ratified the convention.
- **Objective:**
 - **Global Cooperation:** Fosters international collaboration to protect heritage of **outstanding universal value**.
 - **Conservation:** Aims to preserve cultural and natural heritage for **current and future generations**.
- **Core Goals:**
 - **Identification:** Recognize and list sites of unique cultural and natural importance.
 - **Protection:** Ensure measures are in place to protect these sites from damage.
 - **Promotion:** Raise awareness and encourage appreciation for global heritage.

Implementation of the Convention

- **World Heritage List:** Recognizes sites that possess **outstanding universal value** and need preservation under the convention's guidelines.
- **World Heritage Committee:** Supervises the **implementation of the convention** and management of the **World Heritage List**.
- **Importance of the Convention:**
 - **Coverage of Cultural and Natural Sites:** Includes both **cultural monuments** and **natural landscapes**.
 - **Global Impact:** Promotes **sustainable tourism** and encourages international dialogue on heritage protection.

Role of the World Heritage Committee

- **Administration:** Administers the **World Heritage Convention**.
- **UNESCO World Heritage Centre:** Functions as the **secretariat** for the convention.
- **Technical Advisory Bodies:**
 - **Property Inscription:** Decides on adding new sites to the World Heritage List.
 - **Implementation Oversight:** Discusses issues related to the convention's application.
 - **International Assistance:** Reviews requests for global aid in heritage preservation.
 - **Guidance to States:** Provides advice on fulfilling obligations to protect listed properties.
 - **World Heritage Fund:** Manages funds to support conservation activities.
- **Decision-Making Authority:**
 - **Final Authority:** The committee makes the final decision on whether nominated sites are added to the World Heritage List.
 - **Advisory Roles:** For natural heritage, the **IUCN** acts as an advisory body.

Key Outcomes of the 46th Session

The session included in-depth discussions on **conservation efforts**, **international assistance**, and **bilateral meetings** with countries and organizations. This historic event highlighted India's rich heritage and laid the foundation for **future global conservation initiatives**.

INDIA'S SHIPBUILDING MISSION

Goal by 2047: Position India as a major player in the **global shipbuilding industry** and establish it as a **maritime hub**.

- **Current Market Share:** India holds less than **1%** of the global shipbuilding market.

Key Features of the Shipbuilding Mission

- **Focus Areas:** The mission identifies **12 key areas** for development, including:
 - **Financing, insurance, ship ownership, leasing, shipbuilding, repair, recycling, flagging, registration, operations, technical management, and arbitration.**
- **Shipbuilding Parks:** Mega shipbuilding parks will be developed on both **eastern and western coasts** (in **Maharashtra, Kerala, Andhra Pradesh, Odisha, and Gujarat**), inviting foreign investments from **South Korea and Japan**.
- **Maritime Development Fund:** A fund with a **₹25,000 crore** corpus is planned to support long-term financing for maritime initiatives, modeled on the **NaBFID**.
- **Allied Missions:**
 - **Cruise India Mission:** Focuses on improving port infrastructure and creating exclusive terminals for large cruise vessels.
 - **Ship Repair and Recycling Mission:** Targets development of **Kochi, Mumbai, Chennai, Kolkata, and Vadinar (Gujarat)** as key repair hubs.
- **Centre of Excellence:** A specialised Centre for Shipbuilding and Repair will encourage **innovation** in these sectors.
- **Free Trade Depot:** Customs exemptions for ship repairs will be provided through **Free Trade Depots** at shipyards.
- **International Maritime Dispute Resolution Centre (IIMDRC):** Launched to resolve maritime disputes domestically, reducing reliance on international hubs like **Dubai and Singapore**.
- **Domestic Maritime Insurance:** Establishment of **India Club** for third-party maritime insurance to protect coastal shipping and inland waterways from international sanctions.

Recent Developments in India's Maritime Sector

- **Mega Ports Expansion:** India is advancing plans for mega ports, including:
 - **Vadhavan Port** in Maharashtra with an investment of **₹76,220 crore**.
 - Proposed **transshipment port at Galathea Bay**, Andaman & Nicobar Islands, to capture cargo currently handled abroad.

- **Container Handling Capacity:** Target to increase capacity to **40 million TEUs** (twenty-foot equivalent units) within five years, with **Jawaharlal Nehru Port** aiming to boost capacity to **10 million TEUs**.
- **Hydrogen Manufacturing Hubs:** **3,900 acres** allotted in **Kandla** (Deendayal Port Authority) and **VO Chidambaranar Port** for hydrogen hub projects.
- **Global Expansion and Trade Corridors:**
 - India Ports Global Ltd (IPGL) has taken charge of ports in **Sri Lanka, Myanmar, and Bangladesh**.
 - Operationalized **Chabahar Port** contract.
 - **India-Middle East-Europe Economic Corridor (IMEC):** A **4,800 km corridor** to link Indian ports with **Saudi Arabia, UAE, and Europe**.
- **MAITRI Platform:** Integrates **Indian trade portals** with UAE systems for streamlined **cross-border trade** as part of the IMEC's **Virtual Trade Corridor (VTC)**.

Global Shipbuilding Industry

- **Market Value:** The global shipbuilding market was **USD 207.15 billion** in 2023, projected to reach **USD 220.52 billion** by 2024.
- **Major Players:** **China, South Korea, and Japan** dominate, controlling **85%** of the market.
- **India's Market Share:**
 - India contributes **0.06%** to the global market.
 - India's **shipbuilding exports** are valued at **USD 1.12 billion** compared to **China's USD 25 billion**.
 - Projected growth of India's shipbuilding industry from **USD 90 million in 2022** to **USD 8.12 billion by 2033**.
 - Potential for **USD 237 billion** worth of opportunities by **2047**.

Leading Indian Shipbuilding Companies

- **Mazagon Dock Limited (MDL):** Builds warships for the **Indian Navy** and **Coast Guard**.
- **Cochin Shipyard Limited (CSL):** Largest Indian shipbuilder; specializes in offshore vessels, oil tankers, and aircraft carriers.
- **Adani Group's Shipbuilding:** Announced a **₹45,000 crore** project at Mundra Port, targeting a **USD 62 billion** market by **2047**.

Maritime India Vision 2030

- **Vision:** Elevate India's shipbuilding and repair industry from over 20th place globally to **top 10 by 2030** and **top 5 by 2047**.
- **Investment:** Estimated **₹1,00,000-1,25,000 crore** for port capacity upgrades and world-class infrastructure.

India's Maritime Infrastructure and Government Initiatives

- **Ports and Shipping:**
 - India has **12 Major Ports** and **200+ Non-Major Ports** along **7,500 km** of coastline.
 - **95% of trade by volume** and **68% by value** conducted through ports.
 - Merchant fleet of **1,491 ships** totaling **13 million GT**.
- **Port and Shipping Initiatives:**
 - **100% FDI allowed** for port development.
 - **10-year tax holiday** for port and inland waterway infrastructure projects.
 - **Sagarmala Program:** 143 projects completed; 190 ongoing for port connectivity and coastal community development.
- **Inland Vessels Bill 2021:** Establishes a **single legislation** for the country, enabling nationwide vessel registration.
- **National Maritime Heritage Complex:** Collaborative project in **Lothal, Gujarat** to celebrate India's maritime history.

NAMASTE SCHEME

The **Union Ministry of Social Justice and Empowerment** revealed that only **508 out of 766 districts** in India have declared themselves as **manual-scavenging free**.

- This data was presented in a booklet outlining the ministry's achievements since **2014** under the current government.

About the Scheme

- **NAMASTE** stands for **National Action for Mechanised Sanitation Ecosystem**.
- **Objective:** To ensure the **safety and dignity of sanitation workers** in urban India and provide them with **sustainable livelihoods**.
- **Launch Year:** Introduced in **2022**, to be implemented over **2022-2026**.
- **Ministries Involved:** Joint initiative by the **Ministry of Social Justice and Empowerment (MoSJE)** and the **Ministry of Housing and Urban Affairs (MoHUA)**.
- **Implementing Agency:** The **National Safai Karamchari Financial Development Corporation (NSKFDC)**.
- **Coverage:** Targets **500 cities**, aligning with **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)** cities.

Aims of the NAMASTE Scheme

- Achieve **zero fatalities** in sanitation work in India.
- Ensure **all sanitation work is performed by skilled workers**.
- Prevent any sanitation worker from coming into **direct contact with human faecal matter**.
- Organize sanitation workers into **Self-Help Groups (SHGs)** and empower them to run **sanitation enterprises**.
- Provide **alternative livelihood** options for all **Sewer and Septic Tank Sanitation Workers (SSWs)**.

Components of the NAMASTE Scheme

1. **Extending Insurance Scheme Benefits**
 - **Health Coverage:** SSWs and their families will be covered under the **Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)**.
 - **Premium Payment:** NAMASTE will bear the premium for AB-PMJAY for SSWs not previously covered.
2. **Livelihood Assistance**
 - **Mechanization and Enterprise Development:** Promote the use of mechanized equipment for sanitation work.
 - **Counselling:** Identified SSWs and their dependents will receive counselling on available livelihood choices.
 - **Skill Training:**
 - **Continuing in Sanitation Sector:** SSWs choosing to continue will receive **capacity building training**.
 - **Alternative Livelihoods:** Those opting for other fields will receive training to acquire new skills or start entrepreneurial ventures.
3. **Saturation with Social Security Schemes' Benefits**
 - Extend benefits of all applicable **social security schemes** to identified SSWs and their family members.
4. **Financial Assistance**
 - **Capital Subsidies:**
 - Up to **₹5 lakh** for the purchase of sanitation machinery costing up to **₹15 lakh**.
 - **Interest Subsidy:**
 - Interest rates on loans capped between **4% to 6%** for beneficiaries.
 - **Training Stipend:**
 - SSWs will receive a stipend of up to **₹3,000 per month** during training on the use of sanitation machines.

Social Justice Ministry Report on Manual Scavenging

- **Deaths Related to Manual Scavenging:**
 - The Social Justice Ministry maintains that **no manual scavenging deaths** have occurred recently.
 - **377 fatalities** between **2019 and 2023** were attributed to **hazardous cleaning of sewers and septic tanks**.

- **Differentiation by Ministry:**
 - Manual scavenging is distinguished from hazardous cleaning of sewers.
 - Surveys in **2013 and 2018** identified all existing manual scavengers (approximately **58,098 individuals**).
- **Districts Declared Manual Scavenging Free:**
 - **508 districts** have declared themselves as **manual scavenging free** out of **766 districts**.

Rehabilitation of Manual Scavengers

- **One-Time Cash Assistance:** Identified manual scavengers received **₹40,000 each** under the rehabilitation scheme.
- **Skill Development and Training:** Around **22,000** manual scavengers have been connected to **skills training programmes**.
- **Self-Employment Opportunities:** Subsidies and loans are available for those wishing to set up their own businesses.
- **Self-Employment Scheme for Rehabilitation of Manual Scavengers (SRMS):**
 - Launched in **2007**.
 - Aimed at providing financial assistance and skill training to rehabilitate manual scavengers.
- **Merger with NAMASTE Scheme:**
 - The SRMS has been merged into the NAMASTE scheme to focus on **100% mechanisation of sewer work**.
 - **FY 2023-24 Union Budget** allocated **₹100 crore** for NAMASTE and showed **no allocation** for SRMS.

Profiling and Training Under NAMASTE

- **Digital Profiling of SSWs:**
 - Creation of a **national database** for SSWs through the **NAMASTE Mobile App**.
 - As of **March 6, 2024**, a total of **28,732 SSWs surveyed** and **21,760 validated** in **28 states**.
- **Training Sessions:**
 - **2,367 Urban Local Bodies (ULBs)** attended online training on the profiling process.
 - **805 ULBs** attended state-level profiling training to resolve technical queries.
 - **Training of Trainers (ToT)** conducted in states like **Uttar Pradesh, Karnataka, Andhra Pradesh, and Telangana**.
- **Profiling Camps:**
 - Profiling camps conducted across **28 states** with an **IEC (Information, Education, and Communication) campaign** to raise awareness.

Recent Data and Caste Dynamics

- **Caste-Based Occupational Segregation:**
 - Recent data from over **3,000 ULBs** under the NAMASTE scheme indicates that **92%** of the **38,000 manual scavengers and hazardous sewer workers** belong to **Scheduled Caste (SC), Scheduled Tribe (ST), or Other Backward Classes (OBC)** communities.
- **State-Level Progress:**
 - **12 states and Union Territories**, including **Kerala and Rajasthan**, have completed the profiling process.
 - **17 states**, like **Andhra Pradesh and Uttar Pradesh**, are still in progress.
 - Some states, such as **Tamil Nadu and Odisha**, are conducting separate programmes and not reporting to the Centre.
- **Estimated Number of SSWs:**
 - The Ministry of Housing and Urban Affairs estimates around **100,000 SSWs** in urban areas.

PARBATI-KALISINDH-CHAMBAL EASTERN RAJASTHAN CANAL PROJECT

A significant **Memorandum of Understanding (MoU)** has been signed between **Rajasthan, Madhya Pradesh, and the Union Ministry of Jal Shakti** to implement the **Modified Parbati-Kalisindh-Chambal-Eastern Rajasthan Canal Project (Modified PKC-ERCP)**.

- **Project Objective:** Integrates the **Parbati-Kalisindh-Chambal (PKC) link project** with the **Eastern Rajasthan Canal Project (ERCP)** under the **National Perspective Plan** of interlinking rivers to enhance water availability and management.

Modified PKC-ERCP Project

- **Parbati-Kalisindh-Chambal (PKC) Link:** Diverts surplus water from Parbati, Newaj, and Kalisindh rivers to the Chambal River.
- **National Perspective Plan (NPP):** Formulated in **1980** by the **Central Water Commission** and **Union Ministry of Irrigation** (now Ministry of Water Resources), aimed at optimising water use across states.
- **Rivers Included:**
 - **Chambal River:** Originates from **Singar Chouri Peak, Vindhya Mountains, Indore**; major tributaries include **Banas, Kali Sindh, Sipra, Parbati**.
 - **Parvati River:** Begins in **Vindhya Range, Sehore District, MP**; lacks significant tributaries.
 - **Kali Sindh River:** Starts in **Bagli, Dewas District, MP**; tributaries include **Parwan, Newaj, and Ahu**.

Eastern Rajasthan Canal Project (ERCP)

- **ERCP Proposal:** Introduced by the **Rajasthan government in 2019** to facilitate **intra-basin water transfer** within the Chambal Basin.
- **Water Transfer Objective:** Utilises **surplus monsoon water** from **Kalisindh, Parvati, Mej, and Chakan sub-basins** to supply water-deficit sub-basins like **Banas, Gambhiri, Banganga, Parbati**.
- **Beneficiary Districts in Rajasthan:** Includes **Alwar, Bharatpur, Dholpur, Karauli, Sawai Madhopur, Dausa, Jaipur, Ajmer, Tonk, Bundi, Kota, Baran, and Jhalawar**.

Benefits of the Modified PKC-ERCP

- **Water Supply:** Provides **drinking and industrial water** to **13 districts of eastern Rajasthan** and the **Malwa and Chambal regions of Madhya Pradesh**.
- **Irrigation:** Supports irrigation for **2.8 lakh hectares** in each state (total **5.6 lakh hectares** across both states).
- **Groundwater and Industrial Growth:** Expected to raise groundwater levels and support industrial expansion, including the **Delhi-Mumbai Industrial Corridor (DMIC)**.

Integration and Rationale for the Project

- **Integrated Approach:** Merges PKC with ERCP for **joint water-sharing, cost distribution, and inter-state collaboration**.
- **Rajasthan's Water Scarcity:** Rajasthan, India's largest state (10.4% of landmass), has only **1.16% of surface water** and **1.72% of groundwater**, highlighting the need for sustainable water resources.

Historical Background of River Interlinking

- **Origins of Interlinking Idea:** Proposed in **1858** by **British general Arthur Cotton**; focused on interlinking major rivers for drought relief.
- **National River Linking Project (NRLP):** Known as **National Perspective Plan**; seeks to transfer water from **surplus to deficit basins** for flood and drought management.
- **Project Components:**
 - **Northern Himalayan River Interlink Component**
 - **Southern Peninsular Component**
 - **Intra-State River Linking Component**

Importance of River Interlinking Projects

- **Flood Control:** Reduces flooding risk, particularly in basins like **Ganga-Brahmaputra-Meghna**.

- **Water Scarcity Relief:** Provides water to drought-prone regions in **Rajasthan, Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu.**
- **Agricultural Boost:** Increases irrigation, enhancing **agricultural productivity** and farmer incomes.
 - **Example: Ken-Betwa Link Project.**
- **Inland Waterways Support:** Enables the development of **inland waterways** like **National Waterway-1.**
- **Water Resource Optimization:** Reduces **groundwater depletion** and improves the utilisation of surface water.

PKC-ERCP Project Timeline and MoU Details

- **Initial Feasibility Report (FR):** Prepared by the **National Water Development Agency (NWDA)**; shared with concerned states in **February 2004.**
- **Rajasthan's ERCP Proposal:** Submitted in **2019**; aims to merge ERCP with PKC link for optimal water resource usage.
- **Task Force Deliberations:** Integration was discussed by the **Task Force for Interlinking of Rivers (TFILR)** in **2019** and approved by the **Special Committee for Interlinking of Rivers (SCILR)** in **December 2022.**

Current Project Development

- **Detailed Project Report (DPR):** Under preparation; outcome will finalise a **Memorandum of Agreement (MoA)** among **Rajasthan, Madhya Pradesh, and the Union Government.**
- **MoA Components:** Outlines **water-sharing, cost-sharing, implementation mechanisms, and water management** in the Chambal basin.
- **Feasibility and Planning:**
 - **75% Dependable Yield:** Standard requirement for water projects; ERCP initially planned on **50% dependable yield**—required revisions to meet norms.
 - **Revised Planning Request:** **Central Water Commission (CWC)** recommended Rajasthan revise its DPR to 75% dependability; integrated PKC-ERCP approach emerged.

TIRUPATI LADDU CONTROVERSY

Andhra Pradesh CM **N. Chandrababu Naidu** alleged that **animal fat** was present in the ghee used for **Tirupati laddus** under the previous regime of **Y.S. Jaganmohan Reddy.**

- **Lab Report:** A lab report by **CALF (Centre of Analysis and Learning in Livestock and Food)**, part of the **National Dairy Development Board (NDDB)** in Gujarat, raised concerns about the purity of the ghee.
- **FSSAI Action:** The **Food Safety and Standards Authority of India (FSSAI)** issued a show-cause notice to **A.R. Dairy**, a supplier, for allegedly providing substandard ghee.

About Tirupati Laddu and its Preparation

- **Significance:** Tirupati or Srivari laddus have been a **devotional prasadam** at the **Sri Venkateswara Temple** in Tirumala, Andhra Pradesh, for over **300 years.**
- **Ingredients:** Made with **gram flour, sugar, cashews, cardamom, ghee, and raisins.**
- **Daily Usage:** **10 tonnes of cow ghee** are used daily, and around **3,00,000 laddus** are distributed every day at the temple.
- **Geographical Indication (GI) Status:** In **2009**, the **Tirupati Laddu** was awarded GI status, giving exclusive production rights to the temple kitchen.
- The first documented offering of the laddu was on **August 2, 1715.**

Adulteration Allegations and Testing

- **Animal Fat Allegations:** Lab tests indicated possible contamination with **animal fats** like **beef tallow** and **lard.**
- **FSSAI Regulations on Ghee:**
 - **Ghee Quality Standards:**
 - **Saponification Value:** Should be between **205 and 235.**
 - **β-Sitosterol Marker:** Indicates possible adulteration with vegetable oils if present.
 - **Lab Findings:**
 - **Saponification Value** exceeded limits: recorded values were **249.644 and 241.952.**

- **β-Sitosterol Presence:** Detected, suggesting adulteration with **vegetable oils**.
- **S-Values:** All tested **S-values** (indicators for specific fats) were outside acceptable ranges, suggesting the presence of **foreign fats**.

Key Terms in Adulteration Detection

- **Beef Tallow:**
 - Derived from **ruminant animals** (e.g., cows, buffaloes).
 - Commonly used in **high-temperature cooking**, candles, and soaps.
 - **FSSAI Standards:** Saponification value **193-200**, iodine value **35-46**.
- **Lard:**
 - Fat obtained from **hogs or domesticated pigs**.
 - Used in certain cooking and baking contexts.
 - **FSSAI Standards:** Saponification value **192-198**, iodine value **52-65**.
- **Detection of Animal Fats in Ghee:**
 - **Gas Liquid Chromatography:** An FSSAI-recommended test to identify foreign fats in ghee.
 - **Reversed Phase High-Performance Liquid Chromatography (RP-HPLC):** Used to detect **cholesterol and β-Sitosterol markers** for adulteration.

Lab Report Findings

- **Presence of Foreign Fats:**
 - Tests found **foreign fat indicators (S-values)** outside acceptable ranges.
 - Specific fat type and quantity unclear; results indicate possible **mix of foreign fats**.

Tirumala Venkateswara Temple

- **Location:** Situated in **Tirumala**, Andhra Pradesh, on **Venkata Hill** of the **Tirumala Hills**.
- **Dedicated to:** Lord **Venkateswara**, an incarnation of Vishnu.
- **Historical Significance:**
 - References in **Tamil literature** and **inscriptions**; expanded by **Vijayanagara rulers** like **Krishna Devaraya**.
 - Recognized as one of the **wealthiest religious institutions** globally.
- **Architecture:**
 - **Dravidian style** with structures like **Ananda Nilaya Vimana** and **Vimana Pradakshina**.
 - Known for **intricate carvings** and daily poojas, with major festivals like **Brahmotsavam**.

Key Testing Techniques

- **Saponification Value (SV):** Measures the molecular weight of fatty acids, helping to identify quality and possible adulteration.
- **Gas Chromatography:** Separates chemical components to reveal **triglyceride profiles** and detect foreign fats.
- **Dietz Precht Method (1991):** Uses equations to identify specific fats; S1-S5 values detect foreign oils and animal fats.

EAC-PM RELEASES RELATIVE ECONOMIC PERFORMANCE OF INDIAN STATES REPORT

The **Economic Advisory Council to the Prime Minister (EAC-PM)** published a report analysing the economic performance of Indian states over **six decades (1960-61 to 2023-24)**.

- **Key Focus:** Evaluates economic disparity and changes in **state-wise GDP contribution** and **relative per capita income**.

Key Findings of the EAC-PM Report

1. **Economic Performance of Major Regions:**
 - **Southern States:**
 - **Contributed 30% to India's GDP** in 2023-24.
 - **Post-1991 Liberalisation:** Rapid growth in sectors like **technology, industry, and services**.
 - **West Bengal:**

- Decline from **10.5% of GDP in 1960-61** to **5.6% in 2023-24**.
- **Per Capita Income:** Fell to **83.7% of the national average** by 2023-24.
- **Maharashtra:**
 - Largest contributor to **India's GDP at 13.3%** despite a minor decline.
- **Sikkim:**
 - Achieved **320% of the national average per capita income** in 2023-24, now India's wealthiest state in per capita terms.
- 2. **Per Capita Income Data:**
 - **Highest Income States:** **Delhi, Telangana, Karnataka, and Haryana;** Delhi's per capita income stands at **250.8% of the national average**.
 - **Consistently High Incomes:** **Gujarat (160.7%)** and **Maharashtra (150.7%)** have maintained above-average incomes since the 1960s.
 - **Rising Economies:** **Odisha** improved from **55.8% in 2000-01** to **88.5% in 2023-24**.
 - **Punjab vs. Haryana:**
 - **Punjab:** Per capita income at **106% of the national average**.
 - **Haryana:** Surged to **176.8%**, outperforming Punjab.
- 3. **Challenges in Low-Income States:**
 - **Bihar and Uttar Pradesh:** Struggle economically with **Bihar at 4.3%** and **UP at 9.5% of India's GDP**.
 - **Odisha** shows recent improvement but **Bihar** remains significantly behind in economic progress.

Regional Economic Performance Analysis

1. **Southern States:**
 - **Combined GDP Contribution:** **30% in 2023-24**.
 - **High Relative Incomes:** **Telangana (193.6%), Karnataka (181%), Tamil Nadu (171%), and Kerala (152.5%)** of the national average.
2. **Western States:**
 - **Maharashtra:** Maintains the highest share in **India's GDP**.
 - **Gujarat:** Increased its share from **6.4% in 2000-01** to **8.1% in 2023-24**; **per capita income at 160.7% of the national average**.
3. **Northern States:**
 - **Haryana:** Outpaced **Punjab**, achieving **176.8% per capita income** of the national average in 2023-24.
 - **Delhi:** Highest per capita income at **250.8% of the national average**.
4. **Eastern and North-Eastern States:**
 - **West Bengal:** GDP share declined from **10.5% in 1960-61** to **5.6% in 2023-24**.
 - **Sikkim:** Exceptional growth, **320% of the national average per capita income**.

Reasons for Growth in Western and Southern States

- **Industrial Strength:** **Gujarat and Maharashtra** have strong industrial bases, especially in **textiles, chemicals, and engineering**.
- **Service Sector Expansion:** **Karnataka and Tamil Nadu** benefit from a robust **IT sector** and skilled workforce due to high investment in **education and urbanization**.
- **Agricultural Advances:** **Maharashtra and Kerala** have adopted **sustainable practices** like organic farming and water-efficient irrigation.
- **Connectivity:** Strong transport and logistics networks, including **Gujarat's ports** and **Tamil Nadu's highways**, have enhanced regional trade and economic growth.

Indicators of Economic Analysis

- **State's Share in GDP:** Ratio of a state's **Gross State Domestic Product (GSDP)** to India's total GSDP.
- **Relative Per Capita Income:** State's **Net State Domestic Product (NSDP) per capita** as a percentage of India's **Net National Income (NNI) per capita**.

Economic Advisory Council to the Prime Minister (EAC-PM)

- **Role:** Advises on key economic issues, including **inflation, industrial output, and economic planning**.

- **Structure:** Non-constitutional, non-permanent, independent body reporting to the **Prime Minister**.
- **Current Chairman:** Bibek Debroy.
- **Nodal Agency:** NITI Aayog.

ANNUAL SURVEY OF INDUSTRIES REPORT 2022-23

- **Conducted by:** Ministry of Statistics and Programme Implementation (MoSPI).
- **Objective:** Provides data on **output, value added, employment, capital formation** in the manufacturing sector.
- **Period:** Covers **April 2022 to March 2023**.
- **Survey Fieldwork:** Conducted from **November 2023 to June 2024**.

Key Highlights

1. **Gross Value Added (GVA) and Output Growth:**
 - **GVA Growth:** Increased by **7.3%** in 2022-23, totaling **₹21.97 lakh crore**.
 - **Industrial Output:** Grew by **21.5%** compared to the previous year.
 - **Input Increase:** Recorded a **24.4%** rise in input value.
2. **Employment in Manufacturing:**
 - **Employment Growth:** Increased by **7.5%** from **1.72 crore** to **1.84 crore**.
 - **Job Creation:** **13 lakh jobs** added in 2022-23.
 - **Pre-pandemic Levels:** Employment levels surpassed pre-pandemic levels (2018-19) by over **22.14 lakh**.
3. **Top Sectors Driving Growth:**
 - **Main Industries:** Basic metals, coke & refined petroleum products, food products, chemicals, and motor vehicles.
 - **Contribution:** These sectors contributed **58%** of total output with **24.5% output growth** and **2.6% GVA growth**.
4. **State Performance:**
 - **Top States by GVA:** Maharashtra, Gujarat, Tamil Nadu, Karnataka, Uttar Pradesh.
 - **Top States by Employment:** Tamil Nadu, Maharashtra, Gujarat, Uttar Pradesh, Karnataka.
 - **Contribution to Manufacturing GVA and Employment:** These states accounted for over **54% of GVA** and **55% of employment**.
5. **Capital Investment:**
 - **Gross Fixed Capital Formation (GFCF):** Increased by over **77%** to **₹5.85 lakh crore**.
 - **Net Fixed Capital Formation:** Recorded a rise of **781.6%**, supporting manufacturing expansion.
6. **Factory Numbers:**
 - **Growth:** Number of factories rose from **2.49 lakh** in 2021-22 to **2.53 lakh** in 2022-23.
7. **Average Emoluments:**
 - **Increase:** Average emolument per person rose by **6.3%** in 2022-23.

Definitions and Concepts

- **Gross Value Added (GVA):** Value added by producers after deducting intermediate consumption. Formula: **GVA = GDP + subsidies on products - taxes on products**.
- **Net Value Added (NVA):** **GVA - Depreciation**; measures net output after accounting for capital wear and tear.
- **Structural Ratios & Technical Coefficients**
- **Fixed Capital per Factory:** Increased from **₹1,758 lakh (2018-19)** to **₹1,996 lakh (2022-23)**.
- **Output per Worker:** Rose from **₹72.5 lakh (2018-19)** to **₹99.1 lakh (2022-23)**.

National Product Classification and Survey Framework

- **Industrial Classification:** Uses the **National Industrial Classification (NIC) 2008**.
- **Product Classification:** Based on **National Product Classification for Manufacturing Sector (NPCMS), 2011**.

Annual Survey of Industries (ASI) Background

- **Established:** Since **1959** (Collection of Statistics Act, 1953).

- **Coverage:** Includes factories registered under **Factories Act, 1948**, certain **Bidi and cigar establishments**, and **electricity undertakings**.

Opportunities and Challenges in the Manufacturing Sector

1. Opportunities:

- **Domestic Demand:** Expanding domestic and international markets.
- **Global Supply Chains:** Shift to **Asian Global Value Chains (GVCs)**, benefiting Indian manufacturers.
- **MSME Contribution:** MSMEs contribute **30% to GDP** and **45% to exports**.

2. Challenges:

- **Outdated Technology:** Dependence on older technologies reduces competitiveness.
- **Skilled Workforce Shortage:** Only **24%** of India's workforce is skilled for complex manufacturing jobs.
- **High Input Costs:** **14% higher logistics costs** than the global average.

6TH QUAD SUMMIT

An informal alliance between **India, the U.S., Australia, and Japan** focused on maintaining a **free and open Indo-Pacific region**.

Formation: Originated as a response to the **2004 Indian Ocean tsunami** for humanitarian aid; formalized in **2007** by Japan's PM **Shinzo Abe** but lay dormant until **revived in 2017**.

Key Outcomes of the 2024 Quad Summit

1. Quad Wilmington Declaration:

- Formal statement to guide Quad's initiatives and strategies for regional security, economic cooperation, and sustainable development in the Indo-Pacific.

2. Quad Cancer Moonshot:

- **Objective:** To combat **cervical cancer** in the Indo-Pacific.
- **India's Contribution:** Providing **\$7.5 million** worth of **HPV kits and cervical cancer vaccines**.
- **Serum Institute Partnership:** Committed to delivering **40 million HPV vaccine doses** to Indo-Pacific countries.

3. Maritime Security and Training Initiatives:

- **MAITRI (Maritime Initiative for Training in the Indo-Pacific):**
 - Focus on **maritime security, law enforcement, and illegal activity deterrence**.
 - **First MAITRI workshop** to be hosted by **India in 2025**.
- **Quad-at-Sea Ship Observer Mission:** Scheduled for **2025** to improve Coast Guard interoperability among Quad nations.

4. Logistics and Infrastructure Development:

- **Quad Indo-Pacific Logistics Network:** A pilot project to enable rapid **civilian disaster response** through shared airlift and logistical resources.
- **Ports of the Future Partnership:** Supports **resilient and sustainable port infrastructure** across the Indo-Pacific.

5. Semiconductor and Technology Resilience:

- **Semiconductor Supply Chains Contingency Network:** A collaborative effort to secure **supply chains for semiconductors**.
- **Open RAN and 5G:** Expanding **secure telecommunications infrastructure** with the **first deployment in Palau**.
- **BioExplore and AI-ENGAGE Initiatives:** Leveraging **AI for biological ecosystem studies** and **agricultural advancements**.

6. Digital Public Infrastructure:

- **Quad Principles:** Establishes standards for **secure, inclusive, and transparent digital public infrastructure (DPI)** in line with democratic values.

7. Climate and Clean Energy Initiatives:

- **Quad Clean Energy Supply Chain Diversification Program:** Aims to diversify **clean energy supply chains**; India commits **USD 2 million** to solar projects in **Fiji, Comoros, Madagascar, and Seychelles**.

- **Undersea Cable Projects:** Quad pledges **\$140 million** for **telecommunication connectivity** for Pacific island nations by 2025.
- 8. **Cybersecurity and Information Environment:**
 - **Quad Action Plan for Undersea Telecommunications Cables:** Secures **global digital connectivity** and counters potential disruptions.
 - **Counter-Disinformation Working Group:** Supports **media freedom** and combats **foreign information manipulation**.
- 9. **Counter-Terrorism and Space Initiatives:**
 - **Quad Counter-Terrorism Working Group:** Focuses on threats from **unmanned aerial systems (UAS)**, **chemical, biological, radiological, and nuclear (CBRN) devices**.
 - **Space Situational Awareness (SSA):** Sharing space expertise to enhance **sustainability in space operations**.

10 POINT PLAN FOR INDIA-ASEAN RELATIONS

- **Event:** The 21st ASEAN-India Summit, held in **Vientiane, Laos**.
- **Theme:** "Enhancing Connectivity and Resilience."
- **Significance:** The summit celebrated **10 years of India's Act East Policy**, initiated in 2014, to bolster ties with ASEAN in areas like **trade, security, connectivity, and digital infrastructure**.
- **Attendees:** ASEAN member states and India's Prime Minister Modi, who announced a **10-point plan** for strengthening ASEAN-India relations.

About ASEAN (Association of Southeast Asian Nations)

- **Establishment:** Formed in **1967** by **Indonesia, Malaysia, Philippines, Singapore, and Thailand** in Bangkok. Currently, ASEAN has **10 member states**: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.
- **Purpose:** Promote **regional stability, economic integration, and socio-cultural cooperation**.
- **Population and Economic Impact:**
 - ASEAN accounts for **9% of the world's population** (~680 million people).
 - Combined GDP of **USD 3.6 trillion**, making it the **5th largest economy globally**.
- **Strategic Importance:**
 - Located along major **global shipping lanes** in the South China Sea.
 - ASEAN's member states share complex **territorial issues** (e.g., South China Sea disputes) and maintain strategic partnerships with countries like India, the US, and Japan.
 - ASEAN seeks to maintain **neutrality** in global power competition while fostering partnerships for regional stability and development.

India-ASEAN Relations and Cooperation

1. **Economic Ties:**
 - **Trade Growth:** Bilateral trade exceeded **USD 130 billion** in 2024, with India being ASEAN's **6th largest trading partner**.
 - **Investment:** Total investments between India and ASEAN surpassed **USD 125 billion** from 2000 to 2023.
 - **Free Trade Agreement (FTA):** Signed in **2009** for goods, expanded to **services and investments in 2014**.
 - **Local Currency Trading:** India and some ASEAN nations began trading in local currencies, led by **Malaysia**, with other ASEAN members expected to follow.
2. **Digital and Technological Advancements:**
 - **Emerging Technologies:** India and ASEAN cooperate on **AI, Blockchain, IoT, Robotics, Quantum Computing, and 6G technology**.
 - **Digital Transformation:** India shares **digital public infrastructure expertise** (like Aadhaar and UPI) with ASEAN.
 - **Cross-Border Payments:** India's UPI and Singapore's PayNow launched **real-time cross-border transactions** in **June 2024** under **Project Nexus**.
3. **Security and Defence:**

- **Comprehensive Strategic Partnership:** Emphasizes **peace, stability, and maritime security**.
 - **Maritime Code of Conduct:** Both ASEAN and India uphold the **Declaration on Conduct of Parties in the South China Sea (DOC)** and seek an effective **Code of Conduct (COC)** in line with **UNCLOS 1982**.
 - **Joint Exercises:** Military and maritime collaborations, such as **ASEAN-India Maritime Exercise**.
 - **ASEAN-led Platforms:** India actively participates in **ASEAN Regional Forum (ARF)**, **East Asia Summit (EAS)**, and **ADMM+ (ASEAN Defence Ministers' Meeting Plus)**.
- 4. **Infrastructure and Connectivity:**
 - **Trilateral Highway Project:** India-Myanmar-Thailand highway aims to improve transport connectivity between India and Southeast Asia.
 - **Kaladan Multimodal Project:** Strengthens connectivity to Northeast India and links Indian and ASEAN markets.
- 5. **Educational and Cultural Exchange:**
 - **Scholarships for ASEAN Students:** Programs such as **Nalanda University scholarships** and capacity-building initiatives.
 - **Cultural Programs:** Events including **ASEAN-India Youth Summit**, **Music Festivals**, and **Cultural Exchanges**.

10-Point Plan for Enhanced ASEAN-India Cooperation

1. **ASEAN-India Year of Tourism 2025:** India to allocate **USD 5 million** for tourism promotion activities between India and ASEAN countries.
2. **Commemorate Act East Policy:** Mark **10 years of the Act East Policy** with activities like **Youth Summits, Start-up Festivals, Hackathons, Music Festivals**, and **ASEAN-India Network of Think Tanks**.
3. **Women Scientists Conclave:** Establish **ASEAN-India Women Scientists Conclave** to encourage scientific cooperation and advancement for women in STEM fields.
4. **Scholarship Expansion:** Double **Nalanda University scholarships** and introduce new scholarships for ASEAN students at **Indian Agricultural Universities**.
5. **Trade Agreement Review:** Review the **ASEAN-India Trade in Goods Agreement** by **2025** to address trade issues and promote balanced trade relations.
6. **Disaster Resilience:** India to provide **USD 5 million** to strengthen **disaster resilience** within ASEAN.
7. **Health Ministers' Track:** Establish regular **ASEAN-India Health Ministers' Dialogue** to enhance **health resilience** and pandemic preparedness.
8. **Cyber Policy Dialogue:** Launch a **Cyber Policy Dialogue** to address cybersecurity challenges and promote **digital resilience**.
9. **Green Hydrogen Workshop:** Host a **workshop on green hydrogen technologies** to support ASEAN's shift towards sustainable energy solutions.
10. **Climate Resilience Initiative:** Launch the **"Plant a Tree for Mother"** campaign, inviting ASEAN leaders to promote **climate resilience** and environmental sustainability.

Regional and Global Impact

- **Geopolitical and Geostrategic Significance:**
 - ASEAN's role as a neutral platform in the **US-China rivalry** and India's strategic interests in the **Indo-Pacific**.
 - **Code of Conduct in the South China Sea** aims to reduce tensions and promote peace in maritime regions.
- **Regional Security and Cooperation:**
 - Joint initiatives in **maritime security, counter-terrorism, cybersecurity**, and **military exercises**.
 - Continued cooperation through **East Asia Summit (EAS)** and **ASEAN Regional Forum (ARF)** aligns with ASEAN's **Outlook on the Indo-Pacific (AOIP)** and India's **Act East Policy**.

INDIA OFFICIALLY JOINS THE INTERNATIONAL BIG CAT ALLIANCE

India officially joined the **International Big Cat Alliance (IBCA)** in **September 2024** after approval from the Union Cabinet.

- **Background:** The IBCA was proposed by **Prime Minister Narendra Modi** in **2019** and launched in **April 2023**, marking the **50th anniversary of Project Tiger**.

About International Big Cat Alliance (IBCA)

- **Structure:** A coalition of **96 countries** comprising both big cat range countries and non-range nations, along with conservation organizations, scientific bodies, and corporate groups.
- **Objectives:**
 - **Curb Illegal Wildlife Trade:** Aims to prevent illegal trade involving the **seven big cat species**.
 - **Conservation of Habitats:** Focuses on preserving the natural habitats of big cats.
 - **Policy Advocacy:** Promotes policies aligning biodiversity conservation with local needs, supporting the **UN Sustainable Development Goals (SDGs)**.
 - **Financial Support:** Mobilizes resources for conservation efforts.
 - **Knowledge Sharing:** Acts as a central repository for conservation best practices and technical knowledge.
- **Focus Species:**
 - **Seven Big Cats:** **Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar, and Puma**.
 - **India's Presence:** India is home to **five** of these species—**Tiger, Lion, Leopard, Snow Leopard, and Cheetah** (excluding Puma and Jaguar).
- **Member Countries:** India, Nicaragua, Eswatini, and Somalia.
- **Budgetary Support:** **INR 150 crore** allocated by the Union Cabinet for five years (2023-24 to 2027-28).
- **Governance Structure:**
 - Comprises an **Assembly of Members**, a **Standing Committee**, and a **Secretariat** based in **India**.
 - **Model:** Follows the framework of the **International Solar Alliance (ISA)**.
 - **Director-General:** Appointed by the **Ministry of Environment, Forest and Climate Change (MoEFCC)**.

About Big Cats

- **Definition:** Refers to large wild cat species, primarily from the **Panthera genus**, excluding some species like the cheetah.
- **Behavior:**
 - **Lions:** The only big cats that live in **social groups (prides)** and hunt cooperatively.
 - **Other Big Cats:** Typically **solitary**, except for mothers with cubs.
- **Largest Big Cat:** The **Siberian Tiger**, facing threats like trophy hunting and usage in traditional Chinese medicine.
- **Role in Ecosystem:** Serve as **keystone species** and indicators of ecosystem health; threatened by **poaching, illegal trade, and habitat loss**.

Big Cats in India

1. **Royal Bengal Tiger**
 - **Population:** **2,967** as per the **2018-19 Tiger Census**.
 - **Global Share:** India holds **70% of the world's tiger population**.
2. **Asiatic Lion**
 - **Habitat:** Found only in **Gir National Park, Gujarat**.
 - **Population:** Increased from **<200 in the 1960s** to **674 (Census 2020)**.
3. **Leopard**
 - **Population:** Estimated **12,000-14,000** leopards in India.
 - **Genetic Diversity:** Indian leopards are the **most genetically diverse in Asia**.
4. **Snow Leopard**
 - **Habitat Range:** **Western Himalayas** (Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttarakhand) and **Eastern Himalayas** (Sikkim, Arunachal Pradesh).
 - **Population:** **500** in India out of the global **7,500**.

5. Cheetah

- **Extinction:** Declared extinct in India in **1952**.
- **Reintroduction:** **Eight African cheetahs** from Namibia reintroduced in **Kuno National Park, Madhya Pradesh** in **November 2022**.

Conservation Initiatives in India

- **Project Tiger:** Launched in **1973** to conserve India's tiger population.
- **Project Lion:** Focuses on the conservation of Asiatic Lions in **Gujarat**.
- **Project Leopard:** Aims at leopard conservation.
- **Cheetah Reintroduction Project:** Started in **2022** to reintroduce cheetahs to Indian habitats.
- **Wildlife Protection Act, 1972:** Provides a legal framework for wildlife conservation.
- **Snow Leopard Conservation:** Efforts aimed at protecting the snow leopard population in the **Himalayan** region.

WWF'S LIVING PLANET REPORT 2024

- **Release Date:** October 10, 2024
- **Published By:** World Wide Fund for Nature (WWF)
- **Purpose:** Tracks biodiversity trends and ecosystem health using the **Living Planet Index (LPI)**, which monitors population trends in wildlife to indicate extinction risks and ecosystem changes.

Major Findings

- **Global Wildlife Population Decline:** Wildlife populations have dropped by **73% from 1970 to 2020**.
 - **Freshwater Ecosystems:** Decline of **85%** (sharpest among ecosystems).
 - **Terrestrial Ecosystems:** Decline of **69%**.
 - **Marine Ecosystems:** Decline of **56%**.

Regional Declines in Wildlife Populations

- **Latin America and the Caribbean:** Wildlife populations fell by **95%**.
- **Africa:** Decline of **76%**.
- **Asia-Pacific Region:** Decline of **60%**.
- **Central Asia:** Decline of **35%**.
- **North America:** Decline of **39%**.

Primary Threats to Wildlife

- **Habitat Loss and Degradation:** Driven by unsustainable agriculture, deforestation, fragmentation, logging, and mining.
- **Overexploitation:** Overhunting, fishing, and resource extraction at unsustainable levels.
- **Climate Change:** Leading to shifts in ecosystems and increased vulnerability of species.
- **Pollution:** Including plastic and industrial waste affecting marine and terrestrial species.
- **Invasive Species and Disease:** Non-native species destabilising ecosystems and spreading diseases.

Key Environmental Tipping Points

- **Coral Reef Bleaching:** Over **75%** of the world's reefs are affected, with potential collapse threatening fisheries and coastal protection.
- **Amazon Rainforest:** Deforestation risks altering global weather patterns and increasing carbon emissions.
- **Melting of Ice Sheets:** **Greenland and West Antarctic ice sheets** nearing critical melting points, with impacts on sea levels.
- **Ocean Currents:** Potential collapse of the subpolar gyre could disrupt climate patterns in Europe and North America.
- **Permafrost Thaw:** Release of large amounts of methane and carbon, accelerating climate change.

Case Studies Highlighted

- **Brazilian Atlantic Forest:** Loss of large fruit-eating animals has reduced seed dispersal for large hardwood trees, affecting **2-12% of carbon storage capacity** in forests across Africa, Latin America, and Asia.
- **African Forest Elephants:** A **78-81% decline** in populations in Gabon and Cameroon due to poaching for the ivory trade.
- **Chinook Salmon:** **88% population decrease** in the Sacramento winter-run Chinook due to disrupted migratory routes caused by dams.

Economic Impacts

- **Nature Dependence:** Over **55% of global GDP** depends on nature and its services.
- **Food System Costs:** Hidden costs of environmental degradation and health impacts from food systems amount to **USD 10-15 trillion annually** (12% of global GDP in 2020).
- **Biodiversity and SDGs:** **30% of UN Sustainable Development Goals for 2030** are likely to fail or are worse off than the 2015 baseline.

About WWF

General Information

- **Full Name:** World Wide Fund for Nature (WWF)
- **Established:** 1961
- **Headquarters:** Gland, Switzerland
- **Mission:** To conserve nature and reduce the most pressing threats to biodiversity and the diversity of life on Earth.

WWF in India

- **WWF-India:** Established in **1969** as a charitable trust.
- **Headquarters:** New Delhi, India
- **Structure:** Autonomous, with a central Secretariat in New Delhi and multiple state, divisional, and project offices across India.
- **Focus Areas in India:**
 - Conservation of endangered species such as the **tiger, elephant, and rhino**.
 - Addressing issues related to **river ecosystems, forests, and wetlands**.
 - Promoting **environmental education** and **sustainable practices** in local communities.

ACADEMIC FREEDOM INDEX REPORT, 2024

Scholars at Risk (SAR) Academic Freedom Monitoring Project, a network of **665 universities** worldwide, including Columbia, Duke, and New York University.

- **Report Title:** "Free to Think 2024"
- **Scope:** Analyses academic freedom in 51 countries, documenting **391 attacks on higher education** communities from **July 1, 2023, to June 30, 2024**.
- **Countries of Focus:** India, Afghanistan, China, Germany, Israel, Russia, Sudan, and the U.S., among others.

Key Findings on India

- **Academic Freedom Score Decline:** India's score on the **Academic Freedom Index (AFI)** fell from **0.6 to 0.2 points** between **2013 and 2023**, marking it as "**completely restricted**", its lowest since the **mid-1940s**.
- **Primary Threats Identified:**
 - **Political Control:** SAR notes political influence and attempts to impose a Hindu nationalist agenda at universities.
 - **Restrictions on Student Protests:**
 - **Jawaharlal Nehru University (JNU)** barred protests near academic buildings.
 - **South Asian University (SAU)** prohibited protests entirely on campus.
- **Central vs. State Government Conflicts:**
 - Ongoing disputes over control of higher education, particularly in **Kerala, Tamil Nadu, West Bengal, and Punjab**.

- Example: **Kerala's** amendment to remove the Governor as university Chancellor led to legal challenges in the Supreme Court.
- **Intimidation of Scholars:**
 - Resignation of **Sabyasachi Das**, assistant professor at Ashoka University, following criticism for a paper on political manipulation in elections.
 - Instances of barred entry and detention, e.g., **Professor Natasha Kaul** denied entry for critiques, and over **200 students** detained during protests outside the Israeli Embassy.

Academic Freedom Index (AFI)

- **Indicators:** The AFI assesses academic freedom globally based on five indicators:
 1. **Freedom to Research and Teach**
 2. **Freedom of Academic Exchange and Dissemination**
 3. **Institutional Autonomy**
 4. **Campus Integrity**
 5. **Freedom of Academic and Cultural Expression**
- **Scale:** 0 (low) to 1 (high); current data includes **179 countries** and territories.
- **Global Decline:** The report highlights a broader issue of threats to academic freedom, with documented attacks in **51 countries** affecting researchers and students.

GLOBAL INNOVATION INDEX (GII) 2024

- **Rank:** India has risen to **39th place among 133 economies**, up from **81st in 2015**.
- **Regional Leader:** India leads in the **Central and Southern Asia region** for knowledge and technology outputs (rank 22), creative outputs (rank 43), institutions (rank 54), and business sophistication (rank 54).
- **Key Strengths:**
 - **ICT Services Exports:** India ranks **1st globally**.
 - **Venture Capital Received:** India ranks **6th**.
 - **Intangible Asset Intensity:** India ranks **7th**.
 - **Unicorn Companies:** India ranks **8th globally**.
- **Innovation Ecosystem:** Major cities like **Mumbai, Delhi, Bengaluru, and Chennai** are listed among the world's **top 100 S&T clusters** (hubs for research, development, and technological advancements).

Global Innovation Index (GII) Overview

- **Published by:** **World Intellectual Property Organization (WIPO)**.
- **Purpose:** Acts as a benchmark for innovation policies and strategies worldwide, aiding policymakers and business leaders in assessing innovation-driven economic growth.
- **Criteria:** The GI measures **institutions, human capital, infrastructure, market sophistication, business sophistication, knowledge & technology outputs, and creative outputs**.

Top 10 Most Innovative Economies in 2024

1. **Switzerland** – Score: **67.5**; ranks 1st for **knowledge and technology outputs and creative outputs**.
2. **Sweden** – Score: **64.5**.
3. **United States** – Score: **62.4**.
4. **Singapore** – Score: **61.2**.
5. **United Kingdom** – Score: **61.0**.
6. **South Korea** – Score: **60.9**.
7. **Finland** – Score: **59.4**.
8. **Netherlands** – Score: **58.8**.
9. **Germany** – Score: **58.1**.
10. **Denmark** – Score: **57.1**.

Global Trends and Challenges in Innovation

- **R&D Growth:** Slowed to **3%** following booms in **2020 and 2022**.

- **Venture Capital:** Investments decreased by **39%**.
- **Macroeconomic Factors:** Global slowdown, reduced funding, and productivity declines have impacted innovation ecosystems globally.

India's Initiatives for Innovation

1. **Atal Innovation Mission (AIM):** Expands the innovation ecosystem through nationwide initiatives in schools, universities, and industries.
2. **Anusandhan National Research Foundation (ANRF):** Supports research and innovation across India's universities and research institutions.
3. **Biotechnology Industry Research Assistance Council (BIRAC):** Established by the Department of Biotechnology (DBT), supports biotech enterprises in research and innovation.
4. **National Research Foundation (NRF):** Part of **National Education Policy 2020**, it funds interdisciplinary research to promote a culture of research and innovation in higher education.

About the World Intellectual Property Organization (WIPO)

- **Established:** **1967** via the WIPO Convention.
- **Headquarters:** **Geneva, Switzerland.**
- **Role:** WIPO is a **self-funding agency of the United Nations** with **193 member states**, dedicated to advancing a balanced IP system that encourages innovation and creativity.

NOBEL PRIZE 2024

The **Nobel Prizes** are prestigious international awards given annually in recognition of outstanding contributions in six fields: **Physics, Chemistry, Medicine, Literature, Peace, and Economic Sciences.**

- **Founding:** Established by **Alfred Nobel's will** in **1895**. Nobel, a Swedish inventor and industrialist, left most of his fortune to fund these awards.
- **First Awards:** The **first Nobel Prizes** were awarded in **1901** for Physics, Chemistry, Medicine, Literature, and Peace.
- **Fields:**
 - **Physics:** Awarded by the **Royal Swedish Academy of Sciences** for discoveries that advance understanding in physics.
 - **Chemistry:** Also awarded by the **Royal Swedish Academy of Sciences** for significant chemical research and discoveries.
 - **Medicine (Physiology or Medicine):** Given by the **Nobel Assembly at the Karolinska Institute** in Sweden for discoveries that benefit humanity's understanding and treatment of diseases.
 - **Literature:** Awarded by the **Swedish Academy** for remarkable contributions in the field of literature.
 - **Peace:** Awarded by the **Norwegian Nobel Committee** in Norway to individuals or groups who work toward peace and resolving conflicts.
 - **Economic Sciences:** Established in **1968** by the **Swedish central bank (Sveriges Riksbank)** in memory of Alfred Nobel. It is officially known as the **Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel.**
- **Prize Components:**
 - Each award includes a **medal, a diploma, and a cash prize.** The cash prize varies, with recent amounts around **10 million Swedish kronor (SEK).**
 - The prize amount can be split between **up to three laureates** in each category.
- **Selection Process:**
 - Nobel laureates are chosen through a **rigorous selection** process involving nominations, reviews by committees, and evaluations by relevant experts.
 - Only **individuals or organizations** are eligible for the Peace Prize, while the other fields are restricted to individuals.
 - Nobel committees send out **invitations for nominations** to select professors, previous laureates, and relevant institutions worldwide.
 - **Nominations** are kept **secret for 50 years.**

- **Award Ceremony:** Held annually on **December 10**, the anniversary of Alfred Nobel's death, in **Stockholm, Sweden**, for all categories except the Peace Prize, which is awarded in **Oslo, Norway**.

Nobel Prize 2024 Winners

Physics

- **Recipients:** **John J. Hopfield** (USA) and **Geoffrey E. Hinton** (British-Canadian)
- **Achievement:** Development of **artificial neural networks** using statistical physics concepts, advancing **machine learning** and **artificial intelligence**.
- **Artificial Neural Networks:** Core of **machine learning and AI**, enabling pattern recognition in large datasets.
- **Applications:** Used in **particle physics, material science, astrophysics**, and practical tools like **facial recognition**.

Physiology/Medicine

- **Recipients:** **Victor Ambros** and **Gary Ruvkun** (USA)
- **Achievement:** Discovery of **microRNAs** and their role in **gene regulation**, significantly impacting **understanding of cellular functions** and diseases like cancer.
- **MicroRNAs:** Small molecules that regulate genes post-transcriptionally.
- **Key Discoveries:** MicroRNAs **bind to messenger RNA**, affecting protein production and impacting diseases like **cancer** and **heart disease**.

Chemistry

- **Recipients:** **David Baker** (USA), **Demis Hassabis** (UK), and **John M. Jumper** (USA)
- **Achievements:**
 - **David Baker:** Computational **protein design**
 - **Demis Hassabis** and **John Jumper:** **Protein structure prediction** through AI model **AlphaFold2**.
- **Protein Design:** David Baker's work has led to **novel proteins** for use in **pharmaceuticals, vaccines, sensors**.
- **AlphaFold2:** Developed by Demis Hassabis and John Jumper, predicts **3D protein structures**—aiding in **antibiotic resistance** and **plastic degradation**.

Literature

- **Recipient:** **Han Kang** (South Korea)
- **Achievement:** Known for her **intense poetic prose** addressing **historical traumas** and the **fragility of human life**. Famous for works like **The Vegetarian**.
- **Han Kang:** Explores **historical traumas** and human resilience, celebrated for **The Vegetarian** and **Love of Yeosu**.

Peace

- **Recipient:** **Nihon Hidankyo** (Japan)
- **Achievement:** Advocacy for a **nuclear-free world** and raising awareness of the **humanitarian impact of nuclear weapons** through the stories of **Hibakusha** (atomic bomb survivors).
- **Nihon Hidankyo:** Formed on **August 10, 1956**, represents **atomic bomb survivors** from **Hiroshima** and **Nagasaki**.
- **Advocacy:** Works towards **nuclear disarmament** by sharing **Hibakusha experiences** globally to reinforce the **nuclear taboo**.

Economics

- **Recipients:** **Daron Acemoglu**, **Simon Johnson**, and **James A. Robinson** (USA)
- **Achievement:** Research on how **institutions shape economic prosperity**, particularly in post-colonial contexts, explaining **global inequality**.
- **Research Focus:** Influence of **institutions on prosperity**; highlights that **inclusive institutions** promote growth, while **extractive institutions** lead to stagnation.
- **Framework:** Emphasizes the role of **resource allocation, mass mobilization**, and **elite commitment** in shaping institutions.

Historical Context of the Nuclear Attacks on Japan

- **August 6, 1945:** The USA dropped “**Little Boy**” on **Hiroshima**, killing **70,000 instantly**; death toll later exceeded **100,000**.
- **August 9, 1945:** “**Fat Man**” was dropped on **Nagasaki**, killing **40,000** immediately.
- **August 15, 1945:** Japan’s Emperor Hirohito announced surrender, warning of the “**total extinction of human civilization**” if war continued.

Hibakusha’s Role in Nuclear Disarmament

- **Global Advocacy:** Hibakusha survivors share **first-hand accounts** to promote nuclear disarmament and prevent nuclear use.
- **Nihon Hidankyo:** Seeks **compensation for A-bomb victims** and **elimination of nuclear weapons**.

Other Nobel Peace Prize Recipients for Nuclear Disarmament

- **1974:** **Eisaku Sato** (Japan’s former PM) for Japan’s **non-nuclear policy**.
- **2017:** **International Campaign to Abolish Nuclear Weapons (ICAN)** for efforts toward a treaty banning nuclear arms, collaborating with **Nihon Hidankyo**.

RBI JOINS PROJECT NEXUS

An **international initiative** aimed at enabling **instant cross-border retail payments** by interconnecting domestic **Fast Payment Systems (FPSs)**.

- **Participants:** Initiated with the **FPSs of India, Malaysia, Philippines, Singapore, and Thailand**.

About Project Nexus

- **Conceptualization:** Developed by the **Bank for International Settlements (BIS) Innovation Hub**.
- **Objective:** To connect **domestic instant payment systems (IPS)** globally to **enhance cross-border payments**.
- **Significance:** It is the **first BIS Innovation Hub project** in payments to progress towards **live implementation**.

Key Members and Agreement

- **Founding Members:**
 - **Bank Negara Malaysia (BNM)**
 - **Bank of Thailand (BOT)**
 - **Bangko Sentral ng Pilipinas (BSP)**
 - **Monetary Authority of Singapore (MAS)**
 - **Reserve Bank of India (RBI)**
- **Agreement Signed:** **June 30, 2024**, in **Basel, Switzerland**.
- **Future Expansion:** **Indonesia** will join the platform in the coming phases.

Functionality and Benefits

- **Standardization:** Nexus aims to **standardize IPS connections** by centralizing them through a single platform, eliminating the need for custom connections for each new country.
- **Efficiency:** With **one connection to Nexus**, an FPS can connect to other countries’ payment systems, allowing **instant cross-border transactions**.
- **Speed:** The BIS states that **cross-border payments** can be completed **within 60 seconds**.
- **International Reach for UPI:** Nexus supports **RBI’s ongoing bilateral efforts** to expand **UPI’s reach globally**.

Countries Currently Linked with India’s FPS (UPI)

- **India’s UPI** is linked with countries through bilateral agreements, including **Bhutan, UAE, France, Sri Lanka, and Mauritius**.

Bank for International Settlements (BIS)

- **Established:** **1930**, headquartered in **Basel, Switzerland**.
- **Members:** **63 central banks**, representing **95% of world GDP**.
- **Functions:**

- **Central Bank Cooperation:** Provides a forum for global cooperation.
- **Financial Stability:** Develops standards and policies for **monetary stability**.
- **Innovation:** Focuses on **FinTech** through **BIS Innovation Hub**.

BIS Notable Contributions

- **Basel Accords:** A set of global banking regulations:
 - **Basel I** (1988): Minimum capital requirements for banks.
 - **Basel II** (2004): Added market and operational risk standards.
 - **Basel III** (2010-2017): Enhanced **capital, liquidity, and leverage** requirements.
- **Innovation Hub:** Promotes **digital currency research** and **cybersecurity**.
- **Financial Stability Board (FSB):** Established with BIS support to enhance **global financial stability**.

COMMITTEE TO REVISE THE BASE YEAR FOR GDP CALCULATION

Ministry of Statistics and Programme Implementation (MoSPI) has formed a **26-member committee** in **July 2024** to oversee the revision of the base year for **India's national accounts**.

- **Committee Chair:** **Biswanta Goldar**, a noted economist.
- **Primary Objective:** To recommend an updated base year to improve the **accuracy of economic analysis and policy-making** by aligning with recent economic realities and incorporating new data sources.

Mandate and Functions of the Committee

- **Base Year Recommendation:** Propose a new base year for national accounts, with **2020-21** being considered to reflect recent economic changes.
- **Alignment with Key Indices:** The revision aims to align national accounts with the following indices:
 - **Wholesale Price Index (WPI):** Measures wholesale-level price changes for goods.
 - **Producer Price Index (PPI):** Tracks price changes from the perspective of producers, useful for capturing manufacturing sector trends.
 - **Consumer Price Index (CPI):** Measures retail-level inflation for consumers, with **2012** as the current base year.
- **Duration of the Committee's Tenure:** Five years or until the completion of the base year revision process.
- **Methodology Enhancement:** The committee will advise on improving methods for compiling and presenting **National Accounts Statistics**. This includes introducing **seasonal adjustments in quarterly accounts** and following the latest **UN standards** for sector-wise accounts.

Current and Proposed Base Year for National Accounts

- **Current Base Year: 2011-12.** This base was last updated in **2015**, replacing the earlier base year of **2004-05**.
- **Proposed Base Year: 2020-21.** This update aims to better capture the **structural changes** that have occurred in India's economy over the last decade, including changes in **consumption patterns, sectoral contributions, and technological advancements**.

Significance of Regular Base Year Revisions

- **Improves Accuracy:** Regularly updating the base year ensures that economic indicators, such as GDP, **reflect structural changes** in the economy. These changes include evolving consumer behaviors, emerging sectors, and updated sector weights.
- **Global Alignment:** Revising the base year aligns with international standards, such as those recommended by the **United Nations System of National Accounts (SNA)**. In **2008**, SNA advised using a **recent and typical year** as the base to accurately capture economic shifts.
- **Frequency of Updates:** Ideally, the base year should be updated every **five years** to incorporate the latest data and economic shifts. This periodic update ensures that economic data remains relevant and reliable for policy decisions.

Role of Key Economic Indicators in the Revision

- **Purpose of the Base Year:** Serves as a benchmark for calculating economic indicators, allowing **comparative assessments** across different time periods.

- **Economic Indicators Involved:**
 - **Index of Industrial Production (IIP):** Measures the output of various industries, indicating the industrial sector's performance.
 - **Wholesale Price Index (WPI):** Reflects wholesale price changes and is crucial for assessing inflationary trends in the economy.
 - **Consumer Price Index (CPI):** Tracks retail-level inflation, helping to understand the impact of price changes on consumers.
 - **National Income Statistics:** Provides a broad measure of the total income generated within the economy.
- **Current Base Year Use:** As of now, most economic indicators in India, including IIP, WPI, and CPI, are based on **2011-12** data. This proposal to update the base year to **2020-21** reflects MoSPI's commitment to ensuring economic indices align with **current economic scenarios**.

Methodology and Challenges in GDP Calculation

- **Definition and Formula of GDP:** Gross Domestic Product (GDP) measures the **total economic output** from the **consumer's perspective**. It includes private consumption, gross investment, government investment, government spending, and the **net difference between exports and imports**.
 - **GDP Formula:** $GDP = \text{Private Consumption} + \text{Gross Investment} + \text{Government Investment} + \text{Government Spending} + (\text{Exports} - \text{Imports})$
- **Revised Approach in 2015:**
 - Shifted from **GDP at factor cost** to **GDP at market price**, aligning with global practices.
 - **GDP at Market Price Calculation:** $GDP \text{ at Factor Cost} + \text{Indirect Taxes} - \text{Subsidies}$.
 - **Gross Value Added (GVA):** Adopted as an additional measure to assess economic activity from the **supply side**.
- **GVA vs. GDP:**
 - **GVA** provides insights from the **producer's side**, showing sector-specific growth rates and helping identify areas that need **policy intervention**.
 - **GDP** offers a **consumer-side view** and is essential for **cross-country comparisons** and tracking overall economic growth.

Functions of the Advisory Committee Members

- **Key Experts:** The committee includes notable economists and statisticians such as:
 - **G C Manna:** Former Director-General, CSO
 - **Chetan Ghate:** Institute of Economic Growth
 - **Partha Ray:** National Institute of Bank Management (NIBM), Pune
- **Contributions:** Members provide **statistical and economic expertise** to advise on new methodologies, data sources, and aligning India's national accounts with **international standards**.

Additional Considerations for the Base Year Revision

- **New Data Sources:** The committee may consider using **Goods and Services Tax (GST) data**, which offers comprehensive insights into tax revenue and economic activity. Other data sources include:
 - **Annual Survey of Unincorporated Sector Enterprises (ASUSE):** Captures economic contributions from informal sector units.
 - **Double Deflation Technique:** A proposed methodology to improve **GDP accuracy** by separately adjusting the input and output prices.
- **Exclusion of Atypical Years:** Certain years are excluded as potential base years due to significant economic disruptions:
 - **2016** (Demonetization)
 - **2017-18** (Goods and Services Tax implementation effects)
 - **2019-21** (COVID-19 pandemic impact)

Historical Context of Base Year Revisions in India

- **First Base Year:** Since **1956**, India has revised the base year seven times.

- **Last Revision:** The most recent revision was in **2015**, shifting from **2004-05** to **2011-12** to accommodate changes recommended by the **UN SNA 2008**.
- **Importance of Frequent Revisions:** Regular updates ensure that **economic measures accurately reflect current conditions**, allowing policymakers to respond effectively to **structural changes** in the economy.

GLOBAL INDIAAI SUMMIT

India emphasized making **AI accessible to all** across socio-economic backgrounds, focusing on both **domestic needs and global leadership** in AI. The summit also provided a platform for **Global South** countries to share AI-related concerns, highlighting India's role in connecting the **Global North and South**.

- **INDIAai Mission Objectives:** Demonstrated commitment to an **inclusive AI ecosystem** through core focus areas:
 - **Compute Capacity**
 - **Foundational Models and Datasets**
 - **Application Development and Future Skills**
 - **Startup Financing and Safe AI**
- Discussions included building **multiple Large Language Models (LLMs)** for diverse Indian needs, **AI-ready data standardization**, and a **multi-stakeholder partner ecosystem**.
- **Global Partnerships:**
 - **CAIGP (Collaborative AI on Global Partnership):** Unites **GPAI members and experts** to bridge the global AI divide. India, as **GPAI Lead Chair in 2024**, facilitates discussions on key AI issues, promoting **trustworthy AI**.
 - **GPAI Consensus:** Consensus was reached on a human-centric AI approach, acknowledging both its transformative potential and associated risks.
 - **OECD-GPAI Partnership:** Announced a partnership with the **Organisation for Economic Co-operation and Development (OECD)** to reinforce global AI cooperation. Despite India's push for an independent GPAI identity, the **secretariat remains with OECD**; however, non-OECD GPAI members have equal participation under OECD oversight.
- **Startup Ecosystem Support:**
 - **Funding:** **Rs. 2,000 crore** from the **INDIAai Mission's Rs. 10,372 crore** outlay allocated to support **Indian startups** in developing AI-based solutions.
 - **Infrastructure Access:** Plans to provide **subsidised GPU infrastructure** for startups to boost compute power.
 - Addressed key challenges like **dataset access, skill development**, and fostering AI innovation.
- **AI Education:** Emphasized the need for **age-appropriate AI learning** environments to promote AI literacy.
- **Sector-Specific AI Applications:**
 - **Agriculture:** Focused on AI applications within **India's AgriStack** and data-driven credit disbursement, aimed at **timely information collection** for decision-making in farming.
 - **Governance:** Discussed legal frameworks and **dataset management** in government services to improve efficiency and citizen services.
- **Ethical and Human-Centric AI:** Summit reinforced a commitment to **trustworthy, human-centered AI**.
 - **OECD and UNESCO Recommendations:** Participants reaffirmed the **OECD Recommendation on AI** and the **UNESCO Recommendation on Ethics of AI**.
 - UNESCO's recommendation focuses on **human rights, transparency, fairness, and human oversight** of AI. Key areas include **data governance, environmental sustainability, gender equality, education, health, and social well-being**.

Artificial Intelligence Preparedness Index (AIPI)

- **Purpose:** AIPI evaluates the AI readiness of **174 economies** based on **digital infrastructure, human capital, labor policies, innovation, integration, and regulation**.
- **Country Classification:** Countries are categorized as **Advanced Economies (AE)**, **Emerging Market Economies (EM)**, and **Low-Income Countries (LIC)**.

- **Top-Rated Countries:** Highest-rated AEs include **Singapore (0.80)**, **Denmark (0.78)**, and **United States (0.77)**.
- **India's Ranking:** India ranks **72nd with a score of 0.49**, classified as an EM. It performs well among emerging economies but **lags behind regional peers like China (0.63) at 31st**.

International Monetary Fund (IMF)

- **Founded:** 1944, headquartered in **Washington, D.C.**
- **Objectives:** **Global monetary cooperation, financial stability, trade promotion**, and poverty reduction.
- **Key Reports:** **World Economic Outlook** and **Global Financial Stability Report**.
- **Head:** **Kristalina Georgieva** serves as the Managing Director and Chair of the Executive Board of the International Monetary Fund (IMF).

INDIA GRANTS RECORD PATENTS

India has seen a significant rise in the number of patents granted. Between **March 2023 and March 2024**, over **1 lakh patents** were awarded, averaging **250 patents granted daily**.

- **Patent Application Frequency:** On average, a technology seeks intellectual property protection every **6 minutes** in India.

Understanding Patents

- **Definition:** A patent provides exclusive rights to an invention's owner, preventing others from making, using, or selling the invention for **20 years** from the filing date in India, in exchange for full public disclosure.
- **Patent Criteria:** To qualify for a patent, an invention must be **novel, non-obvious**, and have **industrial applicability**.
- **Governing Law:** Patents in India are governed by the **Patents Act, 1970**, which undergoes regular updates to adapt to evolving requirements.

Jurisdiction and Scope

- **Territorial Nature of Patents:** Patents granted in India are valid only within India. Separate patents are needed to protect an invention in other countries.

Recent Developments in Intellectual Property

- **Geographical Indications (GI):** GI registrations have tripled over the previous year, reflecting increased recognition of region-specific products.
- **Copyright:** The **2023-24 fiscal year** saw a record **36,378 copyright registrations**, with ongoing efforts to raise awareness in the creative industries.
- **Design Registrations:** FY **2023-24** recorded the highest number of design registrations to date, with **27,819** designs registered.
- **IP Awareness:** The **National Intellectual Property Awareness Mission (NIPAM)** has provided IP training to **24 lakh youth** across over **7,000 institutions** in the past two years, highlighting India's commitment to promoting intellectual property.

Patents Act, 1970

- **Introduction:** Enacted in **1972**, replacing the **Indian Patents and Designs Act, 1911**.
- **Amendments:** Key changes in the **Patents (Amendment) Act, 2005** included extending product patents to fields like **food, drugs, chemicals, and microorganisms**.
- **Compulsory Licensing:** Allows the government to grant licenses to third parties for patented inventions without the patent owner's consent, under certain conditions.

Key Changes Under Patents (Amendment) Rules, 2024

- **Request for Examination (RFE) Timeline:** Reduced from **48 months** to **31 months** from the priority date.
- **Certificate of Inventorship:** New provision to formally recognize inventors.
- **Filing Statements:** Frequency reduced to once every **three financial years**.
- **Opposition Procedures:** Adjustments made to timelines for pre-grant and post-grant opposition.

Section 3 and 4 of Patents Act, 1970

- **Section 3:** Excludes patents for **frivolous claims**, inventions against natural laws, and discoveries of scientific principles.
- **Section 4:** Excludes patents for inventions related to **atomic energy** as per **Section 20 of the Atomic Energy Act, 1962**.

Intellectual Property Rights (IPR) Objectives

- **Definition:** Intellectual Property (IP) includes any original human creations in arts, sciences, technology, etc.
- **Objectives:** IPRs protect creators' financial interests, balance public and private interests, and safeguard traditional knowledge.

Types of Intellectual Property Rights

- **Patents:** Protect inventions with industrial or commercial application.
- **Copyrights:** Protect authors' rights over literary and artistic works for at least **50 years** posthumously.
- **Trademarks:** Symbols distinguishing one company's products or services from others.
- **Industrial Designs:** Protect decorative or aesthetic designs in objects.
- **Geographical Indications:** Mark products with qualities tied to a specific region.
- **Trade Secrets:** Rights on private information with commercial value.

TRIPS Agreement (1994)

- **Coverage:** Encompasses copyrights, trademarks, geographical indications, patents, and trade secrets.
- **Three Characteristics:** Standards, enforcement, and dispute settlement guidelines.

Intellectual Property Rights in India

- **KAPILA Programme:** Aims to raise IP awareness among students and faculty.
- **International Memberships:** India is a member of WTO and WIPO, adhering to the **TRIPS Agreement**.

AXIOM 4 MISSION

India has shortlisted **two astronaut-designates** for the **Axiom-4 mission** to the **International Space Station (ISS)**, marking a milestone in India-U.S. space collaboration.

- **Indian Astronauts:** Group Captains **Shubhanshu Shukla** and **Prasanth Balakrishnan Nair** have been selected for Axiom-4. Shukla will be the **prime mission pilot**, with Nair as backup.
- **Training:** Both astronauts will undergo **training in the U.S.** starting **August 2024**.
- **ISRO-NASA Collaboration:** Axiom-4 is part of the **ISRO-NASA joint effort** and follows a **Space Flight Agreement** with **Axiom Space Inc.**

About Axiom-4 Mission

- **Axiom Mission 4 (Ax-4):** A private spaceflight mission to the **ISS** operated by **Axiom Space** using a **SpaceX Crew Dragon** spacecraft.
- **Collaboration:** Conducted in partnership with **NASA**; follows **Axiom Missions 1, 2, and 3**.
- **Launch Date:** Scheduled for **2024** from **Kennedy Space Center**, Florida.
- **Mission Duration:** Docking with the ISS for a **14-day mission**.
- **Goal:** Part of Axiom Space's mission to establish a **sustainable human presence in Low Earth Orbit (LEO)**.

Mission Objectives

- **Commercial Space Exploration:** To expand commercial space activities, including **scientific research**, **technology development**, and **space tourism**.
- **International Collaboration:** Features a diverse crew from multiple countries, showcasing **global cooperation** in space.
- **Scientific Research:** Enables experiments in **materials science**, **biology**, **Earth observation**, and more in the **microgravity** environment.
- **Technology Demonstration:** Tests new **spacecraft design**, **life support**, and **communication systems**.
- **Public Inspiration:** Aims to inspire interest in **STEM** fields by showcasing human space achievements.

Key Features

- **Spacecraft and Crew:** The **SpaceX Dragon** spacecraft, launched on a **Falcon 9 rocket**; includes professional astronauts, researchers, and possibly tourists.
- **Mission Duration:** Expected to last **14 days**, with activities including **scientific experiments, tech demonstrations, and educational outreach**.
- **Commercial Space Station:** Axiom Space's long-term vision is to establish the **first commercial space station**, eventually transitioning from the ISS to an independent orbital outpost.

About the International Space Station (ISS)

- **Launch Year:** 1998; a **modular space station** facilitating the addition or removal of modules.
- **Purpose:** A **laboratory in space** for **scientific research** in fields like **astrobiology, astronomy, meteorology, and physics**.
- **First Crew Arrival:** **November 2, 2000**.
- **Orbit:** Located **400 km** above Earth; completes an orbit in **90 minutes** with **16 orbits per day**.
- **Solar Arrays:** Equipped with **eight solar arrays** generating **160 kilowatts** of power.

Participating Space Agencies

- **NASA (USA)**
- **Roscosmos (Russia)**
- **JAXA (Japan)**
- **ESA (Europe)**
- **CSA (Canada)**

The ISS is divided into:

- **Russian Orbital Segment (ROS)** – Operated by **Russia**.
- **United States Orbital Segment (USOS)** – Operated by the **US and other nations**.

Context and Further Details

- **Axiom-4 Mission Contract:** NASA and Axiom Space have signed an agreement for **private astronaut missions** to the ISS, with **Axiom-4 scheduled for August 2024**.
- **Training Focus:** Includes **spacecraft systems** and **emergency protocols** to prepare for space station docking and mission operations.

India's Gaganyaan Program: India's **Gaganyaan mission** aims for an indigenous manned spaceflight by **post-2025** following **two unmanned trials**.

India's Space Station Ambitions: ISRO aims to establish a **20-ton space station** for microgravity research by **2035**.

12TH INDIA-UAE JOINT DEFENCE COOPERATION COMMITTEE MEETING

The **12th Joint Defence Cooperation Committee (JDCC) meeting** between **India and the United Arab Emirates (UAE)** took place in **Abu Dhabi** with a focus on enhancing bilateral defence and security cooperation.

Key Highlights of the 12th JDCC Meeting

- **Collaboration Areas:** Discussions covered a wide range of cooperation areas, including **training, joint military exercises, defence industrial cooperation, expert exchanges, and research & development**.
- **Regional Security Focus:** The two nations reviewed the **regional and maritime security situation** and emphasized the importance of **enhanced collaboration** to address security challenges.
- **Mutual Training and Exchange Programs:** Both countries agreed to **exchange training opportunities** in niche areas and **conduct mutual visits** across different domains for experience sharing.

About the India-UAE JDCC

- **Establishment:** The JDCC was established in **2006** as a platform to enhance defence and security cooperation between India and the UAE.
- **Previous Meetings:** The JDCC has held **11 rounds** of meetings before the recent 12th meeting.

- **Objective:** The JDCC is integral to strengthening the **Comprehensive Strategic Partnership** between India and the UAE, focusing on increasing mutual defence capabilities.

India-UAE Defence Exercises

- **Desert Eagle:** This is an **air force exercise** between India and the UAE, aimed at enhancing air force coordination and tactical capabilities.
- **Desert Cyclone:** A **joint military exercise** involving both countries' armed forces, fostering interoperability and defence cooperation.

India-UAE Defence Relations

1. **Bilateral Defence Cooperation:**

- The two countries have established a strong defence relationship, marked by **high-level exchanges** among **Service Chiefs, functional exchanges, and military education programs**.
- Regular **port visits** by naval ships from both countries are part of this bilateral defence cooperation.

2. **Annual Defence Dialogue:**

- An **Annual Defence Dialogue** between India and the UAE provides a formal platform for discussing security and defence cooperation.
- This dialogue helps to strategize and set future cooperation initiatives in motion.

3. **Institutional Framework:**

- Defence cooperation is structured through the **Joint Defence Cooperation Committee (JDCC)** at the Ministry level.
- **Naval Staff Talks** at the Headquarters level aim to explore and identify new cooperation opportunities.
- A **Permanent Defence Adviser (DA)** was appointed in **March 2013**, facilitating stronger ties in training and exchange programs.

Specific Instances of Defence Cooperation

• **Bilateral Exercises:**

- In **2016**, the Indian Air Force (IAF) conducted a bilateral exercise with UAE's Air Force.
- In **2018**, UAE Air Force officers participated as **observers** in a **Trilateral Air Exercise on Humanitarian Assistance & Disaster Relief (HADR)**.
- The **Gulf Star 1** exercise, held in **March 2018**, was a **bilateral naval exercise** with Indian Navy ships.

- **Mutual Port Visits:** Indian Navy and Coast Guard ships make regular port calls to **Abu Dhabi** and **Dubai**, reinforcing mutual cooperation.

- **IDEX/NAVDEX Participation:** India's participation in the **IDEX/NAVDEX** exhibitions in Abu Dhabi highlights continued engagement and presence in UAE's defence sector.

High-Level Visits and Exchanges

- **Expos and Shows:** UAE delegations have participated in **DefExpo 2018** and **Aero India 2019** held in India, strengthening bilateral defence industry engagement.
- **Dubai Airshow Indian Pavilion:** The first **Indian pavilion** at the Dubai Airshow saw participation from **HAL, DRDO, and BDL**, showcasing India's defence production capabilities.

BIODIVERSITY BEYOND NATIONAL JURISDICTION (BBNJ) AGREEMENT

The Union Cabinet, chaired by the **Prime Minister of India**, approved India's participation in the **Biodiversity Beyond National Jurisdiction (BBNJ) Agreement**.

- **Ministry of Earth Sciences:** This ministry will oversee India's implementation of the BBNJ Agreement.

About the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement

- **Also Known As:** The **High Seas Treaty**, an international treaty under the **United Nations Convention on the Law of the Sea (UNCLOS)**.
- **Objective:** It aims to address concerns regarding the **protection and sustainable use of marine biodiversity** in high seas areas beyond national jurisdiction.

- **Mechanisms for Sustainability:** Establishes mechanisms for sustainable use of marine biological resources through **international cooperation**.
- **Sovereign Rights:** Prohibits any party from claiming **sovereign rights** over high seas marine resources and ensures **equitable benefit-sharing**.
- **Principles:** Based on an **ecosystem-centric approach**, the **precautionary principle**, and supports the use of **traditional and scientific knowledge**.
- **Environmental Impact Assessments (EIA):** Establishes guidelines for **mandatory EIAs** for potentially harmful activities in marine ecosystems.
- **Alignment with SDGs:** Supports several **Sustainable Development Goals (SDGs)**, especially **SDG 14** (Life Below Water).

Implementation History and Structure

- **Third Agreement under UNCLOS:** The BBNJ Agreement will be the third such agreement after:
 - The **1994 Part XI Implementation Agreement** (concerning the international seabed area).
 - The **1995 UN Fish Stocks Agreement** (focusing on migratory and straddling fish stocks).
- **Adoption and Signing Period:** Agreed upon in **March 2023**, open for signing until **September 2025**.
- **Ratification Requirement:** Will become legally binding **120 days after 60 countries ratify** the agreement.

Key Features of the Treaty

1. **Environmental Impact Assessments (EIAs):** Mandatory EIAs for high seas activities, with results to be made publicly available.
2. **Benefit-Sharing of Marine Genetic Resources (MGR):** Establishes fair-sharing principles for MGR derived from high seas research.
3. **Marine Biodiversity Conservation:** Recognizes the need for conserving high seas biodiversity, proposing a **30% ocean protection goal**.
4. **Capacity Building for Developing Nations:** Supports marine technology transfer to **developing countries** to facilitate marine conservation.

Global Ratification Efforts

- **Ratification Progress:** **88 countries** have signed the treaty, with **Chile and Palau** as the first two to ratify it. At least **60 ratifications** are needed for the treaty to come into effect.
- **Blue Leaders High-Level Event:** Held in **Belgium**, calling on countries to ratify the BBNJ Treaty to protect high seas from **pollution, climate change, and overfishing**.
- **Upcoming Platform:** The **United Nations Ocean Conference in 2025** will further the implementation discussions.

India's Benefits from the BBNJ Agreement

- **Strategic Presence Enhancement:** Enables India to extend its presence beyond its **Exclusive Economic Zone (EEZ)**.
- **Marine Conservation and Collaboration:** Fosters India's involvement in **marine conservation, research, technology transfer, and capacity-building**.
- **Support for Sustainable Oceans:** Aligns with India's commitment to keeping **oceans healthy and resilient**.

About the High Seas

- **Definition:** Areas **beyond 200 nautical miles** from the EEZ of coastal countries, as defined by the **1958 Geneva Convention**.
- **Extent:** Comprise **64% of the ocean surface** and cover approximately **43% of Earth's surface**.
- **Biodiversity Significance:** Home to about **270,000 known species**, with many undiscovered species contributing to **climate regulation**.
- **Protection Status:** Only **1.44%** of the high seas are currently protected.
- **Threats:** High seas face pressures such as **overfishing, seabed mining, noise pollution, and plastic dumping** (estimated **17 million tonnes** in 2021, per UN).

The United Nations Convention on the Law of the Sea (UNCLOS)

- **Enforcement:** Came into effect on **November 16, 1994**.
- **Mandate:** Establishes the legal framework governing **rights, duties, and resources** within the world's oceans.
- **Importance:** Ensures **order and fairness** in ocean resource utilization, covering **navigation, scientific research, and deep-sea mining**.
- **Members:** Ratified by **160+ countries**.
- **Significance:** Critical for **environmental protection** and **maritime dispute resolution**.
- **International Seabed Authority:** Created by UNCLOS to regulate **ocean floor mining** beyond national jurisdictions.

Ratification Process

- **Definition:** Ratification is the formal process by which a country agrees to be legally bound by an international treaty.
- **Distinction from Signing:** **Signing** implies agreement with the treaty's provisions but lacks legal binding until **ratification**.
- **Domestic Approval:** Ratification typically requires **legislative approval** in countries with parliamentary systems. In others, **executive approval** suffices.
- **Example:** The United States signed but did not ratify the **Kyoto Protocol** due to the Senate's lack of approval.

UNESCO WARNS OF 90% SOIL DEGRADATION BY 2050

During an international gathering in **Agadir, Morocco**, the **Director-General of UNESCO** appealed to its **194 Member States** to take decisive action on **soil conservation and restoration**.

- **Projection of Future Soil Degradation:** The organization warned that **up to 90% of global soil could be degraded by 2050**, posing a critical risk to **biodiversity** and **human well-being**.

UNESCO's Analysis of Soil Degradation Trends

- **Current Status:** The **World Atlas of Desertification** indicates that **75% of the world's soils** are already degraded, impacting the lives of **3.2 billion people**. This percentage could reach **90% by 2050** if current trends persist.
- **Global Soil Health Benchmark:** UNESCO is developing a **global soil health index** with international collaborators to establish uniform methods for measuring soil quality, track degradation trends, and identify at-risk regions.
- **Pilot Initiative for Soil Management:** A new pilot initiative under UNESCO's **Biosphere Reserves Program** will focus on **sustainable soil and landscape management** in **ten selected sites**, with the goal of refining management techniques and sharing successful practices worldwide.
- **Capacity Building:** UNESCO plans to train **government agencies, indigenous groups, and conservation bodies** in using tools for **soil preservation**.

Understanding the Deterioration of Soil Quality

- **Definition:** Soil degradation refers to the deterioration of soil health, reducing its ability to deliver **ecosystem services**. This decline can include **biological, chemical, and physical** degradation.
- **Contributing Factors:** Causes include **physical agents** like rain, erosion, and floods, **biological impacts** such as human and plant activities, and **chemical changes** like salinity or acidity.
 - **Impact of the Green Revolution:** While it increased agricultural yields, it also contributed to significant soil depletion.
 - **Deforestation Effects:** The removal of tree cover leaves soil vulnerable to erosion.
 - **Urban Expansion:** The conversion of agricultural land for infrastructure development reduces soil quality.
 - **Industrial Pollution:** The release of untreated waste and sewage introduces toxins into the soil.
 - **Mining Operations:** Mining, particularly surface mining, disrupts local ecosystems and contaminates soil and water.
- **Extent of the Problem:** About **33% of global soil** is experiencing moderate to severe degradation, with **40% of degraded lands** located in **Africa**.
 - **Annual Soil Loss:** An estimated **12 million hectares** of arable land are lost each year to soil degradation.

- **Soil Degradation in India:** **146.8 million hectares** of Indian soil, roughly **30%**, is considered degraded. Breakdown: **29%** washed into the sea, **61%** relocated elsewhere, and **10%** accumulates in reservoirs.
- **Consequences:** Degradation reduces **agricultural productivity**, heightens **food insecurity**, and diminishes the ability of ecosystems to provide services. It also hampers efforts to **mitigate climate change** by affecting soil carbon storage.

Key Concepts: Land Degradation, Soil Erosion, and Desertification

- **Scope of Land Degradation:** Land degradation includes all forms of ecosystem decline, beyond just soil erosion, encompassing **biological, water, social, and economic services**.
- **Desertification Defined:** Specifically refers to the permanent degradation of drylands, making them unsuitable for their original use.

Major Initiatives for Sustainable Soil Management

- **Global Soil Partnership (GSP):** Founded in **2012** under the **FAO** to bring global attention to soil issues and support **sustainable soil management** for **food security** and **climate resilience**.
- **World Soil Day:** Observed on **5th December** annually to highlight the importance of maintaining **healthy soils**. First celebrated in **2014** following recognition by the **UN General Assembly**.
- **Bonn Challenge:** An international initiative launched in **2011** by **Germany** and **IUCN**, aiming to **restore 150 million hectares** of degraded land by **2020** and **350 million hectares** by **2030**.
- **Land Degradation Neutrality (LDN):** A goal of the **UNCCD** to halt and reverse **land degradation** by **2030**, aiming for stable or improving land resources to support **ecosystems** and **food security**.
- **Sustainable Development Goal (SDG) 15:** Part of the **2030 Agenda**, targeting the preservation of **terrestrial ecosystems**, sustainable **forest management**, combating **desertification**, and preventing **biodiversity loss**.
- **RECSOIL Initiative:** Led by the **FAO**, this initiative focuses on increasing **soil organic carbon (SOC)** in **agricultural soils** through **sustainable management practices** to combat global soil degradation.

RBI'S FINANCIAL INCLUSION INDEX

As of **March 2024**, the Financial Inclusion Index (FI-Index) reached **64.2**, an increase from **60.1** in **March 2023**. This rise reflects substantial progress in making financial services accessible, especially to vulnerable populations in rural and underserved areas.

- **Definition and Scale:**
 - The FI-Index, developed by the **Reserve Bank of India (RBI)**, is a metric that gauges the extent of financial inclusion in India on a scale of **0 to 100**.
 - **0** denotes complete exclusion, while **100** signifies full inclusion, capturing how accessible, widely used, and high-quality financial services are across the country.
- **Publication and Framework:**
 - Launched in **August 2021**, the FI-Index is published **annually in July**.
 - Unlike other indices, it is not anchored to a base year, which means each year's index value is a cumulative reflection of ongoing efforts in financial inclusion.

Components of the FI-Index

The FI-Index comprises three main parameters, each assigned a weight and covering various indicators:

1. **Access (35% Weight):**
 - Measures the ease of access to financial services such as bank branches, ATMs, and internet/mobile banking facilities.
 - Highlights the growth in access points in rural areas, facilitated by both traditional and digital banking channels.
2. **Usage (45% Weight):**
 - Indicates the extent to which financial services are being utilized by the public. This includes the number and volume of transactions, frequency of account use, credit and savings penetration, and digital payment adoption.

- The strong performance in this dimension for 2024 was a key contributor to the FI-Index rise, showing an increased reliance on formal financial services over informal options.
- 3. **Quality (20% Weight):**
 - Assesses service quality based on metrics such as grievance redressal systems, financial literacy efforts, and customer satisfaction.
 - Aims to improve overall user experience and trust in financial services, enhancing long-term stability. These parameters are supported by **97 indicators** spanning **banking, insurance, investments, postal services, and pension** sectors, making the FI-Index a holistic measure of financial inclusion.

Historical Perspective and Growth Trends

- The FI-Index has shown consistent progress over recent years:
 - **March 2017:** FI-Index was **43.4**, indicating low financial inclusion.
 - **March 2021:** Improved to **53.9**, reflecting growing accessibility and use of financial services, particularly through digital channels and government initiatives.
 - **March 2024:** Reached **64.2**, with the usage dimension being the primary driver of this growth.

Key Government Initiatives Promoting Financial Inclusion

1. **Pradhan Mantri Jan Dhan Yojana (PMJDY):**
 - A flagship financial inclusion scheme launched in **2014**, aiming to provide every household with a basic bank account, debit card, and access to credit and insurance.
 - Over **490 million Jan Dhan accounts** opened by March 2024, with a significant portion in rural areas, driving basic financial access.
2. **JAM Trinity (Jan Dhan, Aadhaar, Mobile):**
 - Combines bank accounts, Aadhaar identity, and mobile connectivity to facilitate efficient service delivery and enhance financial inclusion.
 - Supports direct benefit transfers (DBTs) to accounts, reducing leakages and ensuring benefits reach the intended recipients.
3. **Kisan Credit Card (KCC) and General Credit Card (GCC):**
 - These credit instruments provide easy access to credit for farmers (KCC) and rural businesses (GCC), empowering them to meet their financial needs and sustain growth.
4. **Unified Payments Interface (UPI) and Digital Payment Systems:**
 - Launched in **2016**, UPI has revolutionised transactions by offering fast, secure, and accessible payment methods.
 - Supported by **Bharat QR, Bharat Bill Pay System (BBPS), and RuPay cards**, digital payments have seen exponential growth, especially in underserved areas.
5. **National Strategy for Financial Inclusion (NSFI):**
 - A roadmap to achieve **universal access to financial services**, improve financial literacy, and enhance consumer protection.
 - Sets targets for financial literacy centres, ensuring that more people understand and engage confidently with financial services.

Reserve Bank of India (RBI)

- **Establishment:** The Reserve Bank of India (RBI) was established on April 1, 1935, under the Reserve Bank of India Act, 1934.
- **Headquarters:** Located in Mumbai, Maharashtra.
- **Governor:** As of October 2024, the Governor is Shaktikanta Das.
- **Monetary Policy Committee (MPC):**
 - **Composition:** Six members – three from the RBI and three external members appointed by the Government of India.
 - **Recent Meeting:** Held from October 7 to 9, 2024.
 - **Key Decisions:**
 - **Repo Rate:** Maintained at 6.5%.

- **Policy Stance:** Shifted from 'withdrawal of accommodation' to 'neutral'.

Financial Inclusion Index (FI-Index):

- **March 2024:** Stood at 64.2, up from 60.1 in March 2023, indicating progress in financial inclusion.
- **Foreign Exchange Reserves:** As of October 18, 2024, reserves were \$688.27 billion, a decrease from \$704.89 billion in late September 2024.
- **Currency Management:** The RBI has been actively intervening in the foreign exchange market to stabilize the Indian rupee amid global volatility.
- **Digital Payment Initiatives:** Enhanced limits for UPI123Pay and UPI Lite to ₹10,000 and ₹5,000, respectively, to promote digital transactions.
- **Regulatory Measures:** Extended the ban on foreclosure charges and pre-payment penalties to loans for Micro and Small Enterprises (MSEs).
- **Economic Projections:**
 - **GDP Growth:** Projected at 7.2% for the fiscal year 2024-25.
 - **Inflation:** Projected at 4.5% for the same period.
- **Publications:**
 - Released the October 2024 issue of its monthly Bulletin, including the Monetary Policy Statement and various articles on economic and financial developments.

DEFAMATION CASE AGAINST WIKIPEDIA

Asian News International (ANI) has filed a **defamation lawsuit** against **Wikipedia** in the **Delhi High Court**, accusing it of hosting defamatory content that allegedly harms ANI's reputation.

- **Compensation Demanded:** ANI seeks **₹2 crore** in damages, claiming the content on its Wikipedia page is **false** and **defamatory**, affecting its credibility and goodwill.

Wikipedia's Role and Structure

- **Platform Details:** **Wikipedia**, launched in **2001** by **Jimmy Wales** and **Larry Sanger**, is a **collaborative, open-source** online encyclopedia where users contribute content. It does not produce content directly but provides a platform for user-generated information.

Legal Background:

- **Section 2(1)(w) of the Information Technology (IT) Act, 2000:** Defines "intermediary" as an entity managing electronic records for others, covering platforms like **telecom services, internet service providers, search engines, and web-hosting services**.
- **Section 79 (Safe Harbour Clause):**
 - Protects intermediaries (like Wikipedia) from liability for **third-party content** on their platforms if they meet specified conditions.
 - **Section 79(2)(b):** Intermediaries must **exercise due diligence** and refrain from initiating or modifying transmissions to retain immunity.
 - **Section 79(3):** Removes immunity if the intermediary, despite being notified, fails to **promptly remove or disable access** to objectionable content.
- **IT Rules, 2021:** Intermediaries must establish a **grievance redressal mechanism** and appoint a **resident grievance officer, chief compliance officer, and nodal contact** to retain safe harbour protection.
- **Rule 7 of IT Rules, 2021:** Stipulates that non-compliance with these rules results in **loss of safe harbour protection**, exposing intermediaries to liability.

ANI's Argument:

- The allegedly false content on Wikipedia damages ANI's **credibility** and **reputation**.
- The **editing history** shows ANI's factual edits were reversed in **May 2024** to reflect false content, intending to harm ANI's standing.

Previous Supreme Court Cases Related to Wikipedia:

- **Ayurvedic Medicine Manufacturers Organisation of India (October 2022):**

- SC dismissed a petition against Wikipedia, allowing petitioners to edit content or pursue other legal remedies.
- **Hewlett Packard India Sales vs. Commissioner of Customs (January 2023):**
 - SC warned against using Wikipedia as a primary source in legal decisions due to its **user-generated content** model, which may lead to **misleading information**.

US Law Comparison:

- **Section 230 of the US Communications Decency Act** is similar to **Section 79 of the IT Act**, granting immunity to online platforms from being treated as the publishers of third-party content.

INDIA'S DEEP DRILL MISSION

India has launched a scientific deep-drilling mission in **Koyna, Maharashtra**, aiming to drill **6 km** deep into the Earth's crust.

- **Objective:** To study **reservoir-triggered earthquakes** in the **Koyna-Warna** region, which has experienced frequent seismic activity since the impoundment of the **Koyna Dam** in **1962**.

Scientific Deep Drilling – Purpose and Global Context

- **Scientific Deep Drilling:** A strategic process to dig boreholes for observing and analyzing deeper Earth layers. Offers insight into **earthquakes, rock composition, energy resources, life forms, climate history**, and more.
- **Global Missions:**
 - Countries like the **U.S., Russia**, and **Germany** undertook similar projects in the **1990s**.
 - **China** initiated a deep-drilling mission in **2023**.

India's Deep Drill Mission

- **Institution:** The mission is led by the **Borehole Geophysics Research Laboratory (BGRL)** in **Karad, Maharashtra**, under the **Ministry of Earth Sciences**.
- **Goal:** Drill **6 km** deep to gather data on **seismic activity** in the fault zone, expanding understanding of geohazards.

Alternative Earth Study Methods

- **Seismic Wave Analysis:** Study of seismic waves for insights into Earth's structure.
- **Gravitational & Magnetic Field Measurement:** Assesses internal density changes.
- **Xenolith Study:** Examining crust fragments brought to the surface with magma.

Drilling Technique at Koyna

- **Pilot Borehole:** The **Koyna pilot borehole** is **0.45 m** wide and **3 km** deep.
- **Hybrid Technique:** Uses **mud rotary drilling** and **percussion drilling (air hammering)**.
 - **Mud Rotary Drilling:** A **rotating steel drill rod** with a **diamond-embedded bit** is cooled with drilling mud, which brings debris to the surface.
 - **Air Hammering:** Compressed air replaces mud to flush out rock cuttings, ideal for fractured regions.

Key Findings from Koyna Drilling

- **Geological Discoveries:**
 - Identified **1.2-km thick** Deccan Trap lava flows, dating **65 million years**, over **2,500-2,700-million-year-old granitic rocks**.
 - Discovered **water down to 3 km**, indicating deep rainwater percolation.
- **Seismic Data:** Data on **stress regimes, fracture orientation, and core samples** helps understand seismic activity.
- **Advanced Imaging:** Acoustic and micro-resistivity techniques provided **high-resolution borehole images**.
- **In-Situ Stress Analysis:** **Hydraulic fracturing experiments** revealed stress patterns, aiding in earthquake study.

Other Notable Deep Drilling Projects Worldwide

1. **Kola Superdeep Borehole (Russia):** World's deepest borehole (12,262 m), revealing **liquid water and microfossils** at unexpected depths.
2. **Project Mohole (U.S.):** Attempted drilling to the **Moho Discontinuity**; ended in **1966**.
3. **China's Xinjiang Deep Drilling:** Aims for **10,000 m** depth, exploring strata from the **Cretaceous Period**.
4. **Deep Sea Drilling Project (DSDP):** Drilled in oceans to study Earth's history; ran from **1966 to 1972**.
5. **Integrated Ocean Drilling Project (IODP):** Studies oceanic crust, climate, and the deep biosphere globally.

2ND RETREAT OF THE FOREIGN MINISTERS OF THE BIMSTEC

- **Event:** 2nd BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) Foreign Ministers' Retreat.
- **Location:** Held in **New Delhi, India**.
- **Purpose:** To provide an informal platform to discuss cooperation in **security, connectivity, trade, and investment** within the Bay of Bengal region.
- **Significance:** This retreat is the first major event since the **BIMSTEC Charter** came into effect in **2024**.

Key Objectives

- **Preparation for Sixth Summit:** The retreat prepares for the **sixth BIMSTEC summit**, scheduled for **September 2024**. Leaders are expected to sign the **BIMSTEC Agreement on Maritime Transport Cooperation** to improve regional connectivity.

Structure of the Retreat

1. **First Segment:**
 - **Assessment:** India presented on the implementation of the outcomes from the **1st Retreat**, assessing the state of regional cooperation.
 - **Ideas Shared:** Member states discussed creating **Centers of Excellence** focusing on **Agriculture, Disaster Management, and Maritime Transport**.
 - **India's Support:** Announced assistance for **cancer research, treatment, and e-visa issuance** for patients from BIMSTEC states; **Sri Lanka** proposed adding **kidney disease** support.
 - **Private Sector Involvement:** Emphasis on involving the private sector in trade and promoting young entrepreneurs, enhancing **connectivity, cyber-security, and combating narcotics and illegal arms trafficking**.
2. **Second Segment:**
 - **Expectations & Proposals:** Member countries shared their expectations for the upcoming summit.
 - **Country-Specific Proposals:**
 - **Sri Lanka:** Proposed **mapping mineral resources** and enabling **vertical integration** in production sectors for economic diversification.
 - **Bangladesh:** Highlighted cooperation in the **Blue Economy** and requested a ban on fishing during breeding seasons.
 - **Bhutan:** Advocated for enhanced **tourism and cultural exchanges**.
 - **Nepal:** Supported a '**whole of the region**' approach to maximize synergy and transform BIMSTEC.
 - **Thailand:** Stressed cooperation in **non-traditional security domains**.
 - **Myanmar:** Suggested measures to combat **online scams**.

Bilateral Discussions

- **India-Myanmar:**
 - Concerns over **displaced persons, narcotics, and arms trafficking** across the border.
 - India requested the return of unlawfully detained Indians.
- **India-Bangladesh:**
 - Requested **uninterrupted supply of essentials** and **technical team support** for the **Teesta project**.
- **Strategic Access:**

- Improved ties with **Bangladesh and Myanmar** enhance India's access to the **sea** for its landlocked northeastern states.
- Cooperation with **Myanmar and Thailand** boosts India's influence in the **Indo-Pacific**, aligning with **ASEAN**.

About BIMSTEC

- **Formation:** Founded as **BIST-EC** in **1997** with **Bangladesh, India, Sri Lanka, and Thailand**. Renamed to **BIMST-EC** after **Myanmar** joined in 1997 and finally as **BIMSTEC** with **Nepal and Bhutan** joining in **2004**.
- **Secretariat:** Located in **Dhaka, Bangladesh**.
- **Members:** Seven nations – **Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar, and Thailand**.
- **Founding Principles:** Upholds **Sovereign Equality, Territorial Integrity, Political Independence, Non-interference, and Peaceful Coexistence**.

Aims and Structure

- **Primary Aim:** To promote **regional growth** through cooperation in the Bay of Bengal region, leveraging regional resources and connectivity.
- **Distinct Features:**
 - **Sector-Driven Cooperation:** BIMSTEC focuses on **14 priority areas** such as **Trade, Transport, Energy, Fisheries, Tourism, Agriculture, and Disaster Management**.
 - **India's Leadership:** India leads sectors like **Transport & Communication, Tourism, Environment & Disaster Management, and Counter-Terrorism & Transnational Crime**.

BIMSTEC Working Mechanisms

- **Meetings:**
 - **Summits:** Held every two years.
 - **Ministerial Meetings:** Foreign and Commerce Ministers meet annually to discuss economic matters.
 - **Operational Meetings:** Senior officials meet semi-annually to oversee activities.
- **BIMSTEC Working Group:** A coordinating body with a rotating chair, headquartered in Dhaka.
- **Business & Economic Forums:** Ensures **private sector participation**.

Myanmar Crisis – Impact on BIMSTEC

- **Political Instability:** Myanmar's **military junta** overthrew the elected government in **February 2021**, leading to widespread protests and armed resistance by **Ethnic Armed Organizations (EAOs)**.
- **Humanitarian Crisis:** Approximately **2.6 million** displaced, with **18.6 million** in need of assistance.
- **Impact on BIMSTEC:** Myanmar's instability affects regional projects, particularly the **India-Myanmar-Thailand trilateral highway** and connectivity initiatives.

MONEY BILL ROUTE FOR CONTENTIOUS AMENDMENTS

Chief Justice of India (CJI) D.Y. Chandrachud agreed to list petitions challenging the government's use of the **Money Bill route** to pass controversial amendments in Parliament.

- **Main Issue:** Whether specific amendments could be classified as **Money Bills**, thus bypassing the **Rajya Sabha**, potentially violating **Article 110 of the Constitution**.

Background

- **Initial Case:** The **Money Bill question** was first referred to the Supreme Court in **2019** in the case of **Rojer Mathew vs. South Indian Bank Ltd.**
- **Central Concern:** Whether the classification of certain bills as Money Bills, sidestepping Rajya Sabha's scrutiny, adheres to **Article 110**.

Key Concerns Regarding the Money Bill

1. **Circumventing the Rajya Sabha:**
 - Using the Money Bill route limits **Rajya Sabha's** role to recommendations only, as it has no power to amend or reject the Bill.

- This practice raises concerns about undermining the **bicameral legislative process**, reducing scrutiny on significant laws.
- 2. **Violation of Article 110:**
 - **Article 110** specifies that Money Bills must deal solely with financial matters like **taxation, government borrowing, and expenditure**.
 - Some amendments passed as Money Bills allegedly do not conform strictly to these provisions, sparking concerns about **constitutional violations**.
- 3. **Speaker's Certification:**
 - The **Speaker of the Lok Sabha** has the authority to certify a Bill as a Money Bill, and this decision is **final and not subject to judicial review**.
 - This raises questions about potential misuse, allowing the government to bypass regular legislative procedures.

Notable Cases Involving Money Bill Controversies

1. **Aadhaar Act, 2016:**
 - The **Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits, and Services) Act, 2016** was classified as a Money Bill.
 - In **2018**, the Supreme Court upheld the constitutionality of Aadhaar as a Money Bill. However, **Justice D.Y. Chandrachud** dissented, stating it was an **"abuse of the constitutional process."**
2. **Finance Act, 2017:**
 - This Act made changes to **judicial tribunals**, amending laws to allow government control over tribunal appointments.
 - In **2019**, the **Rojer Mathew case** raised concerns that these amendments had no connection to Article 110, referring the matter to a **seven-judge Bench** for further scrutiny.
3. **Prevention of Money Laundering Act (PMLA) Amendments:**
 - Amendments from **2015 onward** classified as Money Bills expanded powers of the **Enforcement Directorate**, including authority over arrests and raids.
 - The Supreme Court upheld the legality of these amendments but deferred the Money Bill question to the **seven-judge Bench**.

Money Bill vs. Ordinary Bill in India

1. **Definition and Scope**
 - **Money Bill:** A bill that deals exclusively with **financial matters** as defined under **Article 110 of the Indian Constitution**. It covers **taxation, borrowing, expenditure from the Consolidated Fund of India**, and other financial regulations.
 - **Ordinary Bill:** A bill that addresses general matters outside the specific domain of money bills. It can relate to any subject except **financial matters specifically listed for Money Bills**.
2. **Introduction and Origin**
 - **Money Bill:** Can only be introduced in the **Lok Sabha (House of the People)** and only with the **President's prior recommendation**.
 - **Ordinary Bill:** Can be introduced in either **Lok Sabha or Rajya Sabha** (Council of States) and does not require prior presidential approval.
3. **Role of the Rajya Sabha**
 - **Money Bill:** Rajya Sabha has **limited power** regarding Money Bills. It can only **recommend changes**, which the **Lok Sabha may choose to accept or reject**. Rajya Sabha must return a Money Bill to the Lok Sabha within **14 days**.
 - **Ordinary Bill:** Rajya Sabha has **equal power** as the Lok Sabha on Ordinary Bills. If Rajya Sabha rejects or suggests amendments, the **bill goes to a joint sitting** of both houses for consideration.
4. **Presidential Assent**
 - **Money Bill:** After approval by the Lok Sabha and consideration by Rajya Sabha, it is presented to the **President**, who can either **assent to it** or **withhold assent** (cannot return it for reconsideration).

- **Ordinary Bill:** After passing both houses, it is sent to the President, who can **assent, withhold assent, or return the bill for reconsideration** (except when passed again by both houses).
5. **Dispute Resolution**
- **Money Bill:** The **Speaker of the Lok Sabha** has the final authority to certify a bill as a Money Bill, and this decision is final and cannot be questioned.
 - **Ordinary Bill:** Any disagreement between the two houses on an Ordinary Bill is resolved by a **joint sitting** of both houses, presided over by the **Speaker of the Lok Sabha**.
6. **Examples**
- **Money Bill:** Examples include bills related to **imposition of new taxes, withdrawal of money from the Consolidated Fund of India, and payment of government salaries**.
 - **Ordinary Bill:** Examples include bills on subjects like **education, health, social welfare, or criminal justice reforms**.
7. **Special Characteristics**
- **Money Bill:** Must meet all criteria under **Article 110**. If any part of the bill does not fall within this definition, it cannot be considered a Money Bill.
 - **Ordinary Bill:** Can cover **multiple subjects** and doesn't have as strict a definition, allowing broader legislative scope.

Significant Legislation enacted via Money Bills includes:

- **Aadhaar Act, 2016**
- **Finance Act, 2017**
- **Prevention of Money Laundering Act (PMLA) amendments**
- **Foreign Contributions Regulations Act (FCRA), 2010**

SC QUASHES BIHAR DECISION TO CLASSIFY TANTI-TANTWA

The **Supreme Court of India** ruled that **states cannot alter the Scheduled Caste (SC) list** established under **Article 341 of the Constitution**.

- **Key Outcome:** The Court quashed the **2015 Bihar government notification** attempting to reclassify the **Tanti-Tantwa** community as Scheduled Caste.

Background of the Case

- **Previous Classification:** Under the **Bihar Reservation Act, 1991**, the **Tanti-Tantwa** community was categorised as **Extremely Backward Class (EBC)**.
- **2015 Resolution:** On **July 1, 2015**, the Bihar government issued a resolution to include the **Tanti-Tantwa** community in the SC list, based on a recommendation from the **State Commission for Backward Classes (SCBC)**.
- **Court Proceedings:** Although the **Patna High Court** upheld this decision in 2017, it was later challenged in the **Supreme Court**.

Supreme Court's Judgement

- **Ruling on Authority:** The **state government lacks the authority** to alter the SC list established under **Article 341**.
 - **Article 341(1)** grants the **President** the power to designate SCs for each state and union territory.
 - **Article 341(2)** gives **Parliament** the authority to amend this list, thus requiring a **constitutional amendment** for any change.
- **Registrar General's Role:** The **Registrar General of India** had opposed the inclusion of the Tanti-Tantwa community in the SC list, and the Court noted Bihar's failure to follow proper procedures.
- **Condemnation of State Action:** The Court termed the Bihar government's action as **"mala fide"** and **"unacceptable mischief"**, as it deprived legitimate SC members of their rights.
- **Accommodation for Beneficiaries:** The Court ruled that those who benefited under the **2015 notification** should be accommodated under the **EBC category** and **return SC quota positions to the rightful SC category**.

Procedure for Amending/Altering the SC List

1. Initiation and Review:

- A state government submits a proposal for inclusion or exclusion in the SC list.
- **The Ministry of Social Justice and Empowerment** reviews it, with socio-economic data and consultation with the **Registrar General of India**.

2. Expert Recommendations:

- The **National Commission for Scheduled Castes (NCSC)** provides recommendations.
- **Cabinet Approval** follows, based on expert input.

3. Parliamentary Process:

- A **Constitutional Amendment Bill** is introduced, requiring a **special majority** in Parliament.

4. Presidential Assent:

- Once passed, the Bill is sent to the **President** for final assent, enacting the amendment.

Criteria for Inclusion in SC List

- **Criteria:** Communities facing **extreme social, educational, and economic backwardness** due to historical untouchability practices.

The Registrar General of India

- **Establishment:** Formed in **1961** under the **Ministry of Home Affairs**.
- **Functions:** Conducts **demographic surveys** including the **Census** and **Linguistic Survey of India**.
- **Role in SC Classification:** Provides critical evaluation for SC inclusion proposals, influencing final decisions on amendments.

Scheduled Castes and National Commission for Scheduled Castes (NCSC)

1. Scheduled Castes (SCs):

- **Definition:** An administrative category grouping communities facing **historical untouchability** for preferential treatment.
- **2011 Census:** **16.6%** of India's population (around **166.6 million people**) identified as SC.

2. National Commission for Scheduled Castes (NCSC):

- **Constitutional Body:** Established under **Article 338**.
- **Jurisdiction:** Operates under the **Ministry of Social Justice and Empowerment**.
- **Evolution:** Originally formed in **1974**; restructured in **2003** into separate **NCSC** and **National Commission for Scheduled Tribes (NCST)** under **Article 338A**.
- **Objective:** Safeguards SC interests, addressing **social, educational, economic, and cultural needs**.

CAVES ON THE MOON

Scientists recently confirmed a **lunar cave** near the **Apollo 11 landing site**, approximately **400 kilometers** away. This finding has major implications for **future lunar missions** and the possibility of a sustainable human settlement on the moon.

Key Findings about the Lunar Cave

- **Location and Formation:** An **Italian research team** identified the cave in the **Sea of Tranquility**. It was formed by the collapse of a **lava tube**, similar to over **200 other pits** found on the moon's surface.
- **Dimensions:** NASA's **Lunar Reconnaissance Orbiter** radar measurements show that the cave is **at least 40 meters wide and tens of meters long**, with the possibility of being larger.

Significance of the Discovery

- **Natural Shelter:** Lunar caves could offer **protection for future astronauts** from cosmic rays, solar radiation, and micrometeorite impacts, potentially reducing the need for constructing extensive shelters.
- **Insights into Lunar Geology:** Materials inside these caves, preserved over millions of years, can help scientists understand the **moon's geological history**, including volcanic activity.
- **Water and Fuel Resources:** The **south pole's shadowed craters** may contain **frozen water**, which is essential for **drinking and rocket fuel** production.

- **Support for Lunar Missions:** Discovering such caves aids **future mission planning** by improving understanding of the moon's resources and terrain, supporting a long-term human presence.

History of Moon Exploration

- **1959:** The **Soviet Union's Luna 1 and 2** were the first robotic missions to reach the moon.
- **1961-1968:** The **USA** conducted three classes of robotic missions before the **Apollo 11** mission.
- **1969-1972:** **12 American astronauts** walked on the moon as part of the Apollo missions.
- **1990s:** The USA resumed lunar exploration with robotic missions such as **Clementine** and **Lunar Prospector**.
- **2009:** The USA launched the **Lunar Reconnaissance Orbiter (LRO)** and **Lunar Crater Observation and Sensing Satellite (LCROSS)**.
- **2011:** NASA initiated the **ARTEMIS mission** for lunar exploration.
- **2012:** The **Gravity Recovery and Interior Laboratory (GRAIL)** spacecraft studied the moon's gravity field.
- **2019:** China landed two rovers, including the **first rover on the moon's far side**.

India's Lunar Missions (ISRO)

- **Chandrayaan-1:** Launched in **2007** in partnership with **Russia's ROSCOSMOS**. Key findings included the **presence of lunar water**, evidence of **lunar caves**, and past **tectonic activity**.
- **Chandrayaan-2:** India's second moon mission, consisting of an **Orbiter, Lander (Vikram), and Rover (Pragyan)**. The **Pragyan Rover** was housed inside the **Vikram Lander**.
- **Chandrayaan-3 (2023):** India became the **first country to land near the lunar south pole** and the **fourth space agency** (after Roscosmos, NASA, and CNSA) to achieve a successful moon landing.

Key Geographical Features on the Moon

- **Maria:**
 - **Mare Imbrium:** Largest mare on the Moon, northwest near side.
 - **Mare Tranquillitatis:** Sea of Tranquility, famous as the Apollo 11 landing site.
- **Craters:**
 - **Tycho:** Known for a prominent ray system in the southern hemisphere.
 - **Copernicus:** Features terraced walls and a central peak, near Moon's center.
- **Mountain Ranges:**
 - **Montes Apenninus:** Southeastern border of Mare Imbrium, formed by the Imbrium Basin impact.
 - **Montes Taurus:** Site of Apollo 17 landing.
- **Valleys & Rilles:**
 - **Vallis Schröteri:** Largest sinuous rille, likely a collapsed lava tube.
 - **Hadley Rille:** Explored by Apollo 15, another collapsed lava channel.

Lava Tubes on the Moon

- **Formation:** Occur when lava cools on the surface, insulating the flowing lava beneath.
- **Collapse:** Over time, they may collapse due to seismic activity or impacts, creating pits or "skylights."
- **Presence:** Found on the Moon, Mars, and Mercury, similar to those observed on Earth.

Notable Moon Missions

- **Early Soviet Missions:**
 - **Luna 2 (1959):** First human-made object to reach the Moon.
 - **Luna 9 (1966):** First soft landing.
- **Apollo Program (USA):**
 - **Apollo 11 (1969):** First manned landing.
 - **Apollo 17 (1972):** Last manned mission.
- **Recent Robotic Missions:**
 - **Chandrayaan-1 (2008, India):** Discovered water molecules on the Moon.
 - **Chang'e 4 (2018, China):** First mission to land on the Moon's far side.
 - **Artemis I (2022, USA):** Part of NASA's program to return humans to the Moon.

DIGITAL PERSONAL DATA PROTECTION ACT (DPDPA) 2023

NITI Aayog raised issues with some provisions of the **Digital Personal Data Protection Act 2023**, particularly changes affecting the **Right to Information (RTI) Act 2005**.

- The **Digital Personal Data Protection Act (DPDPA) 2023** has been largely welcomed by industry for its simplified compliance requirements. However, the provision requiring **verifiable parental consent** for processing children's data has sparked debate between industry and government.
- **Compliance Timeline:** The **Central Government** has stated that companies will have approximately **one year** to comply, with extended timelines for **smaller organizations and startups**.

About the Digital Personal Data Protection (DPDP) Act, 2023

- **Purpose:** The DPDP Act establishes a framework to **protect individuals' personal data**, ensuring that their data is processed only with consent and safeguarding **privacy in the digital era**.
- **Scope:** The Act applies to the **processing of digital personal data** within India, whether collected online or offline and later digitized. It also covers data processing outside India if it pertains to **goods or services offered to individuals** within the country.

Background and Evolution

- **Origin:** The Act stems from the **Expert Committee's report** led by **Justice BN Srikrishna**, leading to the **Personal Data Protection Bill** in 2019. After multiple consultations and revisions, the **Digital Personal Data Protection Act, 2023** was passed by Parliament.

Key Stakeholders

- **Data Principal (DP):** Refers to the **individual or entity** whose data is collected. DPs must provide written **consent for data processing**, can specify its purpose, and have the right to withdraw or restrict consent at any time.
- **Data Fiduciary:** The **entity responsible for collecting, storing, and sharing** data. It acts as a **Consent Manager**, enabling DPs to **give, manage, review, or withdraw consent** via a transparent, accessible platform.
 - **Significant Data Fiduciaries:** The government may designate certain data fiduciaries as "significant" based on systemic impact.
- **Data Processor:** An entity processing data **on behalf of a Data Fiduciary**; in smaller organizations, the same entity might act as both data fiduciary and processor.
- **Data Protection Officer (DPO):** An individual designated by a data fiduciary to oversee **data protection compliance** under the Act.

Key Provisions

- **Rights of Citizens:** Data Principals have the **right to access information, request corrections or erasure**, file grievances, and nominate someone to exercise these rights in cases of death or incapacity.
- **Data Protection Board of India (DPBI):**
 - An **independent adjudicatory body** to resolve privacy disputes and grievances. It will also determine non-compliance instances and **impose penalties**.
 - The **Chief Executive and Board Members** are appointed by the Central Government, with appeals against DPBI orders going to the High Court. The **High Court** can also address any breaches independently (**Suo moto**).
 - **Civil Courts** have no jurisdiction over matters covered by the Act, and no injunctions will be permitted for actions under the Act.

Penalties for Non-Compliance

- **Financial Penalties:** Penalties range from **Rs. 250 crores for data fiduciaries or processors** to **Rs. 10,000 for data principals**. The Act does not impose **criminal penalties** for violations.

Interaction with Existing Laws

- **Additional Provisions:** The DPDP Act's provisions are **in addition to existing laws**. In cases of conflicts between the DPDP Act and any other law, the provisions of the **DPDP Act will prevail** to the extent of the conflict.

KARNATAKA'S RESERVATION FOR LOCALS IN THE PRIVATE SECTOR BILL

The Karnataka Cabinet approved a **draft bill mandating job reservations for Kannadigas** in the private sector, but the government has paused implementation, deciding to conduct further study due to industry backlash.

Key Details of Karnataka's Employment Reservation Bill, 2024

- **Purpose:** Aims to **secure jobs for Kannadigas** in private industries, with specific quotas for managerial and non-managerial roles.
- **Reservation Quotas:**
 - **50%** for managerial positions.
 - **70%** for non-managerial roles.
- **Definition of Local Candidate:**
 - Born in Karnataka and **residing for at least 15 years**.
 - Proficient in **speaking, reading, and writing Kannada**.
 - Must have **Kannada as a language in secondary school** or pass a Kannada proficiency test.
- **Penalties for Non-compliance:**
 - Fines range from **₹10,000 to ₹1 lakh** for violations, with additional penalties for continued non-compliance.

Provisions in Karnataka Employment Bill, 2024

PROVISION	DETAILS
Reservation Percentages	50% for management roles, 70% for non-management roles for local candidates
Relaxation Clause	Minimum 25% for management and 50% for non-management roles if local candidates are unavailable
Skill Development	Industries required to train local candidates to address skill gaps, with a 3-year implementation timeline
Compliance Reporting	Companies must report compliance to a nodal agency

Similar State Legislation on Local Reservations

- **Andhra Pradesh (2019):** **75% reservation** for locals in industries; implementation stalled due to constitutional challenges.
- **Haryana (2020):** **75% private sector quota** for locals; declared unconstitutional by Punjab and Haryana High Court in 2022, citing Articles **14** and **19** violations.
- **Jharkhand:** Increased reservation in state jobs to **77%** for SC/ST/OBC/EWS categories, awaiting gubernatorial assent.

Constitutional and Legal Aspects

- **Constitutional Provisions:**
 - **Article 14:** Ensures **equality before law**.
 - **Article 15:** Prohibits discrimination based on **place of birth**.
 - **Article 16:** Guarantees equality in **public employment** without domicile-based discrimination.
 - **Article 19:** Grants freedom of **movement and employment** across India.
- **Judicial Precedents:**
 - **Dr. Pradeep Jain v. Union of India (1984):** Limited state-based reservations in employment.
 - **Indra Sawhney Case (1992):** **50% cap on reservations**, applicable to domicile-based reservations as well.
 - **2023 Punjab & Haryana High Court Ruling:** Struck down Haryana's **75% private sector reservation**, emphasizing equal employment rights.

INDIA COMPLETES UN HUMAN RIGHTS REVIEW

India successfully completed its 4th periodic review by the UN Human Rights Committee under the International Covenant on Civil and Political Rights (ICCPR) in Geneva, reflecting its commitment to human rights.

Indian Delegation

- The Indian delegation was co-led by Attorney General Shri R. Venkataramani and Solicitor General Shri Tushar Mehta.
- Secretary (West) Shri Pavan Kapoor and senior officials from ministries like Women and Child Development, Social Justice and Empowerment, Electronics and Information Technology, Minority Affairs, External Affairs, Tribal Affairs, and Home Affairs were included.

Review Details

- The review took place on July 15-16, 2024.
- India engaged in dialogue on civil and political rights including anti-corruption, non-discrimination, women's and minority rights, counter-terrorism, privacy and data protection, and new criminal laws.

India's Achievements

- India emphasized protection efforts for vulnerable groups and global contributions to human rights.
- The Committee acknowledged India's pluralism, non-violence, and diversity, noting its role as a vibrant parliamentary democracy.

Role of the Human Rights Committee

- The Human Rights Committee consists of 18 independent experts who monitor ICCPR implementation through periodic reviews.

Historical Context

- India joined the ICCPR in 1979 and has completed three prior reviews; the last one was in 1997.
- ICCPR was adopted by the UN General Assembly in 1966 and came into force in 1976.

About ICCPR

- The ICCPR is a major international treaty for civil and political rights.
- Along with the Universal Declaration of Human Rights (UDHR) and International Covenant on Economic, Social and Cultural Rights (ICESCR), it forms the International Bill of Human Rights.
- The Covenant enforces rights such as right to life, equality before law, freedom of speech, assembly, association, religious freedom, and protection from torture.
- 174 countries are party to this treaty as of 2024.

Human Rights Provisions

- Article 1 of the Universal Declaration of Human Rights (UDHR) states that “all human beings are born free and equal in dignity and rights.”
- Human Rights include life, liberty, freedom from slavery, opinion, expression, work, and education.
- Indian Constitution Articles 12-35 provide rights like Equality, Freedom, Freedom of Religion, Cultural and Educational Rights, and Constitutional Remedies.

Universal Declaration of Human Rights (UDHR)

- UDHR outlines 30 civil and political rights (e.g., life, liberty, free speech, privacy) and economic, social, cultural rights (e.g., social security, health, education).
- India played an active role in drafting the UDHR.
- UDHR, while not legally binding, has influenced over 70 human rights treaties.
- The Vienna Declaration and Program of Action (1993) further reinforced UDHR's principles.

United Nations Human Rights Council (UNHRC)

Establishment and Purpose

- Established: 2006, replacing the former United Nations Commission on Human Rights.

- **Purpose:** To address human rights violations and make recommendations for their redress.
- **Headquarters**
 - Located at the United Nations Office in Geneva, Switzerland.
- **Structure and Membership**
 - **Members:** 47 member states elected by the United Nations General Assembly (UNGA).
 - **Term:** Members serve three-year terms and are eligible for re-election but cannot serve more than two consecutive terms.
 - **Geographical Distribution:**
 - **Africa:** 13 seats
 - **Asia-Pacific:** 13 seats
 - **Latin America and the Caribbean:** 8 seats
 - **Western Europe and other states:** 7 seats
 - **Eastern Europe:** 6 seats

Recent Membership Elections

- On **9 October 2024**, the UNGA elected 18 new members for the 2025-2027 term.
- **Notable Outcomes:**
 - **Qatar** secured a seat with 167 votes.
 - **Saudi Arabia** failed to secure a seat, receiving only 117 votes.
 - The **United States** chose not to seek re-election for a consecutive term.

Recent Sessions and Activities

- The **57th regular session** was held from **9 September to 11 October 2024**.
- During this session, the Council adopted 37 resolutions and extended the mandates of nine country-specific and one thematic mandate holders.

Notable Actions

- **Russia:** On **10 October 2024**, the Council renewed the mandate of the Special Rapporteur on the human rights situation in Russia.
- **Venezuela:** On **11 October 2024**, the Council extended the mandate of the Independent International Fact-Finding Mission on Venezuela for two years.

5TH POSITIVE INDIGENISATION LIST

- **5th Positive Indigenisation List (PIL):** Announced by the **Ministry of Defence (MoD)** as part of the **Aatmanirbhar Bharat** or **Self-Reliant India** vision in defence.
- **Objective:** To advance **self-reliance** in defence production, reduce reliance on **foreign imports**, and boost the domestic defence manufacturing sector.

Concept of Positive Indigenisation Lists

- The **Positive Indigenisation Lists (PIL)** are a key initiative to ensure that certain defence items are procured only from **domestic manufacturers** within India.
- **Defence Acquisition Procedure (DAP) 2020:** Introduced as part of this policy to promote **domestic manufacturing** and **import substitution** for complex defence equipment.
- **Significance:** Aims to reduce vulnerability from external sources during geopolitical tensions and secure an **independent and resilient supply chain**.

Key Highlights of the 5th Positive Indigenisation List (PIL)

- **Number of Items:** The 5th PIL includes **346 defence items** aimed at enhancing **Aatmanirbhar Bharat** in defence.
- **Categories of Items:**
 - **Line Replacement Units (LRUs):** Components that can be replaced individually within larger systems, such as **radars, avionics for aircraft, and fire control systems for tanks**.

- **Sub-systems:** Smaller parts that form major defence systems, including **missile guidance systems**, **electronic warfare equipment**, and **communication systems**.
- **Spares and Components:** Individual parts that require regular **replacement** or **maintenance**, such as **engine components for aircraft** and **weapon system parts**.
- **Exclusive Procurement:** Ensures that these 346 items are **only procured from Indian industries**, including **DPSUs, Micro, Small, and Medium Enterprises (MSMEs)**, and **startups**.

Implementation Mechanism

- **Srijan Portal:** The list is accessible through the **Srijan Portal**, a platform where **DPSUs** and **Service Headquarters (SHQs)** can invite private industries to participate in the indigenisation process.
- **Process:**
 - DPSUs like **Hindustan Aeronautics Limited (HAL)**, **Bharat Electronics Ltd (BEL)**, **Bharat Dynamics Ltd (BDL)**, and others have begun issuing **Expressions of Interest (EoIs)** and **Requests For Tender or Proposals (RFPs)**.
- **Economic Impact:** Expected import substitution value of **Rs 1,048 crore** through this list.

Objectives and Benefits of the Indigenisation Lists

1. **Enhancing National Security:**
 - By ensuring essential defence items are produced domestically, India mitigates risks related to **supply chain disruptions** and **geopolitical uncertainties**.
2. **Promoting Local Industry:**
 - **Domestic production** strengthens local industries, creating job opportunities and spurring **technological innovation** within India.
3. **Building Strategic Autonomy:**
 - **Indigenisation** allows India to maintain **strategic autonomy** in critical areas and ensures reliable access to defence equipment during crises.

Progress in the Positive Indigenisation Initiative

- **First PIL:** Introduced in **August 2020** and subsequent lists have progressively increased the number of items for indigenisation.
- **Total Indigenised Items:** Across five PILs, **4,666 items** have been indigenised.
 - **Import Substitution Value:** Over **Rs 3,400 crore** achieved so far.
 - Additional lists include **509 items** by the Department of Military Affairs (DMA), focusing on **complex systems** like **sensors, weapons, and ammunition**.
- **Industry Participation:** More than **36,000 defence items** have been made available for indigenisation, with **12,300 items** indigenised in the last three years, leading to **Rs 7,572 crore** worth of orders for domestic vendors.

Initiatives Supporting Defence Indigenisation

- **Defence Procurement Policy (DPP) 2016:** Prioritises indigenous production through the **Buy-IDDM (Indigenously Designed and Manufactured)** category.
- **Defence Acquisition Procedure (DAP) 2020:**
 - Emphasises **indigenous procurement**, **reservation for MSMEs**, and **increased local content** to support the **Make in India** initiative.
 - Includes indigenisation of **imported spares** to reduce foreign dependency.
- **Industrial Licensing and FDI:**
 - **Streamlined licensing process** for ease of investment.
 - **FDI allowed up to 74%** under automatic route to encourage foreign investment.
- **Defence Industrial Corridors:** Two corridors in **Uttar Pradesh** and **Tamil Nadu** with **Rs 6,089 crore** in investments to build an ecosystem for defence manufacturing.
- **Mission DefSpace:** Focuses on developing **space technologies** for defence applications.
- **Innovations for Defence Excellence (iDEX):**

- Launched in **April 2018** to support innovation in defence by engaging **startups, MSMEs, and research institutions**.
- **iDEX Prime** provides up to **Rs 10 crore** for high-end solutions.
- **Srijan Portal**: A platform listing **19,509 items** for local production, with **4,006 items** showing industry interest.
- **R&D Budget Allocation**: **25% of the R&D budget** allocated for industry-led research to advance technology and innovation in defence.

Achievements in Indigenisation

- **Increase in Defence Exports**:
 - **Rs 21,083 crore** (USD 2.63 billion) in exports for **FY 2023-24**, a **32.5% increase** from the previous year.
 - Over **31-fold increase** in exports compared to **FY 2013-14**.
- **Reduction in Import Dependency**: Decrease in foreign defence procurement expenditure from **46% to 36%** in the past four years.
- **Domestic Procurement**: Increased share of domestic procurement from **54% in 2018-19 to 68%** currently, with **25% of the budget** reserved for private industry.
- **Value of Production**: Production by defence companies rose from **Rs 79,071 crore to Rs 84,643 crore** over two years.

NATIONAL FLAG DAY

July 22 each year to commemorate the adoption of the Indian national flag by the **Constituent Assembly** on **July 22, 1947**.

- **Significance**: Marks the adoption of the **Tricolour** (Tiranga) as a symbol of national unity and pride before **India's Independence on August 15, 1947**.

Evolution of the Indian National Flag

- **Early Designs**:
 - **Vande Mataram Flag (1906)**: The first unofficial flag, hoisted in **Kolkata** on **August 7, 1906**. It had three stripes (**green, yellow, red**) with eight lotuses, "Vande Mataram" inscription, and symbols of the sun and crescent moon.
 - **Madam Bhikaji Cama's Flag (1907)**: Hoisted in Paris, with **saffron, yellow, and green stripes**, a lotus, and **seven stars** representing the **Saptarishi constellation**.
 - **Sister Nivedita's Flag (1906)**: Featured a **thunderbolt** and **108 oil lamps** symbolizing enlightenment.
 - **Home Rule Movement Flag (1916)**: Created during the Home Rule Movement by **Dr. Annie Besant** and **Lokmanya Tilak**; had **five red** and **four green stripes**, a **Union Jack**, and crescent and star symbols.
 - **Gandhi's Flag (1921)**: Proposed in **Bezwada (now Vijayawada)**, featured **red, green, and white** bands representing communities with a **spinning wheel (charkha)** symbol.
 - **1931 Flag**: Adopted with **saffron, white, and green stripes**; the **spinning wheel** was later replaced by the **Ashoka Chakra** in 1947 to represent law and justice.
- **Final Adoption**:
 - **Date**: Officially adopted by the **Constituent Assembly on July 22, 1947**.
 - **Design**: **Saffron** (courage), **white** (peace), and **green** (faith) with the **Ashoka Chakra** at the center.
 - **Proposed by**: **Jawaharlal Nehru**, symbolizing **dharma** and law without religious association.

Design and Specifications of the National Flag

- **Structure**: Horizontal tricolour with **deep saffron, white, and dark green**.
- **Ashoka Chakra**: Navy blue with **24 spokes**, symbolizing the **eternal wheel of law (dharma)**; inspired by the **Lion Capital of Ashoka at Sarnath**.
- **Ratio**: **3:2 aspect ratio**, with equal horizontal bands.
- **Official Sizes**: Ranges from **6300 × 4200 mm to 150 × 100 mm**, proportionate sizes for the Chakra.

Manufacturing and Legal Specifications

- **Material:** Initially mandated as **khadi** (hand-spun cloth), reflecting **Mahatma Gandhi's** emphasis on self-reliance.
- **Manufacturing Rights:** Managed by the **Khadi Development and Village Industries Commission**; assigned to licensed regional units.
- **Licensed Units:** **4 units** in India licensed to manufacture the national flag (as of 2023).
- **Standards:** Set by the **Bureau of Indian Standards (BIS)**.

Historical Context and Symbolism

- **Pre-Independence Movement:**
 - **British India Ensigns:** Early flags included symbols like the **Union Jack** and **Star of India**.
 - **Hindu-Centric Designs:** Initial designs included symbols such as **Ganesha**, **Kali**, and the **cow**.
- **Symbolism of Colours:**
 - **Saffron (Kesari):** Represents **courage** and **selflessness**.
 - **White (Shwet):** Signifies **peace**, **truth**, and **purity**.
 - **Green (Harit):** Symbolises **fertility**, **growth**, and the richness of the land.

Flag Satyagraha (1923)

- **Event:** Started in **Nagpur** to protest restrictions on hoisting the national flag after the **Jallianwala Bagh massacre**.
- **Outcome:** Gained national attention and encouraged wider acceptance of the flag across communities.

Legal Framework Governing the National Flag

- **Flag Code of India:**
 - **Implementation Date:** Effective **January 26, 2002**.
 - **Usage Guidelines:**
 - Flag must be made of **hand-woven wool, cotton, silk, or khadi**.
 - Must not touch the ground or be used commercially, except on **state or military funerals**.
 - **Display Rules:** Hoisted **briskly** and lowered **slowly**. Display only from **sunrise to sunset** unless illuminated.
 - **Amendments:**
 - **2002:** Supreme Court allowed private hoisting, leading to amendments.
 - **December 2021:** Permitted polyester and machine-made flags, expanding available materials.
- **Prevention of Insults to National Honour Act, 1971:**
 - **Provisions:**
 - Penalises acts of **insult or disrespect** to national symbols, with imprisonment of up to **three years**, a fine, or both.
 - Restricts use as **clothing** below the waist, **drapery**, or allowing it to touch the **ground**.
 - **Enforcement:** Overseen by the **Ministry of Home Affairs** across India.

Interesting Facts and Historical Events

- **Fundamental Right:** Hoisting the national flag is protected as a **fundamental right under Article 19(1)(a)**.
- **First Raised on Mount Everest:** **May 29, 1953**.
- **Bhikaji Cama:** First Indian to hoist the flag on foreign soil in **1907**.

Other Official Flags of India

- **Army Flags:**
 - **Pre-Independence (1876–1947):** Union Jack with **Star of India**.
 - **Post-Independence:** Evolved to include Indian Army insignia on a red background.
- **Navy Flags:**
 - **Royal Indian Marine (1879–1924):** Blue ensign with Union Jack and Star of India.
 - **Current Design (2022–present):** Simplified design with blue cross and national flag.
- **Air Force Flags:**

- **Royal Indian Air Force (1945–1947):** Similar to RAF ensign.
- **Current Design (2023–present):** Updated insignia on a sky-blue flag.
- **Civil and State Ensigns:**
 - **Civil Ensign (1947–present):** Red ensign with national flag.
 - **State Ensign:** Blue ensign with national flag.
- Armed Forces Flag Day**
- **Observed on: December 7th** each year.
- **Initiated:** First observed on **December 7, 1949** to support **war veterans** and families affected by post-independence conflicts.

JUDGES APPOINTED TO SUPREME COURT 2024

Supreme Court led by **Chief Justice D.Y. Chandrachud** asked the government to submit a report on the pending judicial appointments recommended by the Collegium.

- **Emphasis:** The Supreme Court highlighted the role of the **Collegium** in the constitutional framework, stressing it is not merely a "search committee".
- **Current Proceedings:**
 - A **Public Interest Litigation (PIL)** was filed to establish a timeline for government notification of Collegium-recommended appointments.
 - A **contempt plea** by the Jharkhand government addressed delays in transferring **Chief Justice M.S. Ramachandra Rao** from Himachal Pradesh High Court to Jharkhand High Court.

Between January and October 2024, the Supreme Court of India saw the appointment of three judges:

1. Justice Prasanna B. Varale

- **Appointment Date:** January 25, 2024
- **Previous Position:** Chief Justice of the Karnataka High Court
- **Background:** Born on June 23, 1962, in Nipani, Justice Varale graduated in arts and law from Dr. Babasaheb Ambedkar Marathwada University. He enrolled as an advocate in 1985 and was appointed as an additional judge of the Bombay High Court on July 18, 2008, becoming permanent on July 15, 2011. He served as Chief Justice of the Karnataka High Court from October 15, 2022, until his elevation to the Supreme Court.

2. Justice N. Kotiswar Singh

- **Appointment Date:** July 18, 2024
- **Previous Position:** Chief Justice of the Jammu & Kashmir and Ladakh High Court
- **Background:** Justice Singh's elevation marked a historic moment as he became the first judge from Manipur to be appointed to the Supreme Court. He was appointed as an additional judge of the Gauhati High Court in October 2011 and later served as Chief Justice of the Jammu & Kashmir and Ladakh High Court from February 2023 until his Supreme Court appointment.

3. Justice R. Mahadevan

- **Appointment Date:** July 18, 2024
- **Previous Position:** Acting Chief Justice of the Madras High Court
- **Background:** Born in 1963 in Chennai, Justice Mahadevan graduated from the Madras Law College and enrolled as an advocate in 1989. He specialized in tax law and was elevated as a judge of the Madras High Court in 2013. Known for his erudition in Tamil literature, he has contributed significantly to the legal and literary fields.

Constitutional Basis

- **Article 124 (Supreme Court): Article 124(2):** Supreme Court judges appointed by the **President** after consultation with the **Chief Justice of India (CJI)** and other necessary Supreme Court and High Court judges.
- **Article 217 (High Court):** Deals with the appointment of High Court judges by the **President**, consulting with **CJI** and the **Governor of the state**.

Evolution of the Collegium System

1. **First Judges Case (1981):**
 - **Verdict:** “Consultation” does not mean “concurrence”; **Executive** holds primacy in appointments.
2. **Second Judges Case (1993):**
 - **Change:** Reversed the 1981 ruling, redefining “consultation” to mean **concurrence**; CJI’s advice is binding.
 - Collegium to include **CJI** and **two senior-most judges**.
3. **Third Judges Case (1998):**
 - **Expansion:** Collegium expanded to a **five-member body** (CJI + four senior-most judges).
4. **Fourth Judges Case (2015):**
 - **NJAC Act 2014** attempted to replace Collegium with **National Judicial Appointments Commission (NJAC)**.
 - **2015 Ruling:** SC declared NJAC and the 99th Constitutional Amendment unconstitutional, reinstating the **Collegium system**.

Collegium’s Role and Responsibilities

- **Supreme Court Appointments:**
 - Collegium includes **CJI** and **four senior-most judges**.
 - Recommendations sent to the **government** for approval; government can return recommendations once for reconsideration.
 - If re-sent by the Collegium, the government is obliged to accept.
- **High Court Appointments:** Collegium includes **CJI** and **two senior-most judges** for High Court judge appointments.
- **Transfer of Judges:** Collegium also manages **transfers** between High Courts to ensure judicial independence and prevent local biases.
- **Judicial Independence:** The system’s aim is to ensure judicial appointments remain free from **political or executive influence**.

Recent Developments in Supreme Court Appointments

- **New Judges Appointed:** Justice Prashant Kumar Mishra and Justice K.V. Viswanathan sworn in, achieving the full **sanctioned strength of 34 judges**.
- **Appointment Process:**
 - **Article 124(3)** outlines that a judge must be an **Indian citizen** with at least **five years as a High Court judge** or **ten years as a High Court advocate**, or recognized as a **distinguished jurist**.
 - Appointments are made by the **President** after consulting Supreme Court and High Court judges.

Terms and Provisions for Supreme Court Judges

- **Oath of Office:** Judges must take an **oath** pledging to uphold the **Constitution**.
- **Tenure:** Judges serve until the age of **65 years**; they may resign earlier by notifying the President.
- **Removal:**
 - A judge can only be removed for **misbehaviour or incapacity** by a **Presidential order** with **two-thirds majority support** in both parliamentary houses.
- **Post-Retirement:**
 - Retired judges cannot **practice law** in any court within India.
 - **Article 128** allows the **CJI** to recall retired judges to the Supreme Court with the President’s approval.

Historical Evolution of the Supreme Court Composition

- **Original Composition:** 8 judges (one Chief Justice and seven others).
- **Current Strength:** **34 judges** (one Chief Justice and 33 others).

Salaries, Allowances, and Restrictions

- **Financial Provisions:**
 - **Salaries, allowances, and pensions** for SC judges are drawn from the **Consolidated Fund of India**.
 - Salaries and other financial benefits are determined by **Parliament**.

GOVERNMENT LIFTS BAN ON RSS

In **July 2024**, the **Department of Personnel and Training (DoPT)** removed the ban on **central government employees** participating in **Rashtriya Swayamsevak Sangh (RSS)** activities.

- **Previous Restrictions:** The decision lifted references to the RSS in official memorandums (OM) from **1966, 1970, and 1980** that restricted government employees from joining RSS activities.
- **Scope:** Applies only to **central government employees**. **State government employees** remain subject to separate **Conduct Rules** established by individual states.

Rules Governing Government Employee Participation in Political Activities

- **DoPT Directive (9 July 2024):** The DoPT removed RSS references from prior official memorandums.
 - **RSS Reclassification:** The RSS is no longer categorised as a "political" organisation, thus allowing **central government employees** to engage in its activities without breaching **Rule 5(1) of the Conduct Rules**.
 - **Exception:** The ban still applies to **Jamaat-e-Islami**, which remains classified as a political organisation.
- **Rule 5 of the Central Civil Services (Conduct) Rules, 1964:**
 - Prohibits government employees from joining **political parties** or engaging in political activities.

Historical Official Memorandums on RSS and Other Organisations

1. **OM of 1966:**
 - Issued on **30 November 1966** by the **Ministry of Home Affairs (MHA)**.
 - Directed against participation in **RSS** and **Jamaat-e-Islami** activities, citing these as against government policy.
 - Referenced **Rule 5 of the Central Civil Services (Conduct) Rules, 1964** for disciplinary action against involvement.
2. **OM of 1970:**
 - Reiterated the **1966 directives** on **25 July 1970**, stressing disciplinary action for rule violations.
 - During the **Emergency (1975-1977)**, directives extended to actions against members of **RSS, Jamaat-e-Islami, Ananda Marg**, and **CPI-ML**.
3. **OM of 1980:** Issued on **28 October 1980**, emphasising the need for a **secular outlook** and the removal of communal biases among government employees.
4. **Position Before 1966:** Prior to 1966, government employees were subject to the **Government Servants' Conduct Rules of 1949**, explicitly banning participation in political activities under **Rule 23**.

Penalties for Violations of Conduct Rules

- **Consequences:** Violations of **Rule 5** can lead to **dismissal** from service.
- **Authority:** Government retains final authority in cases of ambiguity about an organisation's political status or compliance with Conduct Rules.

About Rashtriya Swayamsevak Sangh (RSS)

- **Establishment:** Founded in **1925** in **Nagpur** by **Dr. K.B. Hedgewar**.
- **Objective:** Aims to promote **Hindutva**, emphasising Hindu cultural and national identity.
- **Pre-Independence:** Played a role in **social and cultural mobilisation** among Hindus.
- **Post-Independence:**
 - Came under scrutiny after **Mahatma Gandhi's assassination** in 1948, leading to a temporary ban.
 - Resumed operations after affirming loyalty to the **Constitution**.
- **Core Ideology:**
 - Influenced by **Vinayak Damodar Savarkar**, the RSS upholds India as a **Hindu nation** and focuses on **Indian culture and heritage**.
 - Actively engages in **education, healthcare, disaster relief**, and promotes **Seva** (service) among members.

History of Bans on RSS

- **1948:** Banned after **Gandhi's assassination**; reinstated in **1949**.
- **1966:** Ban on government employees joining RSS, reiterated in **1970** and **1980**.

- **1975-1977:** Banned during the **Emergency**; reinstated in **1977**.
- **1992:** Banned post-**Babri Masjid demolition**; lifted in **1993** after a commission found the ban unjustified.

Structure and Operations of RSS

- **Organisation:** Operates through **shakhas (branches)** across India and internationally, focusing on **physical, intellectual, and cultural training**.
- **Affiliated Organisations:** Inspired the creation of groups like **Vishva Hindu Parishad (VHP)**, **Bajrang Dal**, and **Akhil Bharatiya Vidyarthi Parishad (ABVP)**.

Other Relevant Organisations

Jamaat-e-Islami

- **Founded:** **1941** by **Abul A'la Maududi**.
- **Focus:** Promotes **Islamic values** and advocates for an **Islamic state** governed by **Sharia law**.
- **Ban:** **Jamaat-e-Islami Jammu and Kashmir** banned by the Government of India in **March 2019** under the **Unlawful Activities (Prevention) Act (UAPA)**.

Ananda Marg

- **Founded:** **1955** by **Prabhat Ranjan Sarkar**.
- **Ideology:** Known for its **Progressive Utilisation Theory (Prout)**, a socio-economic model promoting comprehensive human development.
- **Controversies:** Faced governmental restrictions and was banned during the **Emergency (1975-1977)**.

MID-YEAR AIR QUALITY ASSESSMENT FOR INDIA: CREA

- **Period Covered:** January to June 2024.
- **Conducted by:** **Centre for Research on Energy and Clean Air (CREA)**.

Air Pollution Levels and Affected Cities

- **Most Polluted City:** **Byrnihat** (Assam-Meghalaya border) with an average **PM2.5 concentration of 140 µg/m³**.
- **Top 10 Most Polluted Cities:**
 - Spread across **16 states and union territories**.
 - Include **three cities in Haryana**, **two each in Rajasthan and Uttar Pradesh**, and **one each in Delhi, Assam, and Bihar**.
 - **Delhi** ranked **3rd** with **PM2.5 levels of 102 µg/m³**, exceeding both **National Ambient Air Quality Standards (NAAQS)** and **World Health Organization (WHO)** guidelines.

Air Quality Standards and Compliance

- **NAAQS Compliance:**
 - **256 cities** monitored; **163 cities** exceeded NAAQS annual limit of **40 µg/m³**.
 - All 256 cities exceeded the **WHO PM2.5 standard of 5 µg/m³**.
- **National Clean Air Programme (NCAP) Cities:**
 - Out of **97 NCAP cities**, **63** exceeded the **NAAQS**.
 - **Only 63 out of 163 cities** exceeding NAAQS are covered under the NCAP, leaving **100 cities** without dedicated action plans.

Monitoring and Air Quality Categories

- **Continuous Ambient Air Quality Monitoring Stations (CAAQMS):**
 - **Six new CAAQMS** were added, bringing the total to **545** across India.
- **Air Quality Categories by Region:**
 - **Karnataka and Maharashtra:** Highest number of cities under **“Good”** and **“Satisfactory”** air quality categories.
 - **Bihar:** Most cities fall under the **“Moderate”** air quality category.

Key Initiatives for Controlling Air Pollution in India

1. **National Clean Air Programme (NCAP):** Targets air pollution reduction through multi-sectoral action plans.

2. **Bharat Stage Emission Standards:** Vehicle emission norms for reducing vehicular pollutants.
3. **Solid Waste Management Rules, 2016:** Framework for managing solid waste to minimize pollution.
4. **System of Air Quality and Weather Forecasting and Research (SAFAR) Portal:** Provides air quality forecasts for Indian cities.
5. **Air Quality Index (AQI):** Index measuring air quality levels in real-time.
6. **Graded Response Action Plan (GRAP):** Response plan with measures based on pollution severity.
7. **National Air Quality Monitoring Programme (NAMP):** Nationwide air quality monitoring network.
8. **Commission for Air Quality Management (CAQM):** Focused on tackling air pollution in the National Capital Region (NCR).

SINDHU-SARASVATI CIVILISATION AND UJJAYINI MERIDIAN

Michel Danino, visiting professor at **IIT Gandhinagar** and head of the NCERT committee for new social science textbooks, recently supervised the release of the **Class 6 textbook 'Exploring Society: India and Beyond'**.

- He clarified that the terms '**Sindhu-Sarasvati**' and '**Indus-Sarasvati**' used for the Harappan Civilization are based on **archaeological evidence**, not political motives.

Key Updates in Class 6 Textbook on Harappan Civilization

- **Reference to Sarasvati River:** Unlike previous editions, the new textbook makes extensive references to the **Sarasvati River** in the chapter on the origins of Indian civilization.
 - **Terminology:** The **Harappan Civilization** is now referred to as the '**Indus-Sarasvati**' or '**Sindhu-Sarasvati**' Civilization.
 - **Geographical Importance:** The **Sarasvati basin** is highlighted as crucial to the civilization, encompassing major sites such as **Rakhigarhi** and **Ganweriwala**.
 - **Present-Day Name:** The **Sarasvati River** is identified as the **Ghaggar** in India and **Hakra** in Pakistan and is depicted as **seasonal**.
- **Role of the Sarasvati River in the Civilization's Decline:**
 - The textbook identifies **two primary causes** for the decline of the Harappan Civilization:
 - **Climate Change:** Decreased rainfall.
 - **Sarasvati River Drying:** The river's desiccation in the central basin led to the abandonment of key cities like **Kalibangan** and **Banawali**.
 - **Comparison with Old Textbook:** The earlier version listed theories such as river drying, deforestation, and flooding without directly linking them to the collapse of cities, suggesting instead a possible loss of ruler control.
- **Ancient Indian Prime Meridian:** It introduces the concept of India's own **prime meridian** before the Greenwich Meridian, known as the "**Madhya rekha**" or "**Ujjayini meridian**", which ran through **Ujjain** and was used in **astronomical calculations**.

Structural and Content Adjustments in the New Textbook

- **Single Volume Format:** The new textbook combines topics from **History, Political Science, and Geography** into one volume, focusing on **five main themes** and providing a more integrated approach.
- **Shift in Focus on Social Issues:** The chapter on diversity now includes **less emphasis on caste-based discrimination and inequality** compared to the previous edition, aiming for a broader interdisciplinary perspective.

SC VERDICT ON GM MUSTARD APPROVAL

On **October 18, 2022**, the **Genetic Engineering Appraisal Committee (GEAC)** recommended the release of GM mustard hybrid **DMH-11** for environmental testing.

- **Centre's Approval:** The Centre approved GEAC's recommendation on **October 25, 2022**.

Genetic Engineering Appraisal Committee (GEAC)

- **Status:** Statutory body under the **Ministry of Environment, Forest, and Climate Change (MoEF&CC)**.

- **Function:** Evaluates the environmental impact of large-scale use of hazardous microorganisms and recombinants.
- **Structure:** Comprises **24 members**.
- **Meetings:** Conducts monthly meetings to review applications related to its regulatory areas.

Genetic Engineering Appraisal Committee (GEAC)

- **Establishment:** Formed under the **Environment (Protection) Act, 1986**.
- **Nodal Ministry:** **Ministry of Environment, Forest, and Climate Change (MoEF&CC)**.
- **Purpose:** GEAC is the **statutory authority responsible for approving genetically modified organisms (GMOs)** and assessing their environmental impacts in India.
- **Composition of GEAC: Members-** GEAC is a 24-member committee comprising scientists, regulatory experts, and representatives from various ministries and government bodies.
- **Scope-** Reviews applications for **import, export, transport, and commercial release** of GMOs and GM crops.

National Policy on GM Crops

- **Supreme Court Directive:** The **Supreme Court** has directed the **Centre** to create a **national policy** on GM crops, covering areas such as **research, cultivation, trade, and commerce**.

Regulatory Framework for GM Crops in India

- **Environment (Protection) Act, 1986:** Governs activities related to GMOs, including research, trials, and commercial approvals.
- **Food Safety and Standards Authority of India (FSSAI):** Oversees the food safety standards for GM foods.
- **Current Regulation:** Only **Bt Cotton** is permitted for commercial cultivation; other GM crops like **GM Mustard** have been approved for environmental release.

GM Mustard (DMH-11)

- **Name:** **Dhara Mustard Hybrid-11 (DMH-11)**.
- **Species:** Hybrid variety of **Brassica juncea**.
- **Traits:** Genetically modified for **herbicide tolerance (HT)**.

Parent Varieties

- **Indian Mustard:** **Varuna**
- **East European Mustard:** **Early Heera-2**
- **Creation:** Developed by **cross-breeding these varieties**.

Genetic Modifications

- **Genes Involved:** **Barnase** and **Barstar** genes from **Bacillus amyloliquefaciens** (a soil bacterium).
- **Purpose:** Enables the creation of high-yield hybrids and maintains **genetic purity** through the "**bar gene**".

Understanding Genetically Modified (GM) Crops

- **Definition:** Plants with **DNA altered** using **genetic engineering techniques** to introduce traits like pest resistance, disease tolerance, or increased nutritional content.
- **Modification Techniques:**
 - **Mutational Breeding:** Established method for altering genomes.
 - **Genome Editing:** Newer technique.
 - **Recombinant DNA Technology:** Methods include **gene cloning, DNA splicing, and gene insertion**.

Global and Indian Context of GM Crops

- **Global Adoption:** GM crops are widely adopted in the U.S., Brazil, Argentina, and Canada.
- **India's First GM Crop:** **Bt Cotton**, introduced commercially in **2002**.
- **Current Status in India:**
 - **Bt Cotton** is the only GM crop approved for commercial cultivation.
 - **GM Mustard (DMH-11)** has been approved for environmental release but awaits commercial use approval.
 - Research is ongoing for **GM varieties of rice, brinjal, wheat, and other staple crops**.

GM Crop Cultivation in India

- **Bt Cotton:** The first GM crop introduced in India in **2002-2003**.
 - By **2014**, **96%** of cotton in India was Bt Cotton.
- **GM Mustard:** Two GM mustard varieties have been approved for environmental release to develop new hybrids.
- **Bt Brinjal:** Approved for evaluation, but halted due to public resistance.
- **Ongoing Research:** GM seeds for crops like **rice**, **wheat**, **sugarcane**, **potato**, and **pigeon pea** are under development.

Regulatory Framework for GM Crops in India

- **Key Legislations:**
 - **Environment Protection Act, 1986**
 - **Biological Diversity Act, 2002**
 - **Food Safety and Standards Act, 2006**
 - **Drugs and Cosmetics Rule (8th Amendment), 1988**
- **GEAC's Role:** Approves all activities related to GMOs under the **Environment Protection Act**.
- **Food Safety:** **FSSAI** regulates GM foods for safety compliance.

Current Status and Supreme Court Verdict on GM Mustard

- **Supreme Court Verdict** (July 23, 2024): Delivered a **split verdict** on the Centre's approval of GM mustard environmental release.
 - **Justice B.V. Nagarathna:** Deemed GEAC's decision invalid due to the absence of key members in the meeting.
 - **Justice Sanjay Karol:** Found no arbitrariness and suggested field trials with safeguards.
- **Next Steps:** Referred to **Chief Justice of India D.Y. Chandrachud** for further review.

HUMAYUN TOMB WORLD HERITAGE SITE MUSEUM

The **Humayun's Tomb Museum** was inaugurated by the **Union Minister of Culture and Tourism** at the Humayun's Tomb complex in **Nizamuddin, Delhi**. This museum, India's first sunken museum, opens to the public on **July 30, 2024**.

- **Collaborators:** Developed by the **Archaeological Survey of India (ASI)** in collaboration with the **Aga Khan Trust for Culture (AKTC)**, with the foundation stone laid in **April 2015**.
- **UNESCO Recommendation:** UNESCO suggested establishing **interpretation centers** at World Heritage Sites to offer cultural context. This museum fulfills that recommendation for Humayun's Tomb.
- **Architectural Design:** Inspired by Delhi's ancient **Baolis** (stepped wells), the museum includes a **100-seat auditorium**, galleries, cafés, meeting rooms, and a library.

Significant Artefacts and Collections

- **Collection Size:** Houses **500+ artifacts** providing insights into **Emperor Humayun's life** and **Mughal heritage**.
- **Major Galleries:**
 - **"Where the Emperor Rests":** Focuses on the architecture of Humayun's Mausoleum, detailing the emperor's life, travels, administration, and his love for astrology, arts, and culture.
 - **"Icons of a Sacred Landscape":** Celebrates four cultural icons associated with the Nizamuddin area:
 - **Hazrat Nizamuddin Auliya** (Sufi Saint)
 - **Amir Khusrau** (originator of Qawwali music)
 - **Rahim** (Akbar's commander-in-chief and poet)
 - **Dara Shukoh** (scholar who translated the Upanishads into Persian)
- **Unique Exhibits:**
 - **Royal Decrees:** Includes **farmans** providing insights into **Mughal governance**.
 - **Astronomical Artifacts:** Features an **astrolabe** and a **celestial sphere** from the **1840s**, reflecting the Mughals' interest in astronomy.
 - **Military Relics:** A **warrior's helmet** from the **16th-17th century** and **coins** from 18 Mughal rulers, including coins from **Akbar's reign** with 'Allah' on one side and 'Ram' on the other.

- **Finial of Humayun's Tomb:** A symbol of the tomb's historical significance, dislodged during a storm in 2014.

Museum Highlights

- **Visitor Experience:** Offers a journey through history using **ramps, doorways, paintings, scrolls, and artifacts**.
- **Modern Technology:** Uses **3D videos** and models, notably a digital reconstruction of the **Nizamuddin Dargah complex** from the 14th century.
- **Positioning and Connectivity:** Strategically located between **Nizamuddin, Sunder Nursery, and Humayun's Tomb**, the museum links these historic sites within a **300-acre conservation area**.

Humayun's Tomb: Historical and Architectural Facts

- **Construction:** Built between **1569-70** by **Empress Bega Begum**, Humayun's widow, and designed by **Persian architect Mirak Mirza Ghiyath**. This tomb was the first **garden-tomb in the Indian subcontinent**.
- **Design:** The tomb is a classic **char bagh** (four-fold garden layout) with **pools, channels, and a high-terraced platform** leading to a centrally located mausoleum.
- **"Dormitory of the Mughals":** Humayun's Tomb houses over **150 Mughal family members**, earning it this title.
- **UNESCO World Heritage Status:** Designated a World Heritage Site in **1993**, marking its international significance.

About Humayun

- **Background:** Humayun, son and successor of **Babur**, the first Mughal emperor, faced many challenges upon ascending the throne.
- **Notable Battles:**
 - **Siege of Chunar (1532):** Defeated Afghan forces and captured Chunar Fort.
 - **Battle of Chausa (1539):** Defeated by **Sher Shah Suri**, narrowly escaping.
 - **Battle of Kannauj (1540):** Known as the Battle of Bilgram; Sher Shah's victory forced Humayun into a **15-year exile**.
- **Exile and Return:**
 - Married **Hamida Banu Begum** and fathered **Akbar** during his exile.
 - With support from the **Shah of Persia**, Humayun recaptured **Kandahar** and **Kabul** in **1545**.
- **Persian Influence:** Introduced Persian administrative practices and arts, significantly impacting Mughal governance and culture.
- **Contributions to Architecture and Arts:**
 - Founded **Dinpanah** and initiated Humayun's Tomb construction, later completed by his wife.
 - Brought **Persian artists Mir Sayyid Ali and Abdal Samad** to India, establishing the **Nigaar Khana** (painting workshop).
 - Began the **Hamza Nama** illustration project, continued by Akbar.
- **Historical Records:** **Gul Badan Begum**, Humayun's sister, documented his life in the **Humayun-Nama**.

Role of Key Institutions

- **Archaeological Survey of India (ASI):**
 - Operates under the **Ministry of Culture**.
 - Responsible for **archaeological research and cultural heritage protection**.
 - Functions under the **Ancient Monuments and Archaeological Sites and Remains Act, 1958**, and the **Antiquities and Art Treasure Act, 1972**.
- **Aga Khan Trust for Culture (AKTC):**
 - Established by the **Aga Khan**, the 49th hereditary Imam of Shia Imami Ismaili Muslims.
 - Aims to enhance quality of life, focusing on **Asia and Africa** without distinction of faith or gender.

GLOBAL EDUCATION MONITORING REPORT 2024 UNESCO

Compiled by UNESCO, the MECCE Project, and the University of Saskatchewan, the Global Education Monitoring Report reveals that climate-related stressors such as **heat, wildfires, floods, and rising sea levels** pose severe risks to education systems, potentially reversing recent educational progress.

Main Findings

- **Impact of Climate Change on Education:** Climate change is severely affecting children's education globally.
- **School Closures Due to Extreme Weather:** In the last **20 years, 75% of extreme weather events** led to school closures, impacting nearly **five million individuals**.
- **Marginalized Populations Most Affected:** Climate-related educational disruptions disproportionately impact marginalized communities.
 - **Income Category of Affected Countries:** Of the **ten countries** most affected by extreme weather, **eight** are classified as middle- or low-income.
 - **High-Risk Countries:** Among the **33 countries** facing the highest climate risks, **29** are classified as fragile states.
- **Displacement Due to Natural Disasters:** In **2022**, about **32.6 million people** were displaced internally due to natural calamities, leading to large-scale disruption in education.
- **Destruction and Loss:** Schools, along with student and staff lives, are at risk from events like cyclones and floods.
- **Enrollment Impacts in Asia:** School enrollments in multiple Asian nations have been heavily disrupted by early-life natural disasters.
- **Academic Performance Decline:** Natural calamities and climate conditions are negatively impacting **math performance** among students.
- **Health and Livelihood Impacts:** Declines in health and livelihoods due to climate change also strain educational systems.

Heatwave Effects on Learning

- **Heat Exposure:** Higher temperatures during prenatal and early childhood stages correlate with reduced schooling, especially in **Southeast Asia**.
- **Schooling Years Reduction:** Children exposed to higher temperatures tend to complete **1.5 fewer years of schooling**.
 - **United States:** A **1% drop in test scores** was observed with a **1°C rise** in temperature during the school year without air conditioning.
 - **China:** High temperatures negatively impacted test scores, high school graduation rates, and college entry exams.
 - **Brazil:** Students in heat-prone areas faced a **1% annual learning loss**.

Effects of Rainfall Shocks

- **Cognitive Impacts:** Sudden rainfall shifts negatively influence **vocabulary** by age five, as well as **non-cognitive** and **math skills** by age 15.

MECCE Project (Monitoring and Evaluating Climate Communication and Education)

- **Purpose:** The **MECCE Project** is a global partnership aimed at improving the **quality and reach** of climate communication and education (CCE).
- **Partnership:** Supported by **100+ scholars and organizations** with an Advisory Committee including **IPCC, UNESCO, UNFCCC**, and the **Global Education Monitoring Report** team.
- **Objectives:**
 - **Data Expansion:** Gather global data to aid in **benchmarking, setting targets, and tracking progress** in climate education.
 - **Beyond Scientific Literacy:** Foster **psychosocial and action-based engagement** to promote climate-related change.

RASHTRAPATI BHAVAN HALLS RENAMED

- **Event:** President Droupadi Murmu has renamed two key halls in Rashtrapati Bhavan:
 - **Durbar Hall** is now **Ganatantra Mandap**.
 - **Ashok Hall** is now **Ashok Mandap**.
- **Purpose:** To reflect Indian **cultural values** and **ethos**.

Ganatantra Mandap (Formerly Durbar Hall)

- **Historical Significance:**
 - **Former Name:** Durbar Hall; 'Durbar' means court or assembly, originally used by **Indian rulers** and the **British**.
 - **Use:** Hosted critical events, including the **1947 swearing-in ceremony** of India's first government.
 - **Ceremonies:** Hosts **Civil and Defence Investiture Ceremonies** and **Chief Justice swearing-in**.
- **Architecture:**
 - Designed by **Sir Edwin Lutyens**, combining **Western** and **Indian elements**.
 - Features **yellow Jaisalmer marble columns** with white bases and intricate **marble jaalis**.
 - Originally held two thrones for the **Viceroy and spouse**; post-independence, a **new throne** with symbols of the Republic was added, with a **5th-century Buddha statue** as a backdrop.

Ashok Mandap (Formerly Ashok Hall)

- **Historical Background:**
 - **Original Use:** Built as a **ballroom** during British rule.
 - **Current Use:** Hosts formal events like **presentation of credentials** by foreign Heads of Missions and **State Banquets**.
- **Architectural Features:**
 - **Decor:** Houses **six Belgian chandeliers** and a hunting scene painted by **Fath Ali Shah**.
 - Designed by **Tomasso Colonnello** with a forest theme carried by **23 Indian artists**.
 - Contains **Victorian fireplaces** with **Persian inscriptions** and paintings depicting royal processions.

Significance of Renaming

- **Ganatantra Mandap:** Reflects India's **Republican spirit** post-independence, with 'Ganatantra' rooted in ancient Indian society.
- **Ashok Mandap:** Named to honor **Emperor Ashoka**, symbolizing **unity and peace**. The term 'Ashok' signifies freedom from **sorrow** and is also associated with the **Ashok tree**, important in Indian **religion and culture**.

Rashtrapati Bhavan's Historical Context

- **Construction:** Built between **1912–1929** as the Viceroy's House, based on **King George V's** 1911 declaration to shift the capital to **Delhi**.
- **Post-Independence:** Became the official residence and office of the **President of India**.
- **Architect:** Located in New Delhi, it was designed by architect Sir Edwin Lutyens.

Recent Cultural Changes at Rashtrapati Bhavan

- **Mughal Gardens:** Renamed **Amrit Udyan** in 2023, commemorating **75 years of India's independence**.
- **Kartavya Path:** Formerly **Rajpath**, renamed to symbolise **public ownership** and **empowerment** instead of colonial power.

INDIA AI MISSION

The **Union Cabinet** approved the **IndiaAI Mission** with an outlay of **₹10,372 crore** for the next **five years**.

- The **Indian Prime Minister** announced the mission at the **Global Partnership on Artificial Intelligence (GPAI) Summit 2023** in **New Delhi**, aiming to establish the computing powers of AI within the country.

What is India's AI Mission?

- **Launch Announcement:** The **Prime Minister of India** announced the mission at the **GPAI Summit 2023**.
- **Implementing Agency:** To be implemented by the '**IndiaAI**' **Independent Business Division (IBD)** under the **Digital India Corporation (DIC)**.
- **Objectives:**
 - Establish a computing capacity of more than **10,000 Graphics Processing Units (GPUs)**.
 - Develop foundational models trained on datasets covering major **Indian languages** for priority sectors like **healthcare, agriculture, and governance**.
- **AI Curation Units (ACUs):** To be developed in **50 line ministries**.
- **AI Marketplace:** A platform to offer **AI as a Service** and pre-trained models to AI application developers.
- **Public-Private Partnership:** Implementation through a **PPP model** with **50% viability gap funding**.
- **Budget Allocation:**
 - Total outlay: **₹10,372 crore**.
 - **₹4,564 crore** earmarked for building computing infrastructure.

7 Key Features of IndiaAI Mission

1. **IndiaAI Compute Capacity:**
 - Build a high-end, scalable **AI computing ecosystem**.
 - Cater to the increasing demands of India's expanding **AI startups** and **research ecosystem**.
2. **IndiaAI Innovation Centre:**
 - Develop and deploy indigenous **Large Multimodal Models (LMMs)**.
 - Focus on domain-specific foundational models in critical sectors.
3. **IndiaAI Datasets Platform:**
 - Provide streamlined access to quality **non-personal datasets**.
 - Support **AI innovation** by making datasets readily available.
4. **IndiaAI Application Development Initiative:**
 - Promote AI applications in critical sectors.
 - Address problem statements sourced from **Central Ministries, State Departments**, etc.
 - Develop, scale, and promote adoption of impactful AI solutions for large-scale socio-economic transformation.
5. **IndiaAI FutureSkills:**
 - Mitigate barriers to entry into AI programs.
 - Increase AI courses at **undergraduate, Master's**, and **Ph.D.** levels.
 - Establish **Data and AI Labs** in **Tier 2 and Tier 3 cities** to impart foundational courses.
6. **IndiaAI Startup Financing:**
 - Support and accelerate **deep-tech AI startups**.
 - Provide streamlined access to funding for **futuristic AI projects**.
7. **Safe & Trusted AI:**
 - Implement **Responsible AI** projects.
 - Develop indigenous tools and frameworks.
 - Create self-assessment checklists for innovators and establish guidelines and governance frameworks.

Compute Capacity

- **Definition:** The amount of **server and storage resources** available to databases in an instance.
- **Mission Goal:** Develop AI compute infrastructure of **10,000 or more GPUs** through public-private partnerships.

India's Initiatives for Developing AI

- **NITI Aayog's Contributions:**
 - Released the '**National Strategy for Artificial Intelligence' Discussion Paper** focusing on establishing the **International Conference on Tools with Artificial Intelligence (ICTAI)** through private sector collaboration.
 - Plans to set up India's first AI-specific cloud computing infrastructure called **AIRAWAT**.
- **Initiative:**
 - **Launch Date:** 28th May 2020.
 - **Nature:** Knowledge portal, research organization, and ecosystem-building initiative.
 - **Collaborators:** Joint venture by **MeitY**, **National e-Governance Division (NeGD)**, and **National Association of Software and Service Companies (NASSCOM)**.
 - **Purpose:** Unite and promote collaborations within India's AI ecosystem.
- **Global Partnership on Artificial Intelligence (GPAI):**
 - **Formation:** India joined in **2020** along with **15 other countries**.
 - **Aim:** Establish frameworks for the responsible utilization of emerging technologies.

Key Organisations

- **Global Partnership on Artificial Intelligence (GPAI):**
 - A multi-stakeholder initiative with **29 member countries**.
 - Aims to bridge the gap between theory and practice on AI.
 - Supports cutting-edge research and applied activities on AI-related priorities.
- **Digital India Corporation (DIC):**
 - An Indian **not-for-profit company** under the **Ministry of Electronics and IT**.
 - Established under **Section 8 of the Companies Act 2013**.
 - Leads and guides in realizing the vision, objectives, and goals of the **Digital India program**.

Additional Context

- **IndiaAI Independent Business Division (IBD):**
 - The implementing arm for the IndiaAI Mission under the DIC.
 - Responsible for structured implementation and nurturing India's AI innovation ecosystem.

ADCS RAISE DEMAND TO PASS 125TH CONSTITUTIONAL AMENDMENT BILL

Chief Executive Magistrates (CEMs) of 10 Autonomous District Councils (ADCs) from **Assam, Meghalaya, Mizoram, and Tripura** have urged the Union Home Minister to expedite the passage of the **125th Constitutional Amendment Bill**.

- **Union Government** has established a **committee led by the Minister of State for Home Affairs** to address issues related to the Bill.

Objective of the 125th Constitutional Amendment Bill

- **Purpose:** To **strengthen the financial, executive, and administrative powers** of tribal autonomous councils under the **Sixth Schedule of the Constitution**.

Key Amendments Proposed in the Bill

1. **Establishment of Village and Municipal Councils:**
 - **Village Councils:** For individual or clusters of villages in rural areas.
 - **Municipal Councils:** To be established in urban areas within each district.
 - **District Councils** will have the authority to legislate on:
 - The **number and composition** of Village and Municipal Councils.
 - **Constituency delimitation** for elections to these councils.
 - **Powers and functions** of the Village and Municipal Councils.
2. **Rules for Devolution of Powers:**
 - The **Governor** will have authority to formulate rules for **devolving powers and responsibilities** to Village and Municipal Councils.
 - These rules may include:

- Preparation of **economic development plans**.
- **Land reforms** implementation.
- **Urban and town planning**.
- **Land use regulation** and other responsibilities.
- The Governor may also set rules for **disqualification of council members** based on defection.
- 3. **State Finance Commission:**
 - The Bill proposes the establishment of a **State Finance Commission** to evaluate the financial conditions of District, Village, and Municipal Councils.
 - The Commission will make recommendations on:
 - **Tax distribution** between states and District Councils.
 - **Grants-in-aid** to District, Village, and Municipal Councils from the state's **Consolidated Fund**.
- 4. **Elections to Councils:**
 - **Elections for District, Regional, Village, and Municipal Councils** will be conducted by the **State Election Commission**, appointed by the Governor in the four states.

Current Status of the 125th Constitutional Amendment Bill

- Introduced in the **Rajya Sabha in 2019** and subsequently referred to the **Departmental-Related Standing Committee on Home Affairs**.
- The **committee raised concerns** in a 2020 report, and the Bill has since remained **pending**.

Sixth Schedule of the Indian Constitution

- **Scope:** Provides governance framework for **tribal areas in Assam, Meghalaya, Tripura, and Mizoram** to ensure protection of **tribal rights**.
- **Constitutional Basis:**
 - **Article 244(2):** Applies Sixth Schedule provisions to these states.
 - **Article 275(1):** Guarantees **grants-in-aid from the Consolidated Fund of India**.
- **Autonomy:**
 - Allows governance through **Autonomous District Councils (ADCs)** with legislative, executive, and judicial powers on matters like **land, forests, agriculture, inheritance, customs, and taxes**.

What are Autonomous District Councils (ADCs)?

- **About ADCs:**
 - ADCs are **constitutional bodies under the Sixth Schedule (Article 244)** in Northeast India, intended to protect **cultural identities** and preserve **natural resources** of tribal populations.
- **Governor's Authority:**
 - The Governor has powers to **organise, reorganise, and modify** autonomous districts, including their areas and boundaries.
 - In districts with **multiple tribes**, the Governor can establish **autonomous regions**.
- **Composition:**
 - **District Council:** Consists of **30 members** (26 elected and 4 nominated by the Governor), with a **five-year term**.
 - **Regional Council:** Each autonomous region has its own council.
- **Administration:**
 - District and regional councils manage their areas, and may set up **village councils or courts** to resolve tribal disputes, with appeals handled as per **Governor's directives**.
- **Current Status:**
 - **10 autonomous councils** exist—**three each in Assam, Meghalaya, and Mizoram**, and **one in Tripura**.

THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD 2024

Published by **FAO, IFAD, UNICEF, WFP, and WHO**, the **SOFI 2024 report** analyses global food security and nutrition challenges, highlighting the urgent need for increased funding to combat **hunger, food insecurity, and malnutrition** in all forms.

Key Global Findings

- **Hunger Prevalence:** In **2023**, between **713 and 757 million people** globally faced hunger, equating to **1 in every 11 people** worldwide and **1 in every 5** in Africa. **Asia** has the largest number of undernourished people, totaling **384.5 million**.
- **Food Insecurity:** Approximately **2.33 billion people** experienced moderate or severe food insecurity in 2023, with over **864 million** affected severely.
- **Cost of a Healthy Diet:** The global average cost of a healthy diet rose to **USD 3.96 per person per day** in PPP terms in 2022. Despite this rise, the number unable to afford a healthy diet declined to **2.83 billion**.
 - **Regional Variations:** The highest diet costs are in **Latin America and the Caribbean**, while the lowest are in **Oceania**. The affordability recovery has been uneven, particularly affecting **Africa**.
- **Child Nutrition:** Progress in reducing **stunting** and **wasting** among children under five continues, yet remains insufficient to meet **2030 SDG targets**. **Exclusive breastfeeding** rates have increased but are still below the target.
- **Obesity and Anaemia:** Rising **obesity** and increasing **anaemia** in women aged 15 to 49 present major public health issues.
- **Funding Gaps:** Public spending on food security and nutrition remains inadequate, especially in **low-income nations**. Limited tracking of private funding compounds the issue, widening the funding gap.

Key Insights on India

- **Undernourishment:** India has the highest number of undernourished people globally, at **194.6 million**. This has decreased from **240 million** during the **2004-06 period**.
- **Affordability of a Healthy Diet:** **55.6% of India's population**—or around **790 million people**—cannot afford a healthy diet. This proportion improved by roughly **3% points** since 2022.
- **Chronic Undernourishment:** **13% of India's population** faces chronic undernourishment, indicating ongoing food insecurity.
- **Global Hunger Index:** India ranked **111th** in the **2023 Global Hunger Index**, reflecting serious food security issues.
- **Child Malnutrition:** India reports **18.7% wasting** (highest in South Asia) and **31.7% stunting** in children under five.
- **Low Birth Weight:** **27.4% of babies** born in India have low birth weight, the highest globally, suggesting maternal malnutrition.
- **Anaemia in Women:** **53% of women in India** are anaemic, the highest rate in South Asia. **Anaemia among women aged 15-49** is anticipated to increase, especially in South Asia.
- **Obesity:** The obesity rate for children under five is **2.8%**, while for adults it has risen to **7.3%**. A significant number of Indians lead physically inactive lifestyles, contributing to obesity.
- **Undernutrition and Obesity Coexistence:** The report notes the simultaneous presence of **undernutrition and obesity** within the same populations, influenced by factors such as **poor diet quality**.
- **Impact of Ultra-Processed Foods:** High consumption of **ultra-processed foods** is associated with poor health outcomes. Most food products by leading manufacturers in countries like India are deemed **unhealthy** by WHO standards.
- **Public Spending on Food Security:** India has increased public spending on **food security and nutrition**, yet the report highlights the need for **better resource allocation** to address root causes of food insecurity.
- **Covid-19 Pandemic Impact:** The pandemic has intensified **food insecurity and malnutrition** challenges in India. The economic slowdown, job losses, and disruptions in food supply chains have worsened food access and affordability.

MAHARASHTRA SPECIAL PUBLIC SECURITY BILL 2024

The **Maharashtra government** introduced the Maharashtra Special Public Security (MSPS) Bill, 2024, in the Assembly to address the rise of Naxalism in **urban areas**, especially through support networks and frontal organizations.

Background on Naxalism

- **Naxalism** is a **Maoist-inspired rebellion** against the Indian government, originating in **Naxalbari village, West Bengal** in 1967.

Origin and Spread of Naxalism

- **Origin:** Naxalism originated from an armed uprising by peasants in **Naxalbari village, West Bengal** in 1967, leading to the movement being named "Naxalism."
- **Founders:** Key leaders included **Charu Majumdar** and **Kanu Sanyal**, who followed Maoist principles, promoting armed struggle against perceived feudal oppression.
- **Ideology:** Naxalism follows **Maoist ideology** which emphasises class struggle and seeks to overthrow the state through **armed revolution**.
- **Spread:** Initially concentrated in West Bengal, Naxalism spread to states like **Andhra Pradesh, Chhattisgarh, Odisha, Jharkhand, Maharashtra, and Bihar**.

Geographical Extent and Red Corridor

- **Red Corridor:** Refers to areas with significant Naxal influence spanning across central and eastern India. It includes parts of **Jharkhand, Chhattisgarh, Odisha, Bihar, Maharashtra, and Telangana**.
- **Affected Districts:** As of recent data, **90 districts across 11 states** are classified as Left-Wing Extremism (LWE) affected by the Ministry of Home Affairs.

Key Provisions of the MSPS Bill

- **Unlawful Organisations:**
 - Allows the **state to declare organisations as "unlawful"** if they are deemed a threat to public order.
 - An **advisory board** of three members (qualified High Court judges) reviews such designations.
- **Definition of Unlawful Activities:**
 - **Threats to public order and disruption of law.**
 - Acts involving **violence, vandalism, use of firearms or explosives**, and **disrupting transportation**.
 - **Encouraging disobedience** to laws and collecting funds for unlawful activities.
- **Punishments:**
 - **Members** of unlawful organisations: **Up to 3 years imprisonment** and **₹3 lakh fine**.
 - **Non-members** aiding unlawful organisations: **Up to 2 years imprisonment** and **₹2 lakh fine**.
 - **Management or promotion** of unlawful organisations: **Up to 3 years imprisonment** and **₹3 lakh fine**.
 - **Committing, abetting, or planning** unlawful activities: **Up to 7 years imprisonment** and **₹5 lakh fine**.
- **Seizure and Forfeiture:**
 - Allows **District Magistrates or Police Commissioners** to seize property linked to unlawful organisations.
 - **Forfeiture of money and assets** intended for such organisations.
- **Legal Review:**
 - **Advisory board** reviews decisions within six weeks and submits a report within three months.
 - **High Court** can review government actions through revision petitions.

Comparison with Unlawful Activities (Prevention) Act (UAPA)

- **Focus:**
 - UAPA: Unlawful activities & terrorist organisations.
 - MSPS Bill: Focused on **urban Naxalism** and related organisations.
- **Definitions:**
 - UAPA: Broad definitions of "unlawful activity" refined by judicial interpretations.
 - MSPS Bill: Expands to include **public order interference** and **fear generation** among the public, with broader definitions.

- **Prosecution:**
 - UAPA requires sanction from higher authorities; the **MSPS Bill** allows **District Magistrates or Police Commissioners** to grant permissions, speeding up the process.

Urban Naxalism

- **Definition:** Activities by **Naxalites in urban areas** using support networks for logistical aid, safe houses, and recruitment.
- **Maoist Strategy:** Based on the "**Urban Perspective**" document by CPI (Maoist) aiming to mobilise urban populations for leadership and providing infrastructure for the insurgency.

UNESCO HERITAGE SITES: TELL UMM AMER AND ASSAM'S CHARAIDEO MOIDAMS

The **World Heritage Committee** included **Tell Umm Amer** (Monastery of Saint Hilarion) in the **UNESCO World Heritage Sites list** and the **List of World Heritage in Danger**. Also, **Assam's Charaideo Moidams** was added as India's **43rd World Heritage Site**.

Key Facts About Tell Umm Amer

- **Historical Background:** Tell Umm Amer, situated in the **Gaza Strip**, is an ancient **Christian monastery** dating to the **fourth century CE**. Established by **Hilarion the Great (291–371 CE)**, it is one of the **earliest and largest monastic sites** in the Middle East.
- **Archaeological Importance:** The site contains the remains of **five churches, bath and sanctuary complexes, geometric mosaics**, and a **large crypt**. It served as a religious, cultural, and economic center from its founding until the **Umayyad period (661–750)**.
- **Recent Damage:** Ongoing conflict in **Gaza** has severely damaged Tell Umm Amer, highlighting the need for urgent preservation.
- **World Heritage Status and Impact:**
 - Inclusion in the **World Heritage List** grants **international recognition** and **protection** responsibilities.
 - Being listed as "**in danger**" allows for **technical and financial support** to help with preservation.
 - In **December 2023**, UNESCO provisionally granted Tell Umm Amer **enhanced protection** under the **1954 Hague Convention**, offering the **highest level of protection against intentional damage** in conflict zones.
- **List of World Heritage in Danger:** This list alerts the international community to threats facing heritage sites, such as **armed conflict, natural disasters, pollution, poaching, urban expansion**, and **tourism development**. The goal is to gather global support for **corrective actions** and maintain the site's World Heritage value.

Key Facts About Assam's Charaideo Moidams

- **Historical Significance:** The **Charaideo Moidams** in Assam are ancient **burial sites of the Ahom dynasty**, founded in **1253 AD** by **King Sukaphaa**.
- **Unique Funerary Practices:** These **earthen mounds or moidams** served as burial sites for **Ahom royalty and aristocrats**. Known as the "**Pyramids of Assam**" due to their resemblance to **Egyptian pyramids**, they are popular tourist sites though many require restoration.
- **Ahom Dynasty:** The **Ahoms ruled Assam for six centuries** and practiced **burial instead of cremation**. The **grandeur of each moidam** often symbolized the status of the person buried within.
- **Sukaphaa's Legacy:**
 - **Chaolung Sukaphaa** migrated from **Burma to the Brahmaputra Valley**, establishing **Charaideo** as his first principality. He replaced the existing political system, adopted **Hinduism** and the **Assamese language**, and skillfully integrated diverse communities and tribes, earning the title '**architect of Bor Asom**' (**Greater Assam**).
 - The **Ahom dynasty's heritage** continues to be honored in Assam, notably through celebrations such as the **400th birth anniversary of Ahom general Lachit Borphukan** and **Asom Divas** on **2nd December** each year, commemorating Sukaphaa's legacy.

AUCTION FOR LITHIUM BLOCK IN J&K CANCELLED FOR THE SECOND TIME

The Ministry of Mines cancelled the auction for the **Reasi lithium block** in J&K due to poor investor response. This second consecutive cancellation indicates underlying challenges in attracting investors for developing this critical mineral resource.

Key Points about the Reasi Lithium Block in J&K

1. Estimated Resources:

- In **February 2023**, the **Geological Survey of India (GSI)** discovered **5.9 million tonnes** of lithium inferred resources in the Reasi district, ranking India as the **seventh-largest lithium** holder globally.
- This discovery has significant implications, as lithium is essential for renewable energy storage and electric vehicle (EV) batteries, supporting India's green energy goals.

2. Auction Attempts:

- **First Attempt:** Held in **November 2023**, this auction failed as only two bidders qualified, less than the minimum three required by auction rules.
- **Second Attempt:** Despite waiving the minimum bidder requirement, no bidders qualified, leading to a second cancellation.

3. Current Classification:

- The block is classified as **G3 under the UNFC (United Nations Framework Classification)**, indicating **preliminary exploration** status with low-confidence resource estimates. This level of uncertainty has contributed to investor hesitation.

Domestic and Global Lithium Reserves

- **India's Reserves:** Beyond the Reasi block, smaller lithium reserves have been found in **Mandya district, Karnataka** (14,100 tonnes). Other promising sites include mica belts in Rajasthan and pegmatite belts in Odisha and Chhattisgarh.
- **Global Context:** The world's largest lithium reserves are in **Chile (9.3 million tonnes)**, **Australia (6.2 million tonnes)**, and **Argentina (2.7 million tonnes)**. India's lithium resources are now significant following the Reasi discovery.

Exploration Status and Challenges in Other Indian States

- **Chhattisgarh Success:** India's first successful lithium auction took place in **Korba, Chhattisgarh**. The block, awarded to **Maiki South Mining Pvt Ltd** in June 2024, saw a high premium bid, showing investor interest when conditions align.
- **Other Challenges:**
 - **Manipur:** Exploration in Kamjong district was halted due to local resistance.
 - **Ladakh:** Exploration in Merak near the India-China border showed poor results, leading to halted exploration.
 - **Assam:** Explorations in Dhubri and Kokrajhar districts were inconclusive, resulting in discontinued efforts.

Significance and Demand of Lithium Globally

- **Demand Forecast:** The demand for lithium is expected to rise drastically, reaching **1.5 million tonnes** of lithium carbonate equivalent (LCE) by 2025 and **3 million tonnes by 2030**.
- **Lithium's Role in EVs and Battery Storage:** Lithium, often called "**white gold**," is crucial for developing EV batteries and grid energy storage solutions, making it a strategic metal for the global green transition.

9TH GOVERNING COUNCIL MEETING OF NITI AAYOG

The 9th Governing Council Meeting of NITI Aayog, chaired by the **Prime Minister**, was held at Rashtrapati Bhavan Cultural Centre in **New Delhi**.

- **Participants:** Leaders from **20 states and 6 union territories** participated, discussing the theme “**Viksit Bharat @2047**” to strategize for India’s growth trajectory toward a developed nation by **2047**.

Key Outcomes of the Meeting

1. **Vision of a USD 30 Trillion Economy:** India’s aim to become the **world’s third-largest economy by 2047** with a GDP target of **USD 30 trillion** was emphasized, underlining growth, innovation, and global competitiveness.
2. **State and District Visions for 2047:** States and districts were urged to develop individual visions for **2047** in alignment with the national goal for **Viksit Bharat**.
3. **Importance of State Development:** The Prime Minister stressed that **developed states are essential for a developed India**, highlighting the role of states in achieving national growth objectives.
4. **Zero Poverty Target:** The meeting underscored the ambition to achieve ‘**zero poverty**’ villages, advocating for poverty eradication efforts at the individual level.
5. **Infrastructure and Investment:** Emphasis was placed on robust **infrastructure**, law and order, and governance for **investment attraction**.
 - Proposal of an **Investment-friendly Charter** to foster a competitive, investor-friendly environment across states.
6. **Youth Skill Development:** A focus on **skilling the youth** to make them employment-ready, aligning with **global demand for skilled human resources**.
7. **Agricultural Reforms:** Key areas included enhancing **productivity**, encouraging **natural farming**, and providing market linkages to farmers for global competitiveness.
8. **Ease of Living:** Recommendations from the 3rd National Conference of Chief Secretaries emphasized **drinking water, electricity, healthcare, education, and property management** as core areas for improving ease of living.
9. **Demographic Management Plans States encouraged** to prepare for challenges related to an aging population with demographic management strategies.
10. **Government Capacity Building:** Collaboration with the **Capacity Building Commission** was recommended to enhance the skills of government officials.
11. **River Grids for Water Management:** States were encouraged to establish **River Grids** to optimize water resource utilization.
12. **Technological Integration in Governance:** **Cybersecurity** and **AI integration** were identified as essential for improving governance efficiency and addressing future challenges.

Governing Council of NITI Aayog

1. **Role and Purpose:**
 - The **Governing Council** serves as the main body for establishing a unified vision of national priorities, fostering cooperative federalism, and accelerating **developmental agendas**.
2. **Members:**
 - **Chairperson:** Prime Minister of India
 - **Chief Ministers** of States and Union Territories with legislatures
 - **Lt. Governors** of Union Territories
 - **Ex-Officio Members, Vice Chairman** of NITI Aayog, Full-Time Members, and **Special Invitees**
3. **Functions:**
 - Coordinates **meetings** and activities of various NITI Aayog divisions.
 - Manages **Parliament-related matters, RTI queries, and annual reporting** for the Parliament.

About NITI Aayog

1. **Formation:**
 - **Established on 1st January 2015** to replace the Planning Commission, adopting a **bottom-up approach** and promoting **cooperative federalism**.

2. **Composition:**
 - **Chairperson:** Prime Minister
 - **Vice-Chairperson:** Appointed by the Prime Minister
 - **Governing Council:** Chief Ministers and Lt. Governors
 - **Regional Council:** Addresses regional issues, chaired by the Prime Minister or nominee
 - **Chief Executive Officer:** Has the rank of **Secretary** to the Government of India
3. **Key Hubs:**
 - **Team India Hub:** Interface between the States and the Centre
 - **Knowledge and Innovation Hub:** Think tank for policy innovation
4. **Initiatives:**
 - **SDG India Index, Composite Water Management Index, Atal Innovation Mission**
 - **SATH Project, Aspirational District Programme**
 - **Health Index, India Innovation Index**
5. **Objectives:**
 - **Platform for Development:** Collaborative strategies for national progress
 - **Cooperative Federalism:** Strengthen collaboration between the **Centre and States**
 - **Ground-Level Mechanisms:** Ensure policies work at the grassroots level for effective implementation
 - **Long-Term Policies and Monitoring:** Design and monitor strategies for sustainable growth
 - **Agriculture and Food Security:** Emphasize moving from **food security** to **nutrition** and agricultural standards

Legacy of the Planning Commission

1. **History:** Founded on **15 March 1950**, replaced by **NITI Aayog in 2015** to modernize India's economic planning framework.
2. **Five-Year Plans:**
 - Implemented centralized economic strategies, with an emphasis on agriculture, industry, and socio-economic development.
 - Notable **Five-Year Plans** focused on **food security, industrialization, poverty alleviation, and economic liberalization** (notably post-1992 reforms).
3. **Organization Structure:** **Prime Minister** as the ex-officio Chairperson, supported by a **Deputy Chairperson**, Cabinet Ministers, and full-time members.

WHO STUDY ON ADOLESCENT GIRLS

- **Study Published by:** World Health Organization in the **Lancet medical journal**.
- **Focus:** Physical and/or sexual violence experienced by adolescent girls aged **15-19** who have been in relationships.
- **Survey Scope:** Conducted with thousands of adolescent girls from **154 countries and regions**.

Key Highlights of the WHO Study

1. **Prevalence of Violence:**
 - **24% of adolescent girls** who have been in a relationship reported experiencing physical or sexual intimate partner violence by **age 20**.
 - **16%** experienced such violence within the past year.
 - **Global Goal Impact:** No country is currently on track to eliminate violence against women and girls by the **2030 Sustainable Development Goal (Goal 5)** deadline.
2. **Regional Variations:**
 - **Highest Rates:**
 - **Oceania:** 47% prevalence (e.g., **49% in Papua New Guinea**).
 - **Central Sub-Saharan Africa:** 40% prevalence (e.g., **42% in the Democratic Republic of Congo**).
 - **Lowest Rates:**
 - **Central Europe:** 10%.
 - **Central Asia:** 11%.

3. Factors Influencing Prevalence:

- Higher rates of violence observed in:
 - **Lower-income countries.**
 - Regions with fewer **girls in secondary education.**
 - Areas where **girls have weaker legal property and inheritance rights.**
- **Child Marriage:**
 - **19%** of young women worldwide were married in childhood (2022).
 - Increases risks of violence due to **power imbalances, economic dependency, and social isolation.**

4. Implications of Intimate Partner Violence:

- Health Risks: Higher likelihood of **injuries, depression, anxiety disorders, unplanned pregnancies, and sexually transmitted infections.**
- Long-Term Effects: Lasting physical and psychological impacts affecting **education, future relationships, and life opportunities.**

Key Facts about WHO

- **Established:** April 7, 1948
 - **Headquarters:** Geneva, Switzerland
 - **Director-General:** Dr. Tedros Adhanom Ghebreyesus
 - **Member States:** 194
 - **Main Organs:**
 - **World Health Assembly (WHA):** Decision-making body with representatives from all member states
 - **Executive Board:** 34 members with health expertise, elected for three-year terms
- Secretariat:** Led by the Director-General, responsible for implementation

NATIONAL GEOSCIENCE AWARDS (NGA) 2023

Instituted by the **Ministry of Mines**, Government of India, the NGA recognizes exceptional contributions in **geosciences**. Established in **1966** as the National Mineral Awards, it was rebranded in **2009** to reflect its broader focus on geosciences.

- **2023 Awards Ceremony:** Held on **20 August 2024**, where **21 geoscientists** were honored by the President of India. Out of **240 nominations**, **12 awards** were presented: **9 individual awards** and **3 team awards**, including:
 - **National Geoscience Award for Lifetime Achievement** to **Prof. Dhiraj Mohan Banerjee**, Emeritus Scientist at INSA.
 - **National Young Geoscientist Award** to **Dr. Ashutosh Pandey**, Assistant Professor at IISER, Thiruvananthapuram.
- **Award Categories:**
 - **Lifetime Achievement Award:** For significant, lifelong contributions to geosciences.
 - **National Geoscience Award:** For notable individual or team achievements in earth sciences within the past decade.
 - **National Young Geoscientist Award:** For contributions by individuals under 35 years old.
- **Award Recipients by Section:**
 - **Section I: Mineral Discovery & Exploration** (excluding fossil fuels)
 - Two **Geological Survey of India (GSI) teams** awarded for mineral discovery of economic and strategic importance.
 - **Section II: Mining, Mineral Beneficiation, and Sustainable Development**
 - **Dr. Harsh Kumar Verma** and **Prof. Narasimha Mangadoddy** recognized for advancements in mining technology and sustainable mineral development.
 - **Section III: Basic Geosciences**
 - **Dr. Rahul Mohan** from NCPOR awarded for contributions in polar research, oceanography, and geoscientific expeditions.
 - A second **GSI team** awarded in the same category.
 - **Section IV: Applied Geosciences**

- **Prof. Vikram Vishal** (IIT Bombay) and **Dr. Bantu Prasanta Kumar Patro** recognized for applied geology and geophysics.
- **Prof. Srimath Tirumala Gudemella Raghukanth** awarded for studies on natural hazards.
- **Eligibility Criteria:**
 - Open to **Indian citizens** who are qualified geoscientists/engineers/technologists/academicians.
 - Work primarily conducted in **India** over the last **10 years** (except for Lifetime Achievement).
 - **Young Geoscientist Award:** Candidates must be under **35 years** as of **December 31** of the previous year.
 - A recipient can receive an award in a field only once.
- **Recognition and Rewards:**
 - **Lifetime Achievement Award:** ₹5,00,000.
 - **National Geoscience Award:** ₹3,00,000 (shared among team members).
 - **National Young Geoscientist Award:** ₹1,00,000 + a **₹5,00,000 research grant** over five years (subject to annual progress).
- **Nomination and Selection Process:**
 - **Nominations** can be submitted by individuals, team members, prior awardees, or heads of institutions.
 - Screening by **Sectional Scrutiny Committees (SSC)** and the **Screening Committee of Experts (SCE)**.
 - **Final recommendations** made by the Award Making Authority (AMA), with shortlisted candidates possibly invited for interviews.

LEANDER PAES AND VIJAY AMRITRAJ INDUCTED INTO THE INTERNATIONAL TENNIS HALL OF FAME

Indian tennis legends **Leander Paes** and **Vijay Amritraj** were recently inducted into the **International Tennis Hall of Fame**, honoring their outstanding contributions to the sport.

Details of the Induction Ceremony

- **Induction Categories:**
 - **Leander Paes:** Inducted in the **Player Category** for his remarkable achievements in professional tennis.
 - **Vijay Amritraj** and **Richard Evans:** Inducted in the **Contributor Category**, acknowledging their influence as pioneers and advocates for the sport.

Leander Paes: Key Achievements

- **Grand Slam Titles:**
 - Paes won **8 doubles** and **10 mixed doubles Grand Slam titles**.
 - Notable wins include the **2003 Wimbledon** and **Australian Open mixed doubles titles** with **Martina Navratilova**.
- **Davis Cup Record:**
 - Holds the record for the **most Davis Cup doubles victories**, with **43 wins**.
 - Played a crucial role in boosting **India's presence in international tennis** through his performances.
- **Tributes:**
 - **Martina Navratilova's Tribute:** Navratilova praised Paes for his skill, passion, and charisma, highlighting his ability to captivate audiences.
 - **Paes's Reflections:** Paes expressed deep gratitude, recalling his journey from modest beginnings to global tennis recognition.

Vijay Amritraj: Contributions and Legacy

- **Wimbledon and US Open Success:**
 - Reached the **men's singles quarterfinals** twice at both **Wimbledon** and the **US Open**, showcasing his competitive prowess.
- **Davis Cup Influence:**
 - Key figure in **India's journey to the Davis Cup finals** in **1974** and **1987**, underscoring his impact on Indian tennis.

Significance of the Inductions

- **Historic Milestone:** This event marks the induction of the **first two Asian men** into the Hall of Fame, underscoring tennis's growing diversity.
- **Inspiration for Indian Tennis:** Paes and Amritraj's recognition serves as a powerful inspiration for future generations of Indian tennis players.

Other Inductees

- **Richard Evans:** Recognized in the **Contributor Category** as a celebrated tennis journalist and official for his decades of contributions to the sport.

About Lawn Tennis

- **Historical Development:**
 - Lawn tennis evolved from "real tennis," a sport popular among European royalty in the **16th century**.
 - The modern version was formalized by **Major Walter Clopton Wingfield**, who patented it in **1874**.
 - The **first Wimbledon Championships** were held in **1877**, establishing Wimbledon as the world's premier tennis tournament.
- **Gameplay and Rules:**
 - Tennis is played on different surfaces such as **grass, clay, and hard courts**, each affecting gameplay style.
 - Scoring is unique, using terms like **"15," "30," and "40"**; a two-game lead is typically required to win a set.
 - The serve initiates each point and can vary in type, including **flat, slice, and kick serves**.

AUCTION OF LAND UNDER THE ENEMY PROPERTY ACT IN UTTAR PRADESH

A land parcel in **Uttar Pradesh**, once owned by relatives of a former Pakistani President, is to be auctioned under the **Enemy Property Act of 1968**. This highlights the continuing process of managing properties designated as "enemy properties" in India.

Overview of the Enemy Property Act, 1968

- **Background:** Enacted after the **1965 India-Pakistan conflict**, the **Enemy Property Act, 1968** was designed to regulate assets left behind by individuals and entities who migrated to **Pakistan and China** following conflicts such as the **1962 Sino-Indian War** and the **1965 and 1971 India-Pakistan wars**.
- **Definition of Enemy Property:** Properties abandoned by people who migrated to enemy nations are designated as **enemy property**. These properties were initially taken over by the **Custodian of Enemy Property for India (CEPI)**, under the **Defence of India Rules of 1962**.
- **Tashkent Declaration:** The **1966 Tashkent Agreement** included discussions about the return of such properties. While **Pakistan disposed of its enemy properties in 1971**, India continued to retain control over similar properties.
- **Government Authority:** The Act enables the government to take **custody and manage** enemy properties to ensure they are not used against India's national security interests.

Key Changes Introduced by the 2017 Amendment

- **Enhanced Scope:** The **Enemy Property (Amendment and Validation) Act of 2017** expanded the 1968 Act, applying it to properties and assets inherited by the legal heirs or successors of enemy nationals, regardless of whether they are citizens of India or non-enemy nations.
- **Permanent Custody:** The amendment clarified that these properties would remain under the **Custodian's management** even if the enemy's citizenship status changes, preventing inheritance or legal claims by successors.

Legal Cases Related to Enemy Property

1. **Union of India vs. Raja Mohammad Amir Mohammad Khan (2005):**
 - **Background:** The **Raja of Mahmudabad**, who moved to Pakistan in 1957, held properties in **Uttar Pradesh** that were subsequently designated as enemy property.
 - **Legal Dispute:** His son, an Indian citizen, challenged the government's classification, seeking to inherit his father's property.

- **Supreme Court Verdict:** The SC ruled in favor of the son, allowing him to claim the property as an Indian citizen. The ruling led to an influx of similar claims, prompting the government to pass the **2017 Amendment** to limit such legal avenues.
- 2. **Lucknow Nagar Nigam vs. Kohli Brothers Colour Lab Pvt. Ltd. (2024):**
 - **Supreme Court Ruling:** The SC clarified that **custody of enemy property by the Custodian is temporary** and does not transfer ownership to the Union of India, meaning the original owner retains ownership rights.

Public Premises (Eviction of Unauthorised Occupants) Act, 1971

- **Purpose:** Known as the **Public Premises Act**, this law addresses **unauthorised occupation** of government property, simplifying the eviction process.
- **Definition of Public Premises:** Includes properties owned, leased, or controlled by the **Central Government**, Parliament, government-owned corporations, central universities, and technology institutes.
- **Implications:**
 - **For Occupants:** Enforces swift eviction to maintain property use for intended public purposes, with limited legal recourse for unauthorised occupants.
 - **For Government Landlords:** Allows efficient property reclamation, though it requires adherence to **principles of natural justice**. Judicial interpretations stress that the powers of **estate officers** should be applied reasonably.

HIMACHAL PRADESH PASSES BILL TO RAISE MARRIAGE AGE FOR WOMEN

The **Himachal Pradesh Assembly** recently approved the **Prohibition of Child Marriage (Himachal Pradesh Amendment) Bill, 2024**, aiming to raise the minimum marriage age for women from **18 to 21 years**.

- **Amendment to Existing Law:** This Bill amends the **Prohibition of Child Marriage (PCM) Act, 2006**, which originally set the minimum marriage age at **18 years for females**.

Debate on Raising the Marriage Age for Girls

- **Gender Equality and Education:**
 - **Higher Education:** Increasing the marriage age allows girls more time for **education**, enhancing **career opportunities**.
 - **Empowerment:** Postponing marriage can empower women by giving them the chance to develop **skills** and gain **financial independence**.
- **Health and Well-being:**
 - **Maternal Health:** Early marriage often leads to early pregnancies, heightening risks of **maternal and infant mortality**. Raising the marriage age supports **safer pregnancies** and improves health outcomes for both mother and child.
 - **Child Development:** Delaying motherhood allows women to be more prepared emotionally and financially, enabling them to provide **better care for their children**.
- **Reducing Child Marriage:**
 - **Combatting Child Marriage:** Child marriage is still common in parts of India, leading to issues like **domestic violence, poverty**, and restricted **education**.
- **Economic Development:**
 - **Workforce Participation:** Postponing marriage can increase **women's participation in the workforce**, contributing to the **economy**.

Key Challenges with Raising the Marriage Age

1. **Difference in Legal Age for Majority and Marriage:**
 - The Bill sets the marriage age for women at **21**, aligning it with that for men, but the **age of majority remains 18** under the **Majority Act, 1875**. This discrepancy could create complications regarding the rights and responsibilities of individuals aged 18 to 21.
2. **Constitutional Concerns:**
 - **Supreme Court Judgments:**
 - In **2018**, the SC affirmed that the **right to marry** is part of the **right to life under Article 21**.

- Another SC ruling in 2018 stated that two consenting adults have the freedom to choose each other as life partners, protected by **Articles 19 and 21**.
 - **Bill's Restriction:** By raising the minimum marriage age to **21**, the Bill limits this right for those between **18 and 21 years**, raising questions about the reasonableness of the restriction.
 - **Criteria for Restriction of Rights:** Restricting a fundamental right requires **public purpose**, a **link between restriction and purpose**, and the **absence of a less intrusive way** to achieve the goal.
3. **Implementation Challenges:**
- **Low Detection Rates:** Enforcing the PCM Act has been difficult, with only **785 cases** registered in **2020**, indicating low detection of child marriages. This raises doubts about whether increasing the marriage age would significantly reduce child marriages.

Provisions of the Himachal Pradesh Marriage Age Bill

- **Amendment Details:** The Bill raises the minimum marriage age for both males and females to **21**, removing the age distinction.
- **Definition of 'Child':** Defines anyone under **21 years** as a child, regardless of gender, and grants this age limit overriding power over any other law or tradition permitting earlier marriage.
- **Extended Time for Annulment:** Individuals can now file for annulment up to **five years after reaching the age of majority**, effectively until **age 23**.

Legislative Process and Constitutional Implications

- **Concurrent List:** Since marriage is on the **Concurrent List**, both the **central and state governments** can legislate on it.
- **Constitutional Conflict:**
 - **Article 254(1)** of the Constitution states that a state law conflicting with central law is void unless the **President grants assent** under **Article 254(2)**.
 - The Bill must be sent to the **Governor**, who will forward it to the **President** for consideration, similar to **Uttarakhand's Uniform Civil Code (UCC) Bill**.

NEW FLAG, INSIGNIA, AND STATUE AT THE SUPREME COURT OF INDIA

President Droupadi Murmu recently unveiled a new **flag and insignia** for the **Supreme Court of India** on its **75th anniversary**. Additionally, the **Chief Justice of India** revealed a redesigned **Lady Justice statue** at the court.

Supreme Court Flag and Insignia

- **Flag Details:**
 - The flag is **blue** and includes symbols of the **Ashoka Chakra**, the **Supreme Court building**, and the **Constitution of India**.
 - The **insignia** displays "Supreme Court of India" and the Sanskrit phrase "**Yato Dharmastato Jayah**" in Devanagari script, meaning "**Where there is Dharma, there is victory**" or "**Victory lies where righteousness prevails.**"
- **Symbolism:**
 - The **Ashoka Chakra** represents the **Dharmachakra** or "wheel of law," inspired by the **Sarnath Lion Capital** from the **Mauryan Emperor Ashoka** in the 3rd century BCE.

Establishment and Evolution of the Supreme Court of India

- **Constitutional Foundation:** **Article 124** of the **Indian Constitution** mandates the establishment of the **Supreme Court of India**.
- **Inauguration:**
 - The Supreme Court was inaugurated on **28 January 1950**, two days after India became a **Sovereign Democratic Republic**.
 - The current building was inaugurated by **Dr. Rajendra Prasad**, the first President of India, on **4 August 1958**.
- **Judges and Workload:**

- Initially, the Constitution provided for a **Chief Justice** and **7 puisne judges**, with Parliament empowered to increase this number as needed.
- The strength of the Court's judges has been raised multiple times due to increased workload, reaching **34 judges in 2019**.
- **Administrative Rules: The Supreme Court Officers and Servants (Conditions of Service and Conduct) Rules, 1961** govern the conduct and conditions of service for Supreme Court staff.

Mother and Child Sculpture

- **Details:**
 - Installed in **1978**, this **210 cm black bronze sculpture** by **Shri Chintamoni Kar** symbolizes **Mother India** as a nurturing figure sheltering a child, representing the **Republic of India**.
 - The child holds an **open book** with a **balance scale**, symbolizing justice and equality under the law.

Structure of the Indian Judiciary

- **Hierarchy:**
 - The **Supreme Court** is India's highest judicial body, interpreting the **Constitution** and adjudicating disputes between **states and the central government**.
 - **High Courts** in each state (or groups of states) handle appeals and oversee state-level cases.
 - **District Courts** handle civil and criminal cases, with specialized courts for issues like family, consumer, and labor disputes.
- **System of Checks and Balances:** Each level of the judiciary operates independently but cooperatively to ensure fair governance and uphold **constitutional values**.

New Lady Justice Statue at the Supreme Court

- **Unveiling:** The **Chief Justice of India** recently unveiled a redesigned **Lady Justice statue** at the Supreme Court.
- **Design and Symbolism:**
 - **Absence of Blindfold:** Unlike traditional depictions, the statue has no blindfold, symbolizing that "**law is not blind**" and justice is fair and inclusive.
 - **Indian Influence:** The statue is clothed in a **saree**, holding **scales** in one hand and the **Indian Constitution** in the other, replacing the traditional sword.
 - **Significance:** Represents a **justice system rooted in Indian values**, aware and aligned with the Constitution, breaking away from colonial imagery.
 - **Origins and Changes:**
 - Traditionally inspired by **Greek and Roman mythology** (Themis and Justitia), Lady Justice statues are often depicted with a blindfold, scales, and sword.
 - This new version reflects modern Indian ideals, with the **scales symbolizing balance** and the **Constitution representing fairness and rights**.
- **Placement:** The statue is located in the **Judges' Library** within the Supreme Court, highlighting its importance in Indian jurisprudence.

AFGHANISTAN BEGINS WORK ON TAPI PIPELINE

Afghanistan has announced the commencement of work on the **Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline**, a **USD 10 billion project** aimed at boosting regional energy links and promoting economic development, after years of delays mainly due to security issues in Afghanistan.

Overview of the TAPI Pipeline

- **Purpose and Scope:**
 - The **TAPI (Turkmenistan-Afghanistan-Pakistan-India) pipeline** is a natural gas pipeline project designed to deliver gas from **Turkmenistan's Galkynysh gas field** through **Afghanistan, Pakistan, and into India**.
 - Covering **1,814 km**, the pipeline aims to supply **33 billion cubic metres** of gas annually, with **5%** allocated to Afghanistan and **47.5% each** to Pakistan and India over the course of **30 years**.
 - Known as the **'Peace Pipeline'**, TAPI symbolizes efforts toward regional cooperation and peacebuilding.

- Originally conceived in the **1990s** and accelerated in **2003** with **Asian Development Bank (ADB)** support, the project saw a key milestone when **India joined in 2008**.
- The **TAPI Pipeline Company Limited (TPCL)**, a collaboration of the four countries, is responsible for constructing and managing the pipeline.
- **Importance and Benefits:**
 - **Environmental Goals:** As a clean energy source, TAPI offers an alternative to coal and supports emission reductions for countries like India with ambitious climate targets.
 - **Economic and Social Impact:** It will provide employment and transit revenue for Afghanistan and Pakistan, and has potential to drive investment in renewable energy in these countries.
 - **Strategic Considerations:**
 - TAPI aligns with **U.S. policy** by offering an alternative to the **Iran-Pakistan-India (IPI) pipeline**, countering Iran and Russia's influence.
 - For **Turkmenistan**, TAPI diversifies export options, reducing its dependency on China and Russia.
 - **China's CPEC project** presents a competitive factor in the region, while TAPI could counterbalance Chinese influence, especially in Pakistan.
 - TAPI's energy linkage strengthens **India's ties with Central Asia**, supporting its energy security and regional connectivity plans.

India's Other Energy Connectivity Projects

- **India-Bangladesh Friendship Pipeline**
- **Motihari-Amlekhgunj Pipeline** (India-Nepal)
- **BIMSTEC (Bay of Bengal Initiative)** for broader energy cooperation
- **International North-South Transport Corridor (INSTC)** to enhance regional connectivity

India's Expanding Role in Central Asia

- **Trade Routes:** India views Central Asia's location as vital for securing new trade pathways and energy resources, which are essential for its economy.
- **Strengthening Economic Ties:**
 - **Chabahar Port** Agreement with **Iran** improves India's connectivity to Central Asia, bypassing maritime bottlenecks and promoting trade through **Iran and into the South Caucasus**.
 - India is pursuing a **free trade agreement with the Eurasian Economic Union (EAEU)** to deepen its trade integration with Central Asia.
 - Global events, like **Covid-19** and the **Russia-Ukraine conflict**, have emphasized the importance of diversifying trade routes for India's economic resilience.
 - The **INSTC** development is crucial for India's strategic expansion into Eurasian markets.
- **Military and Security Engagements:**
 - India has established military bases in **Tajikistan** and conducts joint exercises like **DUSTLIK** with Uzbekistan, strengthening its defense and security ties in the region.
- **Geopolitical Challenges:**
 - **China's Belt and Road Initiative (BRI)** poses competition, with its extensive infrastructure network in Central Asia.
 - China's growing economic influence among Central Asian nations could challenge India's reach in the region.
 - Ongoing tensions with **Pakistan and China** limit India's land access, pushing it to rely on maritime and diplomatic partnerships to maintain regional presence.

COUNCIL OF EUROPE'S FRAMEWORK CONVENTION ON AI

The **United States**, **European Union**, and **United Kingdom** are set to sign the **Council of Europe's Framework Convention on Artificial Intelligence, Human Rights, Democracy, and Rule of Law**, the first legally binding international treaty on AI.

Overview of the Treaty

- **Name:** Officially titled the **Council of Europe Framework Convention on Artificial Intelligence, Human Rights, Democracy, and Rule of Law**.
- **First of its Kind:** It is the **first legally binding treaty** focused on regulating the use of AI in alignment with human rights principles.
- **Relation to Other Agreements:** Complements existing AI frameworks like the **G7 AI pact**, **Europe's AI Act**, and the **Bletchley Declaration**, all signed in **2023**.

Key Features of the Council of Europe Framework Convention on AI

- **Risk-Based Regulation:**
 - Adopts a **risk-based approach** to oversee AI, evaluating the risks of different AI applications and setting suitable regulations.
 - Covers AI use in both **public and private sectors**.
- **Human Rights Focus:**
 - Prioritizes **human rights protections**, ensuring AI use respects fundamental rights such as **equality** and **privacy**.
- **Accountability:**
 - Signatories are held **accountable for any harmful or discriminatory results** of AI usage.
- **Legal Protections for Victims:**
 - Grants victims of rights violations related to AI the right to **seek legal remedies**.
- **Exemptions:**
 - **Exemptions** include specific areas like **national security** and **research and development**, which are not covered by the treaty's provisions.

Importance of the Treaty

- **Legally Binding Framework:** Establishes **unified standards** for AI regulation, preventing regulatory fragmentation that could slow AI advancements.
- **Protection of Rights and Democracy:** Ensures AI development and usage uphold **human rights, democratic values, and the rule of law**.
- **Legal Avenues:** Offers legal recourse for individuals impacted by AI-related rights infringements.

Concerns and Challenges

- **Enforcement Limitations:**
 - Although legally binding, the treaty **lacks penalties** for non-compliance.
 - Relies on **monitoring** for enforcement, which may be insufficient as a deterrent.
- **Limited Initial Participation:**
 - Initially, only **10 countries** are expected to sign, leaving uncertainty about the treaty's broader adoption.

Responsibilities of Member States

- **Human Rights Safeguards:** Ensure that AI systems within their jurisdiction respect **human rights**.
- **Democratic Integrity:** AI should not compromise **democratic institutions** or the **separation of powers**.
- **Protection of Democratic Processes:** Implement measures to protect democratic participation, including fair **public debate access** and **freedom of opinion formation**.

NEW INDIA LITERACY PROGRAMME (NILP) FOR ADULT LITERACY

The **Ministry of Education (MoE)** has outlined the definitions of "literacy" and "full literacy" under the **New India Literacy Programme (NILP)** to boost adult education across States.

About the New India Literacy Programme (NILP)

- **Name and Funding:**
 - Known as **ULLAS - Nav Bharat Saksharta Karyakram** or **NILP**, this is a **centrally sponsored** programme aligned with **NEP 2020**.
 - Launched for **five years** (2022-23 to 2026-27), with a **budget of Rs.1037.90 crore** (Rs.700 crore central share, Rs.337.90 crore state share).
- **Objective:**
 - Aims to educate adults **15 years and above** who missed formal education (non-literate) to empower them to engage meaningfully in society and contribute to national growth.
- **Components:**
 1. **Foundational Literacy and Numeracy (FLN)**
 2. **Critical Life Skills**
 3. **Vocational Skills Development**
 4. **Basic Education**
 5. **Continuing Education**
- **Beneficiaries:**
 - Non-literate adults are identified through **door-to-door surveys** on a **mobile app** by state-appointed surveyors.
 - Individuals can also directly register for the programme using the **mobile app**.
- **Key Aspects:**
 - **Volunteer-Based Learning:** Volunteers can register through the mobile app to teach under the programme.
 - **Technology-Driven:** Learning materials are available on the **DIKSHA platform (NCERT)** and accessible via the mobile app, with additional support from **TV, radio, and community centers**.

Definition of Literacy Under NILP

- **Literacy:** Defined by the MoE as the ability to **read, write, and perform basic calculations** with understanding, including critical skills like **digital and financial literacy**.
- **Full Literacy:** A state or UT is considered "fully literate" if it achieves **95% literacy**.

How Literacy is Assessed in NILP

- **Foundational Literacy and Numeracy Assessment Test (FLNAT):** Individuals are deemed literate upon passing this test.
- **2023 FLNAT:** **39,94,563 adult learners** appeared, of which **36,17,303** were certified as literate.

India's Literacy Challenges

- **High Numbers of Non-Literate Adults:**
 - According to **Census 2011**, **25.76 crore** adults in the **15+ age group** are non-literate.
 - **Gender Disparity:** Of these, **16.68 crore** are women and **9.08 crore** are men, indicating a higher literacy gap among females.
- **Impact of Illiteracy:**
 - Non-literate adults face barriers in **financial transactions, job applications**, understanding **media and technology, rights awareness**, and participating in high-productivity sectors.
- **Past Program Ineffectiveness:**
 - Despite the **Saakshar Bharat program** certifying **7.64 crore people** as literate (2009–2018), an estimated **18.12 crore adults** in India remain illiterate.
- **Lower Pass Rates in FLNAT:**
 - The FLNAT pass rate dropped from **89.64%-91.27% in 2023** to **85.27% in 2024**, indicating challenges in sustaining high literacy achievement.

- **Budget Constraints:**
 - In **2023-24**, NILP was initially allocated **₹157 crore**, later reduced to **₹100 crore** in the revised budget estimate, indicating funding limitations for the programme.

PM SURYA GHAR-MUFT BIJLI YOJANA

The **Ministry of New and Renewable Energy** recently released draft guidelines for the **PM Surya Ghar—Muft Bijli Yojana**, including details on central financial assistance and a payment security mechanism.

Key Features of the Draft Guidelines

- **Scheme Models:**
 - **Renewable Energy Services Company (RESCO) Model:** In this model, a **RESCO** installs and owns the rooftop solar system for at least **five years**, managing all operational and maintenance costs. The consumer pays for the electricity generated and benefits from **net metering**.
 - **Power Purchase Agreement (PPA):** RESCOs may enter into PPAs with **DISCOMs** to sell excess power to the grid.
 - **Utility Led Asset (ULA) Model:** Under this model, **state DISCOMs** own the rooftop solar systems for a minimum of **five years**; ownership is later transferred to the household.
- **Eligibility for Central Financial Assistance (CFA):**
 - Available for **grid-connected rooftop solar systems** installed on residential structures, including terraces, roofs, balconies, and elevated structures.
 - Applies to metering options like **group net metering** and **virtual net metering**.
 - **Exclusions:** Households with pre-existing rooftop solar setups are ineligible.
- **Payment Security:**
 - A **Rs 100 crore corpus** will ensure payment security, managed by a national implementation agency, to maintain financial stability for these projects.

PM Surya Ghar-Muft Bijli Yojana

- **Purpose:** A **central scheme** designed to make solar rooftop systems affordable and easy to install through **financial subsidies**.
- **Goal:** Aims to provide **free electricity** (up to **300 units per month**) to **1 crore households** that adopt rooftop solar installations.
- **Implementation Agencies:**
 - **National Level:** Overseen by the **National Programme Implementation Agency (NPIA)**.
 - **State Level:** Managed by **State Implementation Agencies (SIAs)**, including **DISCOMs** and **state Power/Energy Departments**.
- **Role of DISCOMs:**
 - As SIAs, DISCOMs facilitate rooftop solar adoption by ensuring **availability of net meters**, conducting **inspections**, and managing **installation commissioning**.
- **Subsidy Structure:**
 - **60% subsidy** for systems up to **2 kW capacity**.
 - **40% subsidy** for systems between **2 kW and 3 kW capacity**.
 - The subsidy cap is set at a maximum of **3 kW capacity**.
- **Additional Features:**
 - **Model Solar Villages:** Each district will establish a **Model Solar Village** to showcase rooftop solar installations, particularly in rural areas.
 - **Incentives for Local Bodies:** **Urban Local Bodies** and **Panchayati Raj Institutions** will receive incentives to promote rooftop solar systems in their areas.

Expected Benefits of PM Surya Ghar-Muft Bijli Yojana

- **Economic Impact:** Households save on electricity bills and may sell surplus power back to DISCOMs. A **3 kW system** can generate over **300 units monthly**, meeting the scheme's goal of free electricity.

- **Solar Capacity Expansion:** The programme aims to add **30 GW** of solar capacity through residential installations, producing **1000 billion units** of electricity over 25 years.
- **Environmental Impact:** Expected to reduce **CO2 emissions by 720 million tonnes**, contributing to sustainable development.
- **Job Creation:** The scheme may generate around **17 lakh jobs** across sectors, including manufacturing, logistics, sales, and maintenance.

RASHTRIYA POSHAN MAAH 2024 AND NATIONAL AWARD FOR E-GOVERNANCE

The **Ministry of Women and Child Development** launched **Rashtriya Poshan Maah 2024** in **Dhar district, Madhya Pradesh** on **September 1, 2024**. Additionally, the Ministry received the **National Award for e-Governance (Gold)** in 2024 for its **Poshan Tracker** initiative.

National Awards for e-Governance

- **Presented by:** Department of Administrative Reforms and Public Grievances (DARPG), **Ministry of Personnel, Public Grievances and Pensions**, since **2003**.
- **Purpose:**
 - **Recognize achievements** in e-Governance.
 - **Share knowledge** on designing and implementing effective e-Governance projects.
 - **Promote incremental innovations** in e-Governance.
 - **Exchange experiences** in solving challenges and planning for success.
- **Eligibility:** Open to **Central and State/UT Ministries/Departments, Districts, Local Bodies, Government PSUs, and Academic/Research Institutions**.

Rashtriya Poshan Maah

- **Objective:** An annual campaign to address **malnutrition** and improve **nutrition and health practices**.
- **Timeline:** Celebrated every **September** under **Poshan Abhiyaan** (PM's Overarching Scheme for Holistic Nourishment).
- **Focus Areas:**
 - Raising awareness about **nutrition and healthy diets**.
 - Addressing **malnutrition** in vulnerable groups like **children, adolescents, pregnant women, and lactating mothers**.
 - Aligned with the vision of **Suposhit Bharat** (Nourished India).
- **Activities:**
 - Events include **plantation drives, nutritional supplement distribution, community outreach, exhibitions, and education sessions**.
 - **Example:** The 2024 campaign began with a **nationwide plantation drive** called "**Ek Ped Maa Ke Naam**".
- **2024 Themes:** Key themes include **Anaemia, Growth Monitoring, Complementary Feeding, Poshan Bhi Padhai Bhi, Technology for Better Governance, and Ek Ped Maa Ke Naam**.

POSHAN Abhiyaan

- **Launched:** **March 2018** by the **Ministry of Women and Child Development**.
- **Goal:** To reduce **malnutrition** by targeting **adolescent girls, pregnant women, lactating mothers, and children under 6 years**.
- **Objectives:**
 - Reduce **stunting, under-nutrition, anaemia, and low birth weight** by **2-3% annually**.
 - Specific targets include reducing stunting and underweight prevalence in **children 0-6 years** and anaemia in **young children and women** (6-59 months and 15-49 years).
- **Key Components:**
 - **Village Health Sanitation Nutrition Day (VHSND):** Facilitates **coordination** through **target-setting, meetings, and decentralized planning**.
 - **ICDS-CAS (Common Application Software):** Utilizes digital tools to **monitor nutrition and track growth**.

Poshan Tracker

- **Purpose:** A **mobile application** to monitor the **health and nutrition** of children and pregnant women.
- **Features:**
 - Acts as a **real-time monitoring tool** for Anganwadi Workers (AWWs) to assess the progress and impact of their interventions.
 - Uses **WHO standards** to track growth and provide suggestions for corrective actions.
- **Beneficiaries:** Registers six categories—**Pregnant Women, Lactating Mothers, Children 0-6 months, Children 6 months-3 years, Children 3-6 years, and Adolescent Girls 14-18 years** (for aspirational districts).

Anaemia

- **Definition:** Condition marked by a **deficiency in red blood cells** or **hemoglobin** levels, essential for transporting oxygen.
- **Causes:** Primarily due to insufficient intake or absorption of nutrients like **iron, folate, vitamin B12, and vitamin A**.
- **Global Prevalence:** Affects **40% of children (6-59 months)** and **37% of pregnant women**.
- **India Statistics (NFHS-5, 2019-21):**
 - **31.1%** of adolescent boys (15-19 years) and **59.1%** of adolescent girls are anaemic.
 - **52.2%** of pregnant women (15-49 years) and **67.1%** of children (6-59 months) are anaemic.

GLOBAL MIGRATION AND RELIGIOUS DEMOGRAPHICS

The **Pew Research Center** recently released a report titled **The Religious Composition of the World's Migrants**, drawing on data from the United Nations and insights **from 270 censuses and surveys**.

- **Global Migration Overview:**
 - Over **280 million people** (approximately **3.6%** of the world's population) are international migrants, residing outside their country of birth.
 - The number of people living as migrants has increased by **83%** over the last three decades, surpassing global population growth of **47%**.
- **Religious Composition of Migrants:**
 - **Christians:** Represent **47%** of international migrants, significantly higher than their **30%** share in the global population. **Mexico** is the leading origin country, and the **U.S.** is the top destination.
 - **Muslims:** Comprise **29%** of global migrants, slightly above their **25%** share in the world population. **Syria** is a major source, with **Saudi Arabia** and other MENA countries as popular destinations.
 - **Religiously Unaffiliated:** Account for **13%** of migrants, less than their **23%** share globally. **China** is the most common origin, with the **U.S.** as a frequent destination.
 - **Hindus:** Make up only **5%** of migrants, compared to their **15%** global population share. **India** is both the primary origin and destination country for Hindu migrants.
 - **Buddhists:** Constitute **4%** of both global migrants and the world population. **Myanmar** is the leading origin, with **Thailand** as the top destination.
 - **Jews:** Form **1%** of migrants, compared to just **0.2%** of the global population. **Israel** is both the common origin and destination for Jewish migrants.
- **Migration Likelihood by Religion:**
 - **Jews** are the most likely to migrate, with **20%** residing outside their birth country. This compares with **6%** of Christians, **4%** of Muslims, **1%** of Hindus, **4%** of Buddhists, and **2%** of the religiously unaffiliated.
- **Religious Influence on Migration Patterns:**
 - Migrants often move to avoid religious persecution or to reside among those of similar beliefs, thus impacting the religious landscape of their host countries.
 - Some migrants maintain their original religion, while others adopt the host country's majority religion or choose no religion.
 - Migration patterns show many religious groups move to countries where their faith is widely practiced. For example, **Muslims** often migrate to **Saudi Arabia**, and **Jews** to **Israel**.

- **Christians** and the **religiously unaffiliated** share similar destination countries, with **U.S., Germany,** and **Russia** being the most common.
- **Migration and Socioeconomic Factors:**
 - Migration typically occurs from **economically disadvantaged** or **unstable regions** to countries offering better opportunities and safety.
 - Regardless of religion, many migrants pursue improved prospects for employment, education, or family reunification.

BIOE3 POLICY AND VIGYAN DHARA SCHEME: KEY DEVELOPMENTS IN BIOTECHNOLOGY AND SCIENCE

The Union Cabinet has greenlit the **BioE3 Policy** (Biotechnology for Economy, Environment, and Employment) aimed at advancing high-performance biomanufacturing, as proposed by the **Department of Biotechnology**.

- The Cabinet also approved the merging of three schemes within the Ministry of Science & Technology into a consolidated program called **Vigyan Dhara**, with a budget of **Rs 10,579 crore** till 2025-26.

Vigyan Dhara Scheme

- **Background:** The Department of Science & Technology (DST) oversees the development and coordination of **science, technology, and innovation** in India.
- **Scheme Merger:** Three schemes under DST—**S&T Institutional and Human Capacity Building, R&D and Innovation**, and **Technology Development and Deployment**—are consolidated into **Vigyan Dhara**.
- **Objectives:**
 - Efficiently allocate resources and synchronize projects across **S&T** fields.
 - Expand **R&D infrastructure** and increase the **Full-Time Equivalent (FTE) researcher base** in India.
 - **Increase women's participation** in Science, Technology, and Innovation (STI) sectors, promoting gender parity.
 - Support the national vision of **Viksit Bharat 2047** (a developed India by 2047).
 - Enhance **basic and applied research** in critical areas such as sustainable energy and water resources.
 - Strengthen collaboration among **academic, industrial, and governmental bodies**.

BioE3 Policy Overview

- **Purpose:** The **BioE3 Policy** targets the development of a **biomanufacturing ecosystem** in India, emphasizing sustainable production methods in alignment with India's **Net Zero carbon goals** and circular bioeconomy principles.
- **Employment and Local Development:** Biomanufacturing hubs will utilize **local biomass** for production, generating jobs and boosting regional economies.

Biotechnology: Definition and Benefits

- **Definition:** Biotechnology merges biological and technological processes to create products that improve lives and protect the environment.
- **Applications and Advantages:**
 - **Healthcare:** Facilitates the development of advanced treatments, vaccines, and gene therapy. Stem cell research aids in regenerating tissues.
 - **Agriculture:** Improves crop resilience and nutrition through genetic modification, increasing food security.
 - **Environmental Sustainability:** Biotechnology enables **bioremediation** (pollutant cleanup) and biofuel production, supporting a **circular economy**.
 - **Industrial Innovation:** Utilized in producing eco-friendly materials like **bioplastics** and **bio-based fibers**.
 - **Economic Growth:** Generates jobs in R&D and production, enhancing competitiveness in global markets.
 - **Climate Change Mitigation:** Reduces dependence on fossil fuels through biofuels and captures CO₂ to lower carbon footprints.

Current State of Biotechnology in India

- **Global Standing:** India is one of the top 12 biotech hubs globally. The **Covid-19 pandemic** accelerated its biotech sector, particularly in vaccines and medical devices.

- **Biotech Startups:** In **2021**, 1,128 biotech startups were registered, bringing the total to **6,756** by **2022**, with projections to reach **10,000** by **2025**.
- **Bioeconomy Growth:** India's bioeconomy grew from **USD 10 billion in 2014** to over **USD 130 billion in 2024**, with a target of **USD 300 billion by 2030**.
 - **Biopharma** leads the sector, comprising **49%** of the bioeconomy, valued at **USD 39.4 billion**.
 - The vaccination market alone is projected to reach **Rs. 252 billion** by 2025.
- **Bioresources and Research Potential:** India's **biodiversity** (notably in the Himalayas and along its 7,500 km coastline) offers vast biotech potential. The **Deep Sea Mission** aims to explore marine biodiversity for biotechnological applications.

CABINET APPROVAL FOR 12 HIGH-TECH INDUSTRIAL CITIES ACROSS INDIA

The Union Cabinet, led by the Prime Minister, has recently given its approval for the establishment of **12 advanced industrial cities** under the **National Industrial Corridor Development Programme (NICDP)**.

- These cities will be developed across **10 Indian states**, including **Uttarakhand, Punjab, Maharashtra, Kerala, Uttar Pradesh, Bihar, Telangana, Andhra Pradesh, and Rajasthan**.

Overview of Industrial Smart Cities:

- **Definition:** Industrial smart cities are urban spaces designed with modern technology and data systems to support efficient industrial activity and promote sustainability.
- **Purpose:** These cities are intended to **attract international investments**, enhance **domestic manufacturing capabilities**, and provide **employment opportunities**.
- **Objectives:**
 - Strengthen India's global trade presence by offering **readily available industrial land**.
 - Incorporate **"plug-and-play"** infrastructure for immediate setup and **"walk-to-work"** arrangements to reduce commuting needs.

Development Pathway:

- **Program:** The industrial cities are part of the **National Industrial Corridor Development Programme (NICDP)**, which seeks to develop competitive industrial cities.
- **Management:** The project is overseen by **National Industrial Corridor Development and Implementation Trust (NICDIT)** and **National Industrial Corridor Development Corporation Limited (NICDC)**.
 - **Notable Features:**
 - Integration of **residential and commercial facilities** within each industrial node.
 - **Invest India** will assist in promoting these cities to potential investors.
 - **Special Purpose Vehicles (SPVs)** will be set up to manage implementation, with an estimated completion time of **three years** based on state cooperation.

Main Elements of the Approved Industrial Cities:

- **Alignment with National Development Initiatives:** The initiative supports India's **target to reach USD 2 trillion in exports by 2030**.
- **PM GatiShakti National Plan:**
 - Cities will align with the **PM GatiShakti National Master Plan**, which provides infrastructure for seamless movement of goods and people.
 - Part of a **network of industrial cities** along the Golden Quadrilateral to enhance connectivity and facilitate trade.
- **Economic Impact:**
 - Targets **Foreign Direct Investment (FDI)**, particularly from **Singapore and Switzerland**.
 - Anticipated to create around **10 lakh direct jobs** and **30 lakh indirect jobs**.
 - **Estimated investment** of **Rs 1.5 lakh crore**.
 - Incorporation of **sustainable infrastructure** with smart technology and eco-friendly practices.

INDIA PREPARES TO LAUNCH RHUMI-1, ITS FIRST HYBRID REUSABLE ROCKET

- **Rocket Details:** Rhumi-1, developed by the Tamil Nadu-based start-up **Space Zone India**, will be launched from the Chennai coastline on August 24 using a **mobile launcher**.
- **Purpose:** Designed for **upper-stratospheric research**, Rhumi-1 utilizes **advanced semi-cryogenic technology**.
- **Payload:** The rocket can carry **three Cube Satellites and 50 Pico Satellites** and is expected to reach **altitudes of 35 km**, reaching sub-orbital levels to support educational and research projects.
 - **CubeSats:** A type of **nanosatellite** that follows a standard form factor, typically 10x10x10 cm for “1U” size and scalable to larger sizes like 1.5, 2, 3, 6, and 12U.
 - **Picosatellites:** Very small satellites, weighing **less than 1 kilogram**, that are often used to communicate data through **internet networks**.
- **Reusability:** The hybrid rocket will release its payload before falling into the sea for **recovery and reuse**.
- **Engine:** It uses a **hybrid engine** that combines a **liquid oxidizer and solid fuel**.
- **Airframe and Recovery System:** The rocket’s body is made of **carbon fibre and glass fibre** and includes a **parachute deployment system** using **pyrotechnics** developed in-house.

Goals of the Rocket Launch:

- **Cost Efficiency:** Rhumi-1 aims to make space research more economical.
- **Data Collection:** The mission will gather data on **radiation, vibration, temperature**, and other variables.
- **Launch Facility Access:** Through a **MoU between TIDCO and IN-SPACE**, private companies will be able to launch rockets from a **new facility under construction in Kulasekarapattinam**, reducing dependence on the Sriharikota launch pad.

About Space Zone India:

- **Company Profile:** Space Zone India, a private company registered under the **Companies Act, 2013**, focuses on **educational and research-based programs** for students globally.
- **Mission:** Space Zone India is dedicated to advancing academic standards and helping students achieve **futuristic goals**.
- **Location and Services:** Based in Chennai, the company seeks to offer **affordable, long-term solutions** in the space sector.
- **Educational Outreach:** Provides hands-on training in **aerodynamics, satellite technology, drone technology, and rocket technology** while raising awareness of career options in space sciences.
- **Collaborations:** Works with both private and government schools, as well as engineering and arts and science colleges, with support from experts in various fields.

Role of Indian National Space Promotion and Authorization Center (IN-SPACE):

- The **Indian National Space Promotion and Authorization Centre (IN-SPACE)** is an autonomous, single-window agency under the Department of Space (DoS), Government of India.
- **Establishment:** Established in **2020**, IN-SPACE aims to promote, enable, authorize, and supervise space activities of non-governmental entities (NGEs) in India.
- **IN-SPACE** operates under the Department of Space (DOS) as an **autonomous, single-window agency**.
- **Mandate:** Formed to facilitate and authorize the **participation of private entities** in space activities.
- **Functions:** Promotes and authorizes private-sector space activities, including building launch vehicles and satellites, providing space-based services, sharing infrastructure, and developing new facilities under DOS/ISRO’s supervision.
- **Chairman:** Dr. Pawan Goenka leads IN-SPACE.
- **Directorates:** Comprises three directorates-Promotion Directorate (PD), Technical Directorate (TD), and Program Management and Authorization Directorate (PMAD)-to carry out its functions.

CHINA-AFRICA COOPERATION SUMMIT IN BEIJING

China recently hosted the Forum on China-Africa Cooperation (FOCAC) summit in Beijing, where 53 African nations gathered, demonstrating China's continued efforts to build a stronger partnership with Africa amid economic challenges.

What is the Forum on China-Africa Cooperation (FOCAC)?

- **Background:** Established in **2000**, FOCAC was created to solidify the strategic alliance between China and African nations, with summits held **every three years**, rotating locations **between China and an African host nation**.
- **Participants:** FOCAC includes **53 African countries**, with the exception of Eswatini, which maintains diplomatic relations with Taiwan, in contrast to China's "**One China**" stance. The African Union Commission, responsible for regional cooperation and economic integration, also participates in the forum.
- **2024 Summit Highlights:**
 - **Theme:** *"Joining Hands to Advance Modernization and Build a High-Level China-Africa Community with a Shared Future."*
 - **Focus Areas:** The summit addressed governance, industrial growth, agricultural development, and advancing China's Belt and Road Initiative (BRI) in Africa.
 - **Financial Pledge:** China committed about **USD 51 billion** to support **30 infrastructure projects** across African countries.
 - **Key Documents:** The summit concluded with the adoption of the **Beijing Declaration** and the **FOCAC-Beijing Action Plan (2025-27)**, reinforcing the China-Africa partnership.

China's Relationship with Africa

- **Trade Volume:** In 2023, trade between China and Africa totaled approximately **USD 282 billion**, as per the International Monetary Fund (IMF).
- **Key Trade Components:** China accounts for **20% of Africa's exports** (primarily natural resources like metals, minerals, and fuel) and **16% of its imports** (mostly manufactured goods, electronics, and machinery).
- **Historical Projects:** The **Tanzania-Zambia Railway** was China's initial major infrastructure project in Africa, symbolizing the start of its extensive engagement on the continent.
- **Investment:** China's involvement in Africa, especially under the Belt and Road Initiative, has been considerable. African countries have sought Chinese financial support due to more flexible terms compared to Western funding, though there have been criticisms of potential "debt trap diplomacy" due to China's substantial loan provisions.

India's Engagement with Africa

- **India-Africa Forum Summit (IAFS):** Initiated to bolster India-Africa relations, the last IAFS took place in 2015, with plans for the fourth summit delayed by the COVID-19 pandemic from its original 2020 schedule.
- **Recent Initiatives:**
 - **2023 G20 Summit:** During India's G20 presidency, the African Union (AU) was given permanent G20 membership.
 - **Voice of the Global South Summit (VOGSS):** India hosted the VOGSS, which includes participation from all African nations, with three editions held thus far, coinciding with and following India's G20 leadership.
- **Defense Cooperation:** The India-Africa Defence Dialogue (IADD) underscores India's commitment to security partnerships with African nations.
- **Economic Links:** India ranks as Africa's fourth-largest trade partner, with annual trade exceeding USD 100 billion and cumulative investments surpassing USD 75 billion.
 - **AfCFTA Opportunity:** The African Continental Free Trade Area Agreement (AfCFTA) paves the way for expanded economic integration, with India being the first developing country to provide duty-free access to its markets for Least Developed Countries (LDCs) under its duty-free tariff preference (DFTP) scheme.
- **Digital Collaboration:** India is leveraging its strengths in digital public infrastructure to assist in Africa's digital transformation initiatives.

INDIA LEADS GLOBAL PLASTIC POLLUTION

A recent study published in the journal Nature has identified India as the world's largest plastic polluter, with an annual release of 9.3 million tonnes.

Overview of Study Findings

- **Plastic Waste Output:** India generates roughly **9.3 million tonnes** of plastic waste annually, of which **5.8 million tonnes** are incinerated and **3.5 million tonnes** are released as environmental litter. This level surpasses other major contributors like Nigeria (3.5 million tonnes), Indonesia (3.4 million tonnes), and China (2.8 million tonnes).
- **Per Capita Waste Rate:** India's daily plastic waste production stands at about **0.12 kilograms per person**.
- **Regional Disparities:** Nations in **Southern Asia, Sub-Saharan Africa, and South-eastern Asia** have the highest rates of plastic waste emissions. While **Global South countries**, such as India, often depend on open burning for waste disposal, **Global North** countries primarily use regulated systems, leading to less unmanaged waste.
- **Income-Related Waste Patterns:** High-income countries generate more plastic waste but have nearly complete waste collection and managed disposal systems, keeping them out of the top 90 polluters. In contrast, 69% of global plastic emissions originate from **20 nations** in the Global South, primarily due to open burning and substandard waste management.

Factors Driving High Plastic Waste in India

- **Population and Urbanization:** India's increasing population and urbanization contribute significantly to plastic use, resulting in higher waste production due to increased demand for plastic goods and packaging.
- **Deficient Waste Infrastructure:** India lacks adequate waste management facilities, with a predominance of open dumping sites over sanitary landfills, reflecting poor disposal practices and limited infrastructure.
- **Collection Rate Discrepancy:** Officially reported waste collection rates stand at **95%**, but actual rates are closer to **81%**, revealing inefficiencies in collection and disposal.
- **Waste Burning Practices:** Approximately **5.8 million tonnes** of plastic waste are incinerated each year in India, releasing toxic pollutants that harm health and the environment.
- **Informal Recycling Sector:** A significant portion of plastic waste is managed by the unregulated informal recycling sector, complicating accurate tracking of plastic pollution.

Consequences of Poorly Managed Plastic Waste in India

- **Environmental Impact:** Plastic debris clogs waterways, contributes to marine pollution, and releases harmful pollutants when burned, all of which degrade air quality and harm wildlife.
- **Health Risks:** The presence of microplastics in food and water poses potential health risks. Accumulated plastic waste also creates breeding grounds for disease vectors, increasing health threats like dengue and malaria.
- **Economic Losses:** India could face economic losses of over **USD 133 billion** by 2030 from uncollected plastic packaging waste, including **USD 68 billion** attributed to waste that is discarded or lost.
- **E-Commerce Influence:** The rapid rise of e-commerce has led to increased plastic packaging waste, much of which is challenging to recycle and ends up in landfills or as litter.
- **Regulatory Hurdles:** Issues in enforcing waste regulations and shortcomings in Extended Producer Responsibility (EPR) systems hinder effective plastic waste management.
- **Microplastics in Agriculture:** Microplastics accumulate in agricultural soils due to plastic use in farming and inadequate wastewater treatment, impacting soil quality and food safety.
- **Technological Deficiencies:** Limited waste segregation and processing capabilities, along with insufficient recycling technology, impede plastic waste management efforts. Comprehensive waste tracking systems are also lacking.

Key Plastic Waste Management Regulations in India

- **Plastic Waste Management Rules, 2016** – Sets the regulatory framework for managing plastic waste in India.

- **Plastic Waste Management (Amendment) Rules, 2018** – Phases out non-recyclable multi-layered plastic (MLP) and establishes a central registration for producers, importers, and brands through the **Central Pollution Control Board (CPCB)**.
- **Plastic Waste Management Amendment Rules, 2021** – Bans certain single-use plastic items by 2022, mandates the collection and environmental management of plastic packaging waste under EPR, and sets standards for plastic bag thickness, raising it from **50 microns** to **75 microns** by 2021 and to **120 microns** by 2022.

DISASTER MANAGEMENT AMENDMENT BILL, 2024

The Union government has recently introduced the **Disaster Management (Amendment) Bill, 2024** in the Lok Sabha, proposing changes to the existing **Disaster Management Act, 2005**. These proposed amendments have led to discussions concerning the evolving approach to disaster response.

Key Elements of the Disaster Management (Amendment) Bill, 2024

- **Creation of Disaster Management Plans:** The previous legislation assigned the **National Executive Committee (NEC)** and **State Executive Committees (SECs)** the role of assisting the **National Disaster Management Authority (NDMA)** and **State Disaster Management Authorities (SDMAs)** in drafting disaster management plans. The new Bill empowers the **NDMA and SDMAs** to directly develop these plans, without input from the NEC and SECs. Additionally, the NDMA's duties will now include regular assessments of disaster risks.
- **Establishment of National and State Disaster Databases:** The Bill mandates that both national and state-level databases be created to cover critical disaster management aspects, including disaster evaluation, allocation of funds, expenditures, preparedness strategies, and risk registers.
- **Staffing for NDMA:** The current structure allows the central government to appoint staff for the NDMA. The proposed Bill enables the NDMA to define its staffing needs and appoint experts, pending central government approval.
- **Urban Disaster Management Authority (UDMA):** The amendment introduces **Urban Disaster Management Authorities** for the capitals of states and major cities, except Delhi and Chandigarh. The UDMAs will be led by **municipal commissioners and district collectors**, focusing on managing disasters within urban areas.
- **Formation of State Disaster Response Forces (SDRF):** While the 2005 Act provides for a **National Disaster Response Force (NDRF)**, the amendment allows state governments to establish **State Disaster Response Forces (SDRF)** with defined roles, strengthening local disaster response efforts.
- **Statutory Recognition of Existing Committees:** The Bill provides legal status to the **National Crisis Management Committee (NCMC)** and the **High-Level Committee (HLC)**. The NCMC, headed by the **Cabinet Secretary**, will oversee major disaster management, while the HLC, led by the Minister responsible for disaster management, will handle financial assistance.
- **Imposition of Penalties and Enforcement:** The Bill proposes a new section, **60A**, allowing central and state governments to mandate actions or prohibit specific activities aimed at mitigating disaster impacts. It also includes a penalty of up to **Rs 10,000** for non-compliance.

Background and Features of the Disaster Management Act, 2005

- **Enactment:** The Disaster Management Act was passed in response to the severe impact of the 2004 tsunami. Preparations for such a framework had been underway since the **1998 Odisha super cyclone**.
- **Formation of Key Institutions:** The Act established key institutions, including the **NDMA** at the national level, **SDMAs** at the state level, the **National Disaster Response Force (NDRF)**, and the **National Institute of Disaster Management (NIDM)**, which focuses on disaster-related research, training, and capacity building.
- **Policies and Plans:** The Act was later supported by the **National Disaster Management Policy** in 2009 and a **National Disaster Management Plan** in 2016, forming a structured approach to disaster preparedness and response in India.

TRIPURA PEACE PACT

The **Union Home Minister** recently formalized a peace agreement between the Central government and the state of Tripura, marking a major step in reintegrating insurgents into society.

- On September 4, 2024, over **300 armed members from two insurgent groups in Tripura** renounced violence and joined the mainstream, aligning their efforts towards a more developed Tripura and India.

Overview of the Peace Agreement with Insurgent Groups in Tripura

- **Insurgent Groups:** More than 300 armed members from the **National Liberation Front of Tripura (NLFT)** and the **All Tripura Tiger Force (ATTF)** have formally ended their insurgency and joined the democratic process.
- **Economic Support:** The Centre has allocated a **₹250 crore package** aimed at uplifting the socio-economic status of the tribal communities in Tripura, addressing long-standing grievances.
- **Background of NLFT:** Established in **1989**, the NLFT sought an independent Tripura and demanded the deportation of settlers who arrived post-1956.
- **Peace Accords in Northeast:** This is the **12th peace accord** for the Northeast region, and the **3rd accord** for Tripura in the past decade. Through these accords, approximately **10,000 former insurgents** have reintegrated into mainstream society, contributing to a marked reduction in violence.
- **Infrastructural Focus:** The Union Home Minister emphasized the infrastructural advancements (roads, railways, and flights) brought to the Northeast by the current administration, strengthening the bonds between the region and the rest of India and promoting peace and development.
- **Commitments of NLFT and ATTF:** The groups have agreed to participate in peaceful democratic activities, dissolve their armed factions, and uphold the territorial integrity of India.
- **Goals of the Agreement:** The accord aims to curb loss of life, reduce violence, and drive long-term development efforts in Tripura with particular emphasis on tribal welfare and political inclusion.

Historical Background of Conflict

- **Armed Forces Special Powers Act (AFSPA):** The AFSPA was repealed in Tripura in **2015**. The Union Home Minister highlighted this as part of broader de-escalation measures in the Northeast, focusing on development and cultural preservation across the region.
- **Tripartite Memorandum of Settlement:** A three-party agreement was signed between the Government of India, the Government of Tripura, and insurgent groups NLFT/ATTF, aiming to end the 35-year conflict and bring insurgents into democratic channels.
- **Formation of ATTF:** The ATTF, formed in **1990**, had demands including the removal of illegal migrant names from electoral rolls and full implementation of the **Tripura Merger Agreement (1949)**.
- **Insurgency Activities:** The NLFT was responsible for over **600 fatalities**, while the ATTF accounted for **over 300 deaths** in addition to kidnappings. Both groups operated camps within Bangladesh territory.

Details on AFSPA

- **Historical Background:** The Act was first introduced by the British in **1942** in response to the Quit India movement.
- **Post-Independence:** After independence, then-Prime Minister Jawaharlal Nehru retained the Act. Initially introduced as an ordinance, it was later formalized as an Act in **1958**.
- **Powers Granted by the Act:** The **Armed Forces (Special Powers) Act (AFSPA)** of 1958 provides special powers and immunity to the armed forces for restoring order in areas declared as “disturbed.”
- **Context of Enactment:** The Act was enacted due to increasing violence in the Northeastern states, where local governments faced challenges in maintaining control.

SWACHH VAYU SURVEKSHAN AWARD 2024

The **Swachh Vayu Survekshan Award 2024** was presented by the Union Minister of Environment, Forest & Climate Change and the Chief Minister of Rajasthan in Jaipur on the **International Day of Clean Air for Blue Skies (Swachh Vayu Diwas)**.

- **Date:** Celebrated annually on **7th September**, designated by the **UN General Assembly (UNGA)** in 2019, to promote **awareness and actions** for **improving air quality**.

Swachh Vayu Survekshan Award, 2024:

- **Purpose:** Honors **top-performing National Clean Air Campaign (NCAP)** cities in three categories, based on **population size**.
 - **Category-1** (Population over 10 lakhs): **Surat, Jabalpur, Agra**
 - **Category-2** (Population 3-10 lakhs): **Firozabad, Amravati, Jhansi**
 - **Category-3** (Population under 3 lakhs): **Raebareli, Nalgonda, Nalagarh**
- **Recognition:** Municipal Commissioners of winning cities awarded **cash prizes, trophies, and certificates**.

Swachh Vayu Survekshan (SVS) Initiative:

- **Launched by:** **Ministry of Environment, Forest and Climate Change (MoEFCC)** to **rank cities** based on **air quality** and progress in **NCAP city action plans** for **131 non-attainment cities**.
 - **Non-attainment cities:** Cities that fail to meet **National Ambient Air Quality Standards (NAAQS)** for **PM10 or NO2** over a **5-year period**.
- **Population Classification:** Based on the **2011 Census**.
- **Assessment Criteria:**
 - **Control of biomass burning**
 - **Reduction of municipal solid waste burning**
 - **Mitigation of road dust**
 - **Management of construction and demolition dust**
 - **Reduction in vehicular emissions**
 - **Control of industrial emissions**
 - **Public awareness**
 - **Improvement in PM10 concentration**

National Clean Air Campaign (NCAP):

- **Objective:** **National framework for air quality management**, aiming for a **20% reduction** in **PM10** and **PM2.5** concentration by **2025** (base year **2017**).
- **Cities:** **131 cities** identified to implement **city-specific action plans** under NCAP.
- **Target:** First national effort targeting a **time-bound air pollution reduction** strategy.

MISSION MAUSAM – CLOUD CHAMBER UNDER MISSION MAUSAM

The Union Cabinet, led by the Prime Minister, has recently approved **Mission Mausam** with a budget of **₹2,000 crore** allocated over the next two years.

About Mission Mausam

- **Objective:** Mission Mausam is envisioned as a comprehensive initiative aimed at advancing India's expertise in weather and climate sciences, enhancing research, technology, and service capacities.
- **Focus Areas:** The mission will emphasize:
 - Expanding research and capabilities in **atmospheric sciences** such as weather monitoring, modeling, forecasting, and management.
 - Integrating **high-performance computing**, along with advanced observation systems and **AI/ML technologies** for more accurate forecasts.
 - **Weather and Climate Services:** Mission Mausam will focus on monsoon predictions, air quality warnings, extreme weather alerts (e.g., cyclones), and weather interventions to manage phenomena like fog, hail, and rain.

- **Capacity Building and Awareness:** The mission will enhance public and institutional capacity and create awareness on climate-related issues.
- **Key Elements:**
 - **Next-generation Radars and Satellites:** Deployment of advanced radars and satellite systems equipped with sophisticated sensors.
 - **Earth System Models:** Development of models for improved predictions and a **GIS-based Decision Support System** for real-time data sharing.

Implementation Agencies

- The mission will be primarily implemented by three institutions under the **Ministry of Earth Sciences**:
 - **India Meteorological Department (IMD)**
 - **Indian Institute of Tropical Meteorology (IITM)**
 - **National Centre for Medium-Range Weather Forecasting (NCMRWF)**
- They will receive support from other Ministry institutions, as well as collaborations with national and international organizations, academic institutions, and industry partners.

Sectoral Benefits

- Mission Mausam will directly benefit multiple sectors, including:
 - **Agriculture, Disaster Management, Defence, Environment, Aviation, Water Resources, Power, Tourism, Shipping, Transport, Energy, and Health**
 - Enhanced data-based decision-making support in areas such as **urban planning, transport, offshore operations, and environmental monitoring**.

India's Cloud Chamber Project Under Mission Mausam

- **Purpose:** India's planned **cloud chamber** at IITM Pune will be a unique research facility focused on studying **Indian monsoon clouds**.
- **Design:** Shaped like a closed cylindrical drum, the chamber will replicate cloud formation by introducing water vapor, aerosols, and specific humidity and temperature conditions.
 - This facility differs from simpler chambers in other countries by incorporating **convection properties**, essential for monsoon studies.
 - It will allow scientists to observe seed particles as they form cloud droplets or ice particles, helping improve understanding of monsoon-related cloud behavior.

Why Build a Convective Cloud Chamber?

- **Objective:** To gain insights into cloud physics, including how clouds form rain and ice particles and how added moisture (from low-pressure systems or cyclones) influences these processes.
- **Controlled Environment:** Scientists can adjust variables like temperature, humidity, and convection within the chamber to study specific conditions of **Indian monsoon clouds**. This research will aid in future **weather modification strategies**.

India's Experience with Cloud Seeding

- **CAIPEEX Project:** India's **Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX)** was a **decade-long program** carried out in four phases, focusing on enhancing rainfall through **cloud seeding**.
 - The final phase, conducted from **2016 to 2018** in Solapur, Maharashtra, targeted rain-shadow regions.
 - Findings: Under favorable conditions, cloud seeding increased rainfall by up to **46%** in certain spots and by about **18% over a 100 sq. km area** downwind from the seeding point.
 - **Limitations:** While results were promising, cloud seeding is not viewed as a standalone solution to India's rainfall challenges.

NATIONAL BANK FOR FINANCING INFRASTRUCTURE AND DEVELOPMENT

- The **Government of India**, in coordination with the **Reserve Bank of India (RBI)**, has designated the **National Bank for Financing Infrastructure and Development (NaBFID)** as a “**public financial institution**” under the **Companies Act, 2013** to enhance infrastructure financing capabilities.
- **Companies Act, 2013**: Governs company incorporation, responsibilities, director roles, and dissolution processes, partially replacing the **Companies Act of 1956**.
- **Implication of Notification**: This classification empowers NaBFID to support large-scale infrastructure financing, bolstering India's infrastructure finance system.
- **Establishment**: NaBFID was set up in **2021** under the **National Bank for Financing Infrastructure and Development Act, 2021**, marking it as India's **fifth All India Financial Institution (AIFI)** focused on providing long-term infrastructure finance.
- **Role and Purpose**: NaBFID, as a **Development Finance Institution (DFI)**, supports long-term infrastructure projects, including the development of **bonds and derivatives markets**.
- **Funding Milestones**: As of **February 2024**, NaBFID has sanctioned over **₹86,804 crore** for various infrastructure projects across India, with **50%** of these projects having long-term tenures of **20 to 50 years**.
- **Future Plans**: NaBFID targets to sanction over **₹3 lakh crore** for infrastructure projects by **March 2026**.

TUVALU CLIMATE CHANGE

Tuvalu, a **Pacific island nation** with a population of **11,000**, is grappling with serious threats due to rising sea levels. NASA estimates that by 2050, daily tides will submerge **half of Funafuti, Tuvalu's main atoll**.

- Saltwater intrusion has compromised groundwater, harming agriculture and necessitating reliance on rainwater storage and a central raised garden for food.
- In response, **Tuvalu** is constructing seawalls and expanding artificial land to **mitigate these effects until 2100**. Additionally, a 2023 climate and security agreement with Australia enables **280 Tuvaluans to migrate each year**.

Tuvalu's Response to Rising Sea Levels: **Tuvalu**, a **low-lying island nation**, faces existential threats due to **rising sea levels** from climate change.

- **Funafuti Atoll** (Tuvalu's main atoll), which hosts **60% of Tuvalu's population**, may be **submerged by 2050** due to high tides, as predicted by NASA.
- **Sea Level Rise**: Sea levels around Tuvalu have been increasing at a rate of **5 mm per year**.

Environmental Impacts

- **Saltwater Intrusion** has contaminated groundwater, making traditional agriculture nearly impossible. As an adaptation, Tuvaluans:
 - Use **rainwater tanks** for drinking.
 - Cultivate in **raised gardens** to avoid salt contamination.

Adaptation and Resilience Initiatives

- **Artificial Islands**: Tuvalu has created **17.3 acres of artificial land** on Funafuti, expected to withstand rising seas until **2100**. This land supports **emergency housing** and infrastructure.
- **Sea Walls and Coastal Barriers**: Built to mitigate **erosion**, guard against **storm surges**, and protect habitable land. These structures draw on models from flood-prone regions like **the Netherlands**.
- **Climate Migration Treaty with Australia (2023)**:
 - Allows **up to 280 Tuvaluans per year** to migrate to Australia from **2024** onward.
 - Provides an exit strategy if the islands become uninhabitable.

Diplomatic and Legal Efforts

- **UN Advocacy**: Prime Minister Feleti Teo addressed the **UN General Assembly on September 25, 2024**, urging the **protection of Tuvalu's maritime boundaries and statehood** status.
- **UN Convention on the Law of the Sea (UNCLOS)**:

- Tuvalu proposes UNCLOS amendments to **recognize submerged nations' statehood** and **fix maritime boundaries**.
- **International Law Commission (ILC)** supports a "strong presumption" for statehood persistence, with an upcoming report on sea-level rise.
- Some ILC members suggest alternatives to amending UNCLOS, like legal principles or resolutions.

Regional and Bilateral Support

- **Pacific Islands Forum (18 nations):** Declared that **maritime boundaries should be fixed** despite rising sea levels.
- **Bilateral Agreements:** Agreements with **15 countries** (mainly in Asia and Europe) affirm that Tuvalu's boundaries remain unchanged.
- **Fishing Nation Recognition:** Only **Taiwan and Fiji** formally recognize Tuvalu's fixed maritime boundaries among nations with fishing interests in the region.

Economic and Sovereign Implications

- **Fishing Licenses:** Essential to Tuvalu's economy, generating **over 40% of its revenue** through fees within its **900,000 sq km EEZ**.
 - **Permanent boundary recognition** would preserve income from fishing licenses and deter **illegal fishing** by non-signatory countries.
 - Rising seas pose a risk of boundary loss, potentially impacting **revenue from fishing licenses**.

Key Stakeholder Positions and Global Implications

- **Australia's Role:** Treaty with Tuvalu may set a model for other nations to provide migration pathways for climate-affected communities.
- **Potential UN Legal Framework:** A UN-recognized framework could protect other vulnerable states like **Kiribati and the Maldives**.
- **Economic and Climate Justice:** Tuvalu's stance on fixed boundaries reflects an advocacy for **climate justice**, highlighting disproportionate impacts on low-emission nations.

INDIAN CHESS TEAMS' VICTORY AT THE CHESS OLYMPIAD

The **Indian men's and women's chess teams** won **gold medals** at the **Chess Olympiad** in Budapest.

- **Indian Men's Team:**
 - Defeated **Slovenia** with a score of **3.5-0.5** in the **11th and final round** of the **45th Chess Olympiad**.
 - Previously won **bronze medals in 2014 and 2022** editions of the tournament.
- **Indian Women's Team:**
 - Overpowered **Azerbaijan** with a **3.5-0.5 victory** in the final round.
 - Had earlier won a **bronze medal in 2022**, held in **Chennai**.
- **Historical Achievement:**
 - **India** joins **China** and the **Soviet Union** as the only nations to have won **both men's and women's gold medals in the same Chess Olympiad** edition.
- **Chess Olympiad Overview:**
 - **Biennial event** where teams from around the world compete in chess.
 - Organised by **FIDE**, which also selects the host nation.
 - The first **unofficial Chess Olympiad** was held in **1924**.

INDIA'S VICTORY IN THE 5TH ASIAN CHAMPIONS TROPHY 2024

- The **Indian men's hockey team** won the **5th Asian Champions Trophy 2024** held in **China**, defeating **China 1-0** in the final.
- **India** holds the record for the most **Asian Men's Hockey Champions Trophy** titles with **5 titles**.
 - **Pakistan** follows with **3 titles**, including **one shared title with India**.
- **Top Goal Scorers:**
 - **Harmanpreet Singh** (India) is the **second-highest goal scorer** in the Asian Champions Trophy with **7 goals**.
 - He trails **Korea's Jihun Yang**, who leads with **8 goals**.
- **Asian Men's Hockey Champions Trophy Overview:**
 - Organized **annually** by the **Asian Hockey Federation** since **2011**.
 - The **inaugural tournament** included **India, Pakistan, Malaysia, Japan, South Korea, and China**.
 - The **Asian Hockey Federation** governs hockey in Asia, with **33 member associations** and is affiliated with the **International Hockey Federation (FIH)**.
- **Historical Insights:**
 - **India** won the **first edition in 2011**, defeating **Pakistan** in the final via **penalty shoot-out**.
 - **Pakistan** claimed the **2012 title**, marking the start of a back-and-forth winning trend with India until **South Korea** won the **2021 title**, breaking the sequence.

SUCCESSFUL LAUNCH OF AGNI-4 MISSILE

- The **Agni-4 missile** was successfully launched from the **Integrated Test Range in Chandipur, Odisha**.
 - The launch validated **all operational and technical parameters** under the **Strategic Forces Command (SFC)**.
- **Agni-4 Missile Specifications:**
 - Part of the **Agni series** of ballistic missiles developed by **DRDO**.
 - **Intermediate-range** ballistic, **surface-to-surface missile** capable of striking **ground or sea targets**.
 - Has a **range of 4,000 kilometres** and measures **20 metres in length**.
 - **Payload capacity of 1,000 kg**.
- **Significance of 'Agni':**
 - The name '**Agni**' originates from **Sanskrit**, meaning '**fire**', symbolizing one of the **five elements of nature**.
- **Strategic Forces Command (SFC):**
 - SFC operates under **India's Nuclear Command Authority (NCA)**.
 - Responsible for the **management and administration** of India's **tactical and strategic nuclear weapons stockpile**.
- **Nuclear Command Authority (NCA) Structure:**
 - Composed of two councils:
 - **Political Council:** Chaired by the **Prime Minister**, holds sole authority to authorize the use of nuclear weapons.
 - **Executive Council:** Chaired by the **National Security Advisor**, provides inputs for decision-making and implements directives from the Political Council.

ELECTION EXPENDITURE IN INDIA

- **Total Expenditure in 2024 General Election:** Estimated at **₹1,00,000 crores** by various political parties, as per **Centre for Media Studies (CMS)**, a not-for-profit for responsive governance.
- **Expenditure Limits for Candidates:**
 - **Lok Sabha Seats:** ₹95 lakh in larger states, ₹75 lakh in smaller states.
 - **Assembly Seats:** ₹40 lakh in larger states, ₹28 lakh in smaller states.
 - **No Limits on Political Parties' Spending:** No ceiling on expenditures by parties during elections, allowing unrestricted spending.
- **Election Costs:**
 - **Cost per Vote in 2024:** Approx. **₹1,400**.

- **Total Election Expenditure Growth:** From ₹9,000 crores in 1998 to approximately ₹1 lakh crores in 2024.
- **Government Advertising Spend:**
 - ₹3,020 crore spent by Central government on ads from 2018-19 to 2022-23.
 - Highest in election year **2018-19 with ₹1,179 crore**; lower at ₹408 crore in 2022-23.
- **Comparison with Previous Elections:**
 - **First General Election (1951-52):** Candidates spent around ₹25,000.
 - **Present Limit:** ₹75-95 lakh, a **300-fold increase** from 1951-52.
- **Transparency Measures:**
 - Political parties must submit **Annual Contribution Reports** for donations **over ₹20,000** to the Election Commission of India (ECI).
 - Required to file **Annual Audited Accounts** and **Election Expenditure Reports** within **75 days post-election**.
- **Funding Sources:**
 - **Corporate Contributions** form the bulk of political funding, strengthening ties between **donors and politicians**.

Election Expenditure in Other Democracies

- **United States:**
 - Primarily funded by **limited individual, corporate, and Political Action Committee (PAC)** contributions.
 - **Super PACs** can spend **unlimited amounts** on campaigns, enabled by US Supreme Court rulings.
- **United Kingdom:**
 - **Expenditure Cap** for political parties: **£54,010 per constituency** contested.
 - Overall party spending cap at **£35 million** for national-level contests.
 - **Long Campaign** (5 months before House of Commons term ends): **£46,000 to £49,000** per constituency.
 - **Short Campaign** (post-election announcement): **£17,000 to £20,000** per constituency.

Election Expenditure Governance in India

- **Representation of the People Act (RPA), 1951:**
 - **Section 77:** Candidates must maintain accurate records of campaign expenses from nomination day until election day.
 - **Section 78:** Candidates must submit their **election expense account** to the District Election Officer **within 30 days of result declaration**.
- **Companies Act, 2013:**
 - Non-government companies with **3+ years of operations** may contribute up to **7.5% of average net profits** over the past three years to political parties registered under RPA.
- **Foreign Contribution (Regulation) Act (FCRA), 2010:**
 - Prohibits political parties, candidates, and related entities from receiving **foreign contributions**, including funds, gifts, or donations from foreign sources.

INDIA-GERMANY INTER-GOVERNMENTAL CONSULTATIONS (IGC)

7th Inter-Governmental Consultations (IGC) held in New Delhi were chaired by **PM Narendra Modi** and **German Chancellor Olaf Scholz** to address global issues.

Global Issues Addressed

- **Russia-Ukraine Conflict:**
 - **PM Modi** reiterated **India's commitment** to peaceful conflict resolution.
 - **Chancellor Scholz** acknowledged **India's stabilizing role** in South Asia and encouraged a **political solution** to the Ukraine crisis.
- **West Asia:** Both leaders supported measures to prevent **escalation** in the region, advocated a **ceasefire** and a **two-state solution** for the Israeli-Palestinian conflict.
- **Indo-Pacific Security:**

- Emphasis on **rules-based order** and **maritime freedom** in the **Indo-Pacific**.
- Announcement of a **joint Memorandum of Arrangement** for **mutual logistics support** to enhance security cooperation.
- **Germany to deploy a permanent Liaison Officer** at **Information Fusion Centre – Indian Ocean Region (IFC-IOR)** in **Gurugram** to support marine traffic monitoring.
- **Condemnation of Terrorism:** Both leaders strongly condemned **terrorism** and **violent extremism** in all forms, calling for unified action against **UNSC-sanctioned terrorist organizations**.
- **Reform of Global Institutions:** Advocated for **reforms in multilateral bodies**, including the **UN Security Council**, to better address current global challenges.

Key Announcements and Agreements

- **Increased Visa Quota for Skilled Indian Workers:** Germany to increase visa quota for skilled Indian workers from **20,000 to 90,000 annually**.
- **Germany's "Focus on India" Strategy:** Emphasizes **India's skilled workforce** and **partnership**, reflecting deepened trust and strategic ties.
- **Reducing Dependency on China:** Both countries highlighted the need to avoid **"one-sided dependencies"**, especially in critical raw materials, with **India positioned as a key partner** in diversifying supply chains.
- **India as a Manufacturing Hub:** PM Modi promoted **"Make in India, Make for the World"**, encouraging German investments in India's trade and manufacturing sectors.
- **Enhanced Defence and Security Cooperation:** Agreements signed, including one on **classified information exchange**, indicating **mutual trust** in defense matters.
 - **Mutual Legal Assistance Treaty (MLAT)** in criminal matters signed to strengthen legal collaboration.
- **Clean Energy and Sustainable Development:**
 - **Green Hydrogen Roadmap:** Joint initiative supporting renewable energy goals.
 - **Joint Research and Development (R&D):** Declaration to cooperate on **advanced materials**, demonstrating commitment to technological progress.
- **Triangular Development Cooperation (TDC):** Collaboration on **sustainable projects** in **third countries** for **SDGs and climate targets** in **Africa, Asia, and beyond**.

India-Germany Relations

- **Strategic Partnership** since **2000** has deepened to include areas like **AI, cybersecurity, circular economy, smart farming, and sustainable development**.

Bilateral Trade Relations

- **Germany is India's top trading partner within the EU.**
 - Total trade in **2022-23** reached **USD 26 billion**.
 - **Indian exports** to Germany were valued at **USD 10.1 billion**; **German imports** were **USD 14.9 billion**.
 - Although no direct **Free Trade Agreement (FTA)** exists, Germany supports **EU-India Comprehensive FTA** negotiations for stronger economic ties.

NATIONAL MISSION FOR MANUSCRIPTS (NMM)

- **Revival and Restructure:** The **Union Ministry of Culture** plans to **revive and relaunch the NMM** and is considering creating an **autonomous body** to enhance the preservation of India's ancient texts.
 - The new entity, likely named the **National Manuscripts Authority**, will function as an autonomous body under the **Ministry of Tourism and Culture**.

About National Mission for Manuscripts (NMM)

- **Establishment:** Initiated in **February 2003** by the **Ministry of Tourism and Culture**.
- **Mandate:** Aims to **document, conserve, and disseminate** the knowledge in India's manuscripts.
 - **Motto:** "Conserving the past for the future."
- **Scope:** A unique project to explore and safeguard India's **vast manuscript wealth**, estimated at around **ten million manuscripts**, likely the **largest collection worldwide**.
 - Manuscripts cover diverse **themes, materials, scripts, languages, calligraphies, illuminations, and illustrations**.

- Approximately **75% of manuscripts are in Sanskrit**, with **25% in regional languages**.

Objectives of NMM

- **Manuscript Survey:** Conduct national surveys to locate and document manuscripts.
- **National Electronic Database:** Document manuscripts and repositories, currently holding **information on 4 million manuscripts**—the **world's largest manuscript database**.
- **Conservation Techniques:** Employ **modern and indigenous conservation methods** and train new conservators.
- **Scholar Training:** Educate scholars in **Manuscript Studies**, including **languages, scripts, text editing, cataloguing, and conservation**.
- **Digitization:** Digitize rare and endangered manuscripts to promote accessibility.
- **Publication of Critical Editions:** Make unpublished manuscripts accessible through **published critical editions and catalogues**.
- **Public Engagement:** Organize **lectures, seminars, publications**, and outreach programs to raise awareness.
- **Infrastructure:** Over **100 Manuscripts Resource Centres** and **Manuscripts Conservation Centres** established across India.

What is a Manuscript?

- **Definition:** A **handwritten composition** on materials like **paper, bark, cloth, metal, or palm leaf** that is **at least 75 years old** and holds **scientific, historical, or aesthetic significance**.
- **Exclusions:** **Lithographs and printed volumes** are not considered manuscripts.
- **Language Diversity:** Manuscripts exist in numerous **languages and scripts**. Some languages, like **Sanskrit**, are represented in various scripts, such as **Oriya, Grantha, and Devanagari**.
- **Distinct from Historical Records:** Unlike **epigraphs, firmans, or revenue records**, manuscripts focus on **knowledge content** rather than historical events.

National Culture Fund (NCF)

- **Establishment:** Formed in **1996** under the **Charitable Endowment Act, 1890**, to raise **additional resources** through **Public-Private Partnerships (PPP)** to support **India's cultural heritage**.
- **Purpose:** Acts as a funding platform to enable **donors and sponsor institutions** to aid in **protecting, restoring, conserving, and developing India's tangible and intangible heritage** (monuments, cultural traditions) in partnership with the government.
- **Features of NCF:**
 - Provides a reliable platform for **heritage, culture, and arts partnerships**.
 - Each project is monitored by a **Project Implementation Committee (PIC)**, including representatives from the **Donor, Implementer, and NCF**.
 - **Annual audit by the Comptroller and Auditor General of India**.
- **Management:**
 - NCF is overseen by a **Council**, chaired by the **Minister of Culture**, and an **Executive Committee**, led by the **Secretary**.

EMISSIONS GAP REPORT 2024

United Nations Environment Programme (UNEP) released the **Emissions Gap Report 2024** prior to COP 29 of the UNFCCC in Baku, Azerbaijan.

Current Emissions and Temperature Trajectory

- **Projected Warming:** With current policies, **global temperatures could increase by 3.1°C** above **pre-industrial levels**.
- **Paris Agreement Risk:** Full implementation of **Nationally Determined Contributions (NDCs)** would still lead to a **2.6°C rise**, endangering the **Paris Agreement** target of keeping the rise below **2°C**, ideally **1.5°C**.
- **Necessary Reductions for 1.5°C Goal:**

- **Greenhouse gas emissions** must **peak before 2025** and **decrease by 43% by 2030** to limit warming to **1.5°C**.

Emissions Data and Trends

- **Record High Emissions:** Global greenhouse gas emissions reached **57.1 gigatons of CO₂ equivalent (tCO₂e)** in 2023.
 - **India's Emissions:** Increased by **6.1%**, while **global emissions rose by 1.3%** in 2023 compared to 2022.

Major Contributors to Emissions

- **G20's Role:** The **G20 (excluding African Union)** was responsible for **77% of global emissions** in 2023.
- **Largest Emitters:** Six top emitters accounted for **63% of global emissions**.

Per Capita Emissions

- **India's Per Capita Emissions (2022):** **2.9 tCO₂e**, lower than **China (11 tCO₂e)** and the **US (18 tCO₂e)**.
- **Developed Countries:** Their per capita emissions are about **three times the global average (6.6 tCO₂e)**, while **India, the African Union, and least developed countries** remain below this average.

Required Emissions Cuts

- **Annual Reduction:** To stay on track for the **1.5°C target**, global emissions need to decrease by at least **7.5% per year until 2035**.

Cost of Achieving Net-Zero by 2050

- **Annual Investment:** Reaching net-zero requires **USD 900 billion to USD 2.1 trillion** per year, approximately **1% of global GDP**.

Emission Reduction Pathways

- **Renewable Energy:** Scaling up **solar and wind energy** can contribute **27% of necessary reductions** by 2030.
- **Forest Conservation:** Preserving and restoring forests could account for **20% of needed emissions cuts**.

About United Nations Environment Programme (UNEP)

- **Founded:** Established in **1972** after the **UN Conference on the Human Environment** in **Stockholm**.
- **Headquarters:** Located in **Nairobi, Kenya**.
- **Governing Body:** The **United Nations Environment Assembly (UNEA)**, the highest environmental decision-making body, with **universal membership** of all **193 UN Member States**.
- **Initiatives:** Key programs include **Climate Action, Ecosystem Restoration, Clean Seas**, and support for **Sustainable Development Goals (SDGs)**.
- **Reports:** UNEP publishes major reports, such as the **Emissions Gap Report, Global Environment Outlook**, and the **Adaptation Gap Report** to inform global policies.

CHINA'S JIANGMEN UNDERGROUND NEUTRINO OBSERVATORY (JUNO)

Jiangmen Underground Neutrino Observatory (JUNO) in **Guangdong, China**, nearing completion, is expected to advance our knowledge of **neutrinos**, helping uncover cosmic mysteries through global collaboration.

About JUNO and Its Purpose

- **Location:** JUNO is situated **700 meters underground** in **Guangdong province, China**.
- **Structure:** Houses a **giant sphere** with thousands of light-detecting tubes inside a **12-storey water-filled cylindrical pool**.
- **Purpose:**
 - To study **neutrinos**, elusive subatomic particles resulting from nuclear reactions.
 - Aims to determine **neutrino mass hierarchy**, enhancing understanding of **subatomic processes** and **matter formation** in the universe.
 - JUNO will monitor **solar neutrinos**, offering real-time data on solar processes.
 - Studies **neutrinos from radioactive decay** in Earth's mantle (uranium, thorium) to aid in understanding **mantle convection** and **tectonic plate movement**.
- **Global Collaboration:** JUNO's research is a collaborative effort with scientists from **France, Germany, Italy, Russia, the U.S., and Taiwan**.

- **Operational Timeline:** JUNO is set to commence operations by **late 2025**, positioning it ahead of other observatories like the **Deep Underground Neutrino Experiment (DUNE)** in the U.S.

What are Neutrinos?

- **Abundance:** **Second most abundant particles** after photons.
- **Origins:** Produced in **nuclear reactions** in the **Sun, stars**, and other cosmic phenomena.
- **Characteristics:**
 - Extremely **small, near-massless** particles.
 - Billions pass through matter every second, including the human body.
 - They “**oscillate**” (change type mid-flight), essential for studying **mass relations** and **universal origins**.
- **Varieties:** There are **three types of neutrinos**, which can **transform between types** during flight. Understanding their mass hierarchy could reveal why matter exists as it does.
- **JUNO’s Focus:** Tracks neutrinos from **Guangdong nuclear power plants**, focusing on **neutrino oscillation** to solve the **mass hierarchy problem**.

Deep Underground Neutrino Experiment (DUNE)

- **Location:** **South Dakota, U.S.**, approximately **1,500 meters underground**.
- **Objectives:**
 - Study **neutrino oscillations** to understand their fundamental properties and **mass hierarchy**.
 - Investigate **asymmetry between matter and antimatter**, neutrino interactions, and potential **proton decay**.
- **Global Collaboration:** Involves scientists from **30+ countries**, including the **U.S., UK, India, Japan**, and **Brazil**—one of the largest collaborations in particle physics.
- **Scientific Importance:** Insights into **particle physics** and the **universe’s evolution**.

Indian Neutrino Observatory (INO)

- **Location:** Proposed to be built in a **1,200-meter-deep cave** at **Pottipuram village, Theni district, Tamil Nadu**.
- **Objective:** To study **neutrinos** as part of a major particle physics research initiative.
- **Development:** Initially proposed by the **Institute of Mathematical Sciences**, later supported by the **Tata Institute of Fundamental Research**.
- **Current Status:** As of **October 2024**, construction is **stalled** due to opposition from **state authorities and ecologists**.

UN REPORT ON GENDER-RESPONSIVE CLIMATE POLICIES

The UN Climate Change secretariat released a synthesis report showing an increase in **gender-responsive climate policies** worldwide.

Key Highlights of the Report

- **Increase in Gender References:**
 - Around **81% of Parties to the Paris Agreement** now include **gender references** in their **Nationally Determined Contributions (NDCs)**, a notable increase from **2015**, when few NDCs mentioned gender.
- **Strengthening Institutional Mechanisms:**
 - Approximately **62.3% of Parties** reported steps to enhance **institutional frameworks** for incorporating gender in climate initiatives.
- **Gender Balance Initiatives:**
 - About **11.5% of Parties** have established programs to boost **gender diversity** among stakeholders in **agriculture, forestry, and water resources** adaptation efforts.
- **Commitment to Gender Equality:**
 - **55.7% of Parties** affirmed support for **gender equality** in climate action, indicating its growing recognition in global policies.
- **Impact on Food Security:**
 - Climate change affects **food availability, accessibility, utilization, and stability**.

- **Women, producing 45-80% of food** in developing countries, are disproportionately affected as traditional sources become unreliable and food prices rise.
- **Vulnerability Considerations:**
 - The report notes **women's increased vulnerability** to climate change and emphasizes that **men in vulnerable situations** are also often overlooked in policies.

Recommendations & Future Prospects

- **Enhancing Climate Initiatives:** Gender-responsive approaches are essential to boost **ambition and effectiveness** in climate action. Most Parties reiterate **gender equality** as a core aspect of climate goals.
- **Global Stocktake Outcomes:** The **first Global Stocktake at COP 28** of the UNFCCC urges Parties to adopt **gender-responsive climate policies**.
- **Next Round of NDCs (NDCs 3.0):** The **2025 NDC submissions** present an opportunity to strengthen global efforts toward **gender equality** and **effective climate outcomes**.

India's Nationally Determined Contributions (NDCs)

- **Emissions Reduction:** India aims to cut **emissions intensity of its GDP by 45% by 2030**.
- **Net-Zero Goal:** India's updated NDC aligns with the **target of net-zero emissions by 2070**.
- **Cleaner Energy Transition (2021-2030):** The framework focuses on **green jobs, manufacturing of low-emission products** (e.g., EVs, efficient appliances), and innovative technologies like **green hydrogen**.
- **Adaptation Targets:** India will increase investment in **vulnerable sectors** and build **capacity for climate technology adoption**.

Importance of Gender Equality in Climate Action

- **Agricultural Impact:**
 - Women play a central role in food production but lack equal access to resources and decision-making.
 - **Equal access for women** in agriculture could **increase yields by 20-30%**, potentially reducing **hunger for 100-150 million** and cutting **CO₂ emissions by 2.1 gigatons by 2050**.
- **Land Ownership:**
 - Women form **one-third of the global agricultural workforce** but own only **12.6% of land**.
 - Limited land ownership increases women's vulnerability, restricting access to **adaptation resources** and information.
- **Decision-Making in Climate Leadership:**
 - Women's involvement in **climate policy** is vital but often limited due to their responsibility for **75% of unpaid care work** globally.
 - **Climate-induced disasters** further strain women's roles in **household and community recovery**.
- **Impact on Education and Employment:**
 - Climate pressures restrict **education and labor opportunities** for women and girls.
 - **Gender-based violence risks** increase in disaster contexts, underscoring the need for **quality services** and **decision-making participation**.

Examples of Gender-Responsive Climate Action

- **Bhutan:** Trained **Gender Focal Points** in government ministries and women's groups to promote **gender equality in climate policies**.
- **Zimbabwe:** Established a **renewable energy fund** to create **entrepreneurial opportunities** for women.
- **Uzbekistan:** Launched a **green mortgage pilot** providing **low-carbon energy** access to rural homes, with **67% uptake by women-headed households**.
- **Uruguay:** Implemented a **gender-responsive system** to monitor and evaluate the impact of **NDCs on gender equality**.

UNITED NATIONS DAY AND KEY HISTORICAL EVENTS

United Nations Day is celebrated every year on **24th October** to mark the **UN Charter's anniversary**, which came into effect in **1945** following **World War II**. The day promotes awareness of the UN's goals and achievements.

UN Charter

- **Background:**
 - Signed on **26th June 1945** in **San Francisco** at the UN Conference on International Organization.
 - Came into force on **24th October 1945**.
 - **India**, a founding member, **ratified the UN Charter on 30th October 1945**.
 - **League of Nations** (predecessor of the UN), established in **1919** under the **Treaty of Versailles** to promote **international cooperation and peace**.
- **About the UN Charter:**
 - The **foundational document** of the UN and **binding** for all **Member States**.
 - Establishes principles of **international relations** such as **equal rights** of countries and **prohibition of force** between nations.
 - **Amended three times** (1963, 1965, 1973).
- **Significance:**
 - UN's **focus areas**: Maintaining **international peace**, providing **humanitarian assistance**, protecting **human rights**, and upholding **international law**.
 - Has played a crucial role in **global cooperation, peace, and development** for over **79 years**.

Principal Organs of the UN

- **General Assembly (UNGA):**
 - Main policy-making body with representation from **all 193 Member States** (one vote per country).
 - Serves as a **forum for multilateral discussions** on global issues.
- **Security Council (UNSC):**
 - Comprises **15 members: 5 permanent members** (China, France, Russia, the UK, and the US) and **10 non-permanent members** (elected for two-year terms).
 - **India** has served as a **non-permanent member eight times**.
- **Economic and Social Council (ECOSOC):**
 - Includes **54 members**, elected by the **UNGA**.
 - Focuses on **coordination, policy review**, and recommendations on **economic, social, and environmental issues**.
- **Trusteeship Council:**
 - Established to oversee the **transition of trust territories** from colonies to **sovereign nations**.
 - The UNTC was established under **Chapter XIII of the UN Charter**.
 - It oversaw **11 trust territories from 1946 until 1994**, when **Palau** became the last trust territory to gain independence.
 - The UNTC suspended its activities on **November 1, 1994**.
- **International Court of Justice (ICJ):**
 - The **only international court** resolving disputes between **UN Member States**.
 - Decides on **contentious cases** (disputes between states) and provides **advisory opinions** on legal questions referred by UN bodies.
- **Secretariat:**
 - **Secretary-General**, appointed by the **UNGA** upon recommendation from the **UNSC**, is the **chief administrative officer**.
- **Note:** UNGA, UNSC, ECOSOC, Trusteeship Council, and Secretariat are located at **UN Headquarters in New York**, while the ICJ is based in **The Hague, Netherlands**.

Key Historical Events and UN Involvement

1. **Israel-Palestine Conflict:**
 - After the **Ottoman Empire's defeat** in WWI, **Palestine** was placed under British mandate.

- In **May 1947**, the **UN Special Committee on Palestine (UNSCOP)** recommended a **partition**, proposing a **Jewish state**.
 - **UNGA's Resolution 181** (November 1947) outlined a **two-state solution** and **partition plan**.
 - The **Nakba** (1948) saw a large exodus of **Arab residents**, and **Israel was established on 14th May 1948**.
 - **Kofi Annan (2006)** highlighted the UN's failure to resolve the conflict, which continues to impact its reputation.
2. **Korean War:**
- After WWII, **Korea** was divided: **North Korea** (backed by Soviet and Chinese forces) and **South Korea** (supported by the US).
 - **North Korea's invasion** of the South in **1950** led the **UN Security Council** to condemn the attack.
 - **UNSC Resolutions 82 and 83** called for an **immediate ceasefire** and **military support for South Korea**.
 - This led to the creation of **UN Command**, the first **international unified military command** under the **UN Charter**.
 - The **1953 armistice** established the **Korean Demilitarized Zone (DMZ)**, but no formal peace treaty was signed.
 - **UNGA's Resolution 377A** (Uniting for Peace resolution) enabled the **General Assembly** to deliberate on issues when **UNSC** members failed to reach consensus.
3. **Suez Crisis:**
- In **1956**, Egypt nationalized the **Suez Canal**, previously controlled by **France and the UK**.
 - The crisis escalated when **Israel, France, and the UK** invaded Egypt.
 - **UNGA's Uniting for Peace resolution** enabled an **emergency session** demanding a **ceasefire** and **foreign withdrawal**.
 - The UN established the **UN Emergency Force (UNEF)**, the first **peacekeeping force**, to monitor troop withdrawal and maintain stability.

SUPREME COURT VERDICT ON TAXING INDUSTRIAL ALCOHOL

In an **8:1 decision**, a **nine-judge Bench of the Supreme Court of India** ruled that **states can impose taxes** on both **alcoholic beverages and industrial alcohol**. This decision enhances **states' revenue potential** and has significant implications for **taxation and federalism**.

Background of the Taxation Dispute on Industrial Alcohol

- **Controversy in Taxing Industrial Alcohol:**
 - The dispute arises from **overlapping constitutional entries** in the **Seventh Schedule**:
 - **Entry 8 of List II (State List):** Allows states to regulate **intoxicating liquors**.
 - **Entry 52 of List I (Union List):** Grants the **Centre authority over industries**.
 - **Entry 33 of List III (Concurrent List):** Gives the Centre power over industries that Parliament considers to be in the **public interest**.
 - **Centre's Claim:**
 - The **central government** argues that **industrial alcohol** falls under its jurisdiction per the **Industries (Development and Regulation) Act, 1951**.
 - The **1951 Act** was enacted by Parliament under the **Union and Concurrent List** entries, granting it regulatory control over certain industries.

Supreme Court's Verdict on Taxing Industrial Alcohol

- **Primary Question:**
 - The court examined whether "**intoxicating liquor**" could also include **industrial alcohol**, as states argued for regulatory control to prevent misuse in creating **illegal consumable alcohol**.
- **Majority Opinion:**
 - **Chief Justice of India (CJI) D.Y. Chandrachud** and eight other justices sided with the states.
 - They interpreted "**intoxicating liquor**" in **Entry 8 of List II** broadly, covering production, regulation, and consumption.

- The ruling allows **states to tax both alcoholic beverages and industrial alcohol** if it has intoxicating potential or poses health risks.
- The court rejected the Centre's argument, ruling that **industrial alcohol** does not fall exclusively under the **1951 Act**.
- **Dissenting Opinion:**
 - **Justice B.V. Nagarathna** dissented, supporting the Centre's control over **industrial alcohol**.
 - She argued that **industrial alcohol** should not be classified as **intoxicating liquor** and that the **Centre's industrial regulation** under the 1951 Act should take precedence.

Implications of SC's Verdict on Taxing Industrial Alcohol

- **Overtaken Previous Judgment:**
 - The ruling **overturns the 1990 SC decision in Synthetics & Chemicals Ltd v. State of UP**, which prohibited states from taxing **industrial alcohol**.
- **Impact on State Revenues:**
 - The decision will enhance **state revenues** as **alcohol taxation** is a major source of income for many states.
 - For instance, **Karnataka** increased **Additional Excise Duty** on Indian-made liquor by **20% in 2023**, highlighting states' reliance on alcohol taxes.
- **Federal Balance and Centre-State Relations:**
 - The ruling supports **federal balance** by upholding state powers in cases of **overlapping constitutional entries**.
 - Allowing states authority over **industrial alcohol** aligns with federal principles and prevents redundancy in constitutional provisions.
 - This decision is similar to the **8:1 ruling in July 2024**, affirming states' right to **levy royalties on mineral extraction** and tax mining lands.

Industries (Development and Regulation) Act, 1951

- **Purpose:**
 - Establishes a framework for **industrial development and regulation** in India.
- **Goals:**
 - **Control and guide national industry growth.**
 - **Equitable resource distribution.**
 - **Prevent concentration of economic power.**
 - **Ensure controlled industrial expansion.**
- **Central Government Powers:**
 - **Regulate production, supply, and distribution** of industries.
 - **Restrict establishment** of new industries.
 - **License industries** to operate.
 - **Directly manage industries** when in the public interest.
 - **Prevent economic concentration** in a few hands.

Similar Cases Related to Federal Governance in Industrial Regulation

- **Ch Tika Ramji v. State of UP (1956):**
 - The **Supreme Court** upheld **UP's regulation of the sugarcane industry**, rejecting a claim for exclusive **central control under Section 18-G** of the **1951 Act**.
 - The ruling confirmed states' authority in industrial matters, even alongside central legislation, supporting **federal principles**.
- **Synthetics & Chemicals Ltd v. State of UP (1989):**
 - A **seven-judge Constitution Bench** ruled that **state powers** under Entry 8 of the **State List** applied only to **intoxicating liquors** and excluded **industrial alcohol**.
 - The court held that **only the Centre** could tax **industrial alcohol**, which is non-consumable.
 - The decision did not consider its prior ruling in **Ch Tika Ramji**.

KARTARPUR CORRIDOR AGREEMENT AND GURU NANAK DEV

India and Pakistan renewed the **Kartarpur Corridor agreement** for another **five years**, allowing continued access for pilgrims to the **Kartarpur Sahib Gurudwara** in Pakistan.

Kartarpur Corridor Agreement

- **Signed:** The agreement was signed on **24th October 2019** to facilitate pilgrimages from **India to Gurdwara Darbar Sahib Kartarpur** in **Narowal, Pakistan** via the **Kartarpur Corridor**.
- **Validity:** The agreement will remain operational until **2029**, ensuring uninterrupted religious visits.
- **Indian Government's Commitment:** The **Indian External Affairs Minister** emphasized the government's dedication to ensuring **Sikh pilgrims' access** to holy sites.

About the Kartarpur Corridor

- **Connection:** Links **Darbar Sahib Gurdwara** in Pakistan with **Dera Baba Nanak shrine** in **Punjab, India**.
- **Significance of Kartarpur:** The gurudwara is about **4 km from the border** and is revered as the place where **Guru Nanak Dev** spent the last **18 years of his life**.
- **Historical Contribution:** Constructed with financial support from the **Maharaja of Patiala** in the **1920s**.
- **Protocol on Visits to Religious Shrines:** Pilgrimages between India and Pakistan are governed by the **1974 Protocol on Visits to Religious Shrines**, which lists shrines in each country open for visitors from the other. **Visas** are typically required for these visits.
- **Visa-Free Access:** The **Kartarpur Corridor** provides **visa-free access** for Indian pilgrims to the shrine in Pakistan. Only a **permit** is needed to cross into Pakistan.
- **Location:** Situated on the **Ravi River**, part of the **Indus River System**.
- **Commemoration:** Built to celebrate **Guru Nanak Dev's 550th birth anniversary** on **12th November 2019**.

Guru Nanak Dev

- **Birth:** Born in **1469** at **Nanakana Sahib**, Punjab (now in Pakistan).
- **Death:** Passed away in **Kartarpur, Pakistan**.
- **Role:** **Founder of Sikhism** and the **first of the Ten Sikh Gurus**.

Teachings and Beliefs

- **Bhakti Saint:** Advocated the **Nirguna Bhakti** (devotion to a formless God).
- **Ek Omkar:** Taught belief in **One God** (Ek Omkar), present everywhere.
- **Rejection of Rituals:** Opposed **sacrifices, ritual baths, image worship, austerities**, and rejected religious texts of both **Hinduism and Islam**.
- **Equality:** Emphasized **equality for all** regardless of **caste, religion, or gender**.
- **Opposition to Caste System:** Strongly opposed the **caste system** and **social hierarchies**.

Religious Practices Introduced by Guru Nanak Dev

- **Sangat:** Established the concept of **Congregational Worship (Sangat)**, encouraging collective prayer and recitation.
- **Langar:** Initiated **Langar**, a **community kitchen** promoting social equality, where people share meals regardless of status.
- **Succession:** Chose **Guru Angad Dev** as his successor to ensure the continuity of his teachings.
- **Compilation of Teachings:** **Guru Arjan Dev** (the fifth Guru) compiled **Guru Nanak's hymns** into the **Adi Granth Sahib**, the central holy scripture of Sikhism today.

MORMUGAO PORT AUTHORITY AND ENVIRONMENTAL SHIP INDEX (ESI)

Mormugao Port Authority has been globally recognized as an **incentive provider** on the **Environment Ship Index (ESI)** portal, acknowledged by the **International Association of Ports and Harbours (IAPH)**.

About Mormugao Port

- **Location:** Situated on the **western coast of India** in **Goa**, at the mouth of the **Zuari River**.
- **Established:** **Commissioned in 1885** at a natural harbour, it is one of **India's oldest ports**.
- **Structure:** It features a **naturally protected open harbour** with additional protection from a **breakwater and mole** parallel to the wharf.
- **Major Port Status:** Declared a **Major Port** in **1964**.
- **Iron Ore Terminal:** Developed primarily for **iron ore export** in response to mining growth in Goa, particularly to meet Japanese industrial demand.
- **Strategic Development:** A **Perspective Plan** was developed in **1965** to enable **deep-water access** and high-capacity loading, aiming to compete with **Brazil and Australia** in iron ore exports.
- **Green Transition:** The **Harit Shrey program**, launched in **October 2023**, offers **discounts on port charges** to vessels that use **green fuel** and have zero emissions of **nitrogen oxides (NOx)** and **sulphur oxides (SOx)**.

Environment Ship Index (ESI)

- **Purpose:** **Evaluates and rewards** seagoing ships based on **environmental performance**.
- **Launch:** Started on **1st January 2011**, with data managed by the **International Association of Ports and Harbours (IAPH)**.
- **Evaluation Criteria:** Measures **NOx** and **SOx** emissions and includes a **greenhouse gas (GHG) reporting scheme** for ships.
- **Port-Centric System:** Developed to operate between ports, allowing ports to incentivize eco-friendly ships.
- **Voluntary Participation:** Shipowners can voluntarily register to showcase the environmental standards of their vessels.
- **Applicability:** Relevant for **all types of seagoing ships**, irrespective of size or type.
- **Incentives:** Ports may offer benefits like **reduced port fees** or **priority berthing** to ships with higher ESI scores.
- **2023 IMO GHG Strategy:** Sets a target to **reduce carbon intensity of shipping by 40% by 2030**.

Zuari River

- **Largest River in Goa:** A **tidal river** originating from **Hemad-Barshem** in the **Western Ghats**.
- **Also Known As:** Referred to as the **Aghanashani** in interior regions.
- **Tributaries:** Includes the **Kushawati River, Guleli River, and Uguem River**.

International Association of Ports and Harbours (IAPH)

- **Established:** Formed in **1955** and represents **seaports globally**.
- **Membership:** Has over **200 member ports** and **national port bodies**.
- **UN Consultative Status:** Recognized as an NGO with consultative status in **five UN agencies**, including **UNCTAD** and the **IMO**.
- **Headquarters:** The **Secretariat** is located in **Tokyo** and led by a **Secretary General** appointed by the Board of Directors.
- **Regional Structure:** IAPH membership is divided into three regions—**African/European, American, and Asian/Oceanian**.

BRICS AND THE 16TH SUMMIT IN KAZAN

Prime Minister Narendra Modi participated in the **16th BRICS Summit** in **Kazan, Russia**, along with other leaders such as **Chinese President Xi Jinping** and **South African President Cyril Ramaphosa**. The summit is hosted by **Russian President Vladimir Putin**.

Overview of BRICS

- **Origins:** Initially formed by **Brazil, Russia, India, China, and South Africa**.
- **Expansion in 2023:** During the **15th BRICS Summit** in South Africa, six new countries were invited to join—**Iran, United Arab Emirates, Saudi Arabia, Argentina, Egypt, and Ethiopia**.
- **Global Representation (pre-2023):** BRICS accounted for about **42% of the world's population, 30% of the landmass, 23% of global GDP, and 18% of international trade**.
- **Objective:** Aims to offer an alternative to Western-dominated economic and political frameworks.
- **Annual Summit Rotation:** Member countries host the **BRICS Summit** on a rotational basis to discuss priorities and strategies.

Achievements and Role of BRICS

- **Key Achievements**
 - **Enhanced Economic Cooperation:** BRICS has bolstered **trade and investment** among its members, fostering closer economic ties and focusing on reducing dependency on Western financial institutions.
 - **New Development Bank (NDB):** Launched in **2014** with a capital base of **\$100 billion** to support **infrastructure and sustainable development projects** across BRICS and other developing countries. The NDB has funded numerous initiatives, particularly in **renewable energy, urban infrastructure, and social development**.
 - **Contingent Reserve Arrangement (CRA):** BRICS members established a **\$100 billion reserve fund** to assist with **short-term liquidity needs** and buffer against economic shocks.
 - **Influence on Global Politics:** As a bloc, BRICS advocates for a **multipolar world order** and greater representation of developing nations in organizations such as the **United Nations, IMF, and World Bank**.
 - **Technical and Scientific Collaboration:** BRICS has developed initiatives for **cooperation in science, technology, and innovation**, such as the **BRICS Science, Technology, and Innovation Framework Programme**. The bloc has also made joint efforts in fields like **health, agriculture, and disaster management**.
- **Key Challenges**
 - **Economic Differences:** BRICS members are economically diverse, which can create challenges in reaching a consensus due to differences in development, economic structures, and political systems.
 - **Geopolitical Tensions:** Relationships, especially between **China and India**, can strain cooperation due to **territorial disputes** and differing regional interests.
 - **Complex Relations with the West:** The BRICS members have varied approaches to their relationships with Western countries. **China and Russia** are increasingly wary of the West amid rising tensions, while **India** continues to strengthen economic and technological ties with the **United States**.
 - **Limited Progress on Institutional Reforms:** BRICS has advocated for reforming global organizations like the **IMF and UN**, but progress has been limited by established power structures.
 - **China's Dominance:** As the largest economy within BRICS, China often influences the group's economic direction, raising concerns among other members about Beijing's role in decision-making.
- **Agenda Focus:**
 - A core focus is the members' shared dissatisfaction with **Western-dominated economic governance**.
 - BRICS is exploring ways to decrease reliance on the **US dollar** and **SWIFT**, the latter of which excluded Russian banks in 2022.
 - At the **2023 Summit**, Brazil proposed the idea of a **BRICS trading currency**; however, the group's primary focus remains on promoting **national currencies** for bilateral trade to reduce vulnerability to currency volatility.

- **China** has developed an alternative to **SWIFT** with limited capacity, and countries like **Turkey** and **Brazil** have bolstered **gold reserves**. Currency swaps are also being explored for energy transactions, underscoring a push for financial independence from Western systems.

Kazan's Significance in Russia

- **Russia's "Third Capital":** Designated as Russia's **third capital** in **2009**, Kazan is a major hub for **petrochemicals, military manufacturing, and the IT sector**.
- **Cultural and Demographic Importance:**
 - Kazan serves as the **capital of the Republic of Tatarstan** and is situated **900 km east of Moscow**, where the **Volga and Kazanka rivers** converge.
 - The city's population is balanced between **ethnic Russians** and **Tatars** (a predominantly Muslim ethnic group), symbolizing Russia's **multi-ethnic and multi-religious** identity.
- **Historic and Cultural Landmarks:**
 - Kazan's **kremlin** houses both the **Orthodox Annunciation Cathedral** and **Kul Sharif Mosque**, one of Europe's largest mosques, reconstructed in **2005** with support from **Saudi Arabia** and the **UAE**. This unique blend of religious sites underscores the city's cultural diversity.

IMF WORLD ECONOMIC OUTLOOK (WEO) REPORT

The **International Monetary Fund (IMF)** released its **World Economic Outlook (WEO)** report for **October 2024**.

World Economic Outlook (WEO)

- **About:** A major report from the **IMF**, published **biannually** in **April and October**.
- **Focus:** Analyzes and forecasts the **global economy** and individual country economies.
- **Purpose:** To assess **economic trends**, identify **risks**, and provide **policy recommendations**.
- **Components:**
 - **Economic Growth Projections:** Predicts economic performance at both global and regional levels.
 - **Inflation Trends:** Offers insights into **inflation rates** and potential impacts.
 - **Financial Stability Assessment:** Examines risks to financial systems and markets.
- **Importance:** Serves as a key resource for **policymakers, researchers, and investors** to make informed decisions about economic conditions.

Key Highlights of the October 2024 WEO Report

- **India-Specific Insights:**
 - **Growth Projections:** India's economy is projected to grow by **7% in FY 2024** and **6.5% in FY 2025**. The slowdown from **8.2% in FY 2023** is due to the diminishing post-pandemic surge in demand.
 - **Inflation:** Headline inflation is forecasted to **ease to 4.4% in FY 2024-25** and **4.1% in FY 2025-26**, reflecting a global trend of declining inflation since the pandemic peak.
 - **Domestic Demand:** Despite a global economic slowdown, **India's consumption and investment** remain robust, bolstered by favorable **domestic policies** and an encouraging **investment environment**.
 - **RBI's Projections:** The **Reserve Bank of India (RBI)** has also maintained its growth forecast at **7.2% for FY 2024**, citing strong domestic demand.
 - **External Shocks:** India's growth may still face risks from external economic shocks.
- **Global Growth Projections:**
 - **Global Growth:** Predicted to remain stable at **3.2% for 2024 and 2025**.
 - **U.S. Economy:** Expected to grow by **2.8% in 2024** and **2.2% in 2025**.
 - **China's Economy:** Projected to expand by **4.8% in 2024** and **4.5% in 2025**.
 - **Sectoral Shifts:** **Goods prices** continue to be high post-pandemic, with a shift toward **services consumption** expected globally.
 - **Automotive Industry:** The global shift to **electric vehicles (EVs)** is expected to reduce emissions but may lead to job losses in **capital-intensive manufacturing sectors**.

About the International Monetary Fund (IMF)

- **Overview:** An **international organization** that promotes **global economic growth** and **financial stability**.
- **Primary Functions:** Encourages **international trade** and works to reduce **global poverty**.
- **Established:** Created in **1944** at the **Bretton Woods Conference**.
- **Original Goal:** Aimed to foster **international economic coordination** to prevent competitive **currency devaluation**.
- **Role Expansion:** Now serves as a **lender of last resort** for countries experiencing **severe currency crises**.

Key IMF Reports

- **Global Financial Stability Report:** Assesses risks and developments in the global financial system.
- **World Economic Outlook (WEO):** Analyzes and projects economic trends worldwide.

SEMICON INDIA 2022 CONFERENCE AND INDIA SEMICONDUCTOR MISSION

The **Ministry of Electronics & Information Technology (MeitY)** inaugurated the **first Semicon India 2022 Conference** in **Bengaluru** under the **India Semiconductor Mission (ISM)**.

Semicon India 2022 Conference

- **Objective:** Organized to advance the **Prime Minister's vision** of positioning **India** as a **leader in electronics manufacturing, semiconductor design, and innovation**.
- **Theme:** "Catalyzing India's Semiconductor Ecosystem."

Understanding Semiconductors

- **Definition:** Semiconductors are **crystalline solids** with **intermediate electrical conductivity**, lying between conductors and insulators.
- **Uses:** They are essential in **electronics** for components such as **diodes, transistors, and integrated circuits**, valued for their **compactness, reliability, power efficiency, and low cost**.
- **Applications:** Semiconductors are utilized in **power devices, optical sensors, light emitters, and solid-state lasers**.

India Semiconductor Mission (ISM)

- **Overview:**
 - Launched in **2021** with a financial outlay of **Rs 76,000 crore** under **MeitY**.
 - Part of a broader program to develop a **sustainable semiconductor and display ecosystem** in India.
 - **Objective:** To provide **financial support** to companies investing in **semiconductors, display manufacturing, and design**.
 - **Leadership:** ISM will be led by global experts and serve as the **nodal agency** for the effective implementation of various semiconductor schemes.
- **Components:**
 - **Scheme for Semiconductor Fabs:** Offers **fiscal support** for eligible companies to set up **semiconductor wafer fabrication** facilities, encouraging large investments in this area.
 - **Scheme for Display Fabs:** Provides financial backing to establish **TFT LCD / AMOLED display fabrication** units in India.
 - **Scheme for Compound Semiconductors, Silicon Photonics, and ATMP/OSAT Facilities:** Supports **30% of capital expenditure** for the development of **Compound Semiconductors, Silicon Photonics (SiPh), Sensors, and ATMP/OSAT (Outsourced Semiconductor Assembly and Test)** facilities.
 - **Design Linked Incentive (DLI) Scheme:** Offers **financial incentives and design infrastructure** for developing **Integrated Circuits (ICs), Chipsets, SoCs, Systems & IP Cores, and semiconductor designs**.
- **Vision:**
 - To establish a robust **semiconductor and display design ecosystem**, making India a **global hub for electronics manufacturing and design**.
- **Significance:**
 - **Strategic Framework:** ISM organizes efforts to support the **semiconductor and display industry** through a comprehensive, structured approach.

- **Supply Chain Security:** Ensures secure semiconductor and display **supply chains**, including access to **raw materials, specialty chemicals, gases, and manufacturing equipment**.
- **Support for Startups:** Facilitates growth in the **Indian semiconductor design industry** by providing tools such as **Electronic Design Automation (EDA) tools** and foundry services for startups.
- **Encouraging IP Generation:** Promotes indigenous **Intellectual Property (IP) generation** and **Technology Transfer** to bolster India's capabilities.
- **Collaborative Programs:** ISM fosters partnerships with **national and international entities** for collaborative research, commercialization, and **skill development** in the semiconductor sector.

Government Initiatives for Semiconductors

- **Semiconductor Laboratory (SCL):** MeitY is undertaking modernization and commercialization of the Semiconductor Laboratory (SCL).
- **Support for Compound Semiconductors:** The government offers **30% fiscal support** for capital expenditure for Compound Semiconductor units.
- **Production Linked Incentives (PLI):** Approved incentives worth **Rs 55,392 crore** (approx. USD 7.5 billion) under schemes like **PLI for Large Scale Electronics Manufacturing, PLI for IT Hardware, SPECS, and Modified Electronics Manufacturing Clusters (EMC 2.0)** to boost the semiconductor and electronics sector.

MALABAR 2024 EXERCISE

The **sea phase of the Malabar 2024 Exercise** recently concluded at **Visakhapatnam**.

Key Highlights of Malabar 2024

- **Participants and Major Exercises:**
 - Engaged **warships, helicopters, patrol aircraft**, and a **submarine**.
 - Conducted exercises across **surface, sub-surface, and air warfare** domains.

Phases and Activities: The exercise was conducted in two phases:

- **Harbor Phase (October 8-12, 2024):** Held in Visakhapatnam, India, this phase included joint planning, professional exchanges, and cultural events.
- **Sea Phase (October 13-18, 2024):** Conducted in the Bay of Bengal, this phase involved complex and advanced exercises in surface, sub-surface, and air warfare domains.

Assets Deployed: The exercise featured a diverse array of naval assets, including:

- **India:** Deployed INS Delhi, INS Tabar, INS Kadmat, INS Kamorta, INS Shakti, and P-8I maritime patrol aircraft.
- **United States:** Participated with USS Dewey, integral helicopters, and P-8 Poseidon aircraft.
- **Japan:** Contributed JS Ariake.
- **Australia:** Included HMAS Stuart, MH-60R helicopter, and P-8 maritime patrol aircraft.

Overview of Malabar Exercise

- **Establishment:** Began in **1992** as a **bilateral naval exercise** between **India and the United States**.
- **Expansion:** In **2007**, the exercise expanded to include **Japan and Australia**, making it a **multilateral war-gaming exercise**.
- **Link to Quad:** Malabar and the **Quadrilateral Security Dialogue (Quad)** share a commitment to **enhancing security cooperation** in the **Indo-Pacific region**.

The Quad (Quadrilateral Security Dialogue)

- **Members:** An **informal strategic forum** involving **India, the United States, Japan, and Australia**.
- **First Meeting:** Held in **2007** on the sidelines of the **ASEAN summit**.
- **Regional Maritime Initiative:** The **Quad Leaders** launched **MAITRI (Maritime Initiative for Training in the Indo-Pacific)** to strengthen maritime security through the **Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)**.

Related Military Exercises:

- **La Perouse:** A biennial naval exercise involving India, Australia, the United States, France, Japan, and the United Kingdom, aimed at enhancing maritime domain awareness and interoperability.
- **SALVEX:** A bilateral exercise between India and the United States focusing on salvage operations and diving procedures.
- **Sea Dragon:** An annual anti-submarine warfare exercise involving India, the United States, Japan, Canada, and South Korea, designed to enhance coordination and tactical skills.
- **Ex Veer Guardian:** An air exercise between India and Japan aimed at improving air combat tactics and interoperability.
- **Exercise Kakadu:** A biennial exercise hosted by the Australian Navy, involving multiple nations, including Malabar participants, to enhance maritime cooperation and regional security.

IMPORTANT NUCLEAR NON-PROLIFERATION TREATIES AND EXPORT CONTROL REGIMES

1. Key Nuclear Non-Proliferation Treaties

- **Treaty on the Prohibition of Nuclear Weapons (TPNW):**
 - **Overview:** First comprehensive international treaty to ban all nuclear activities, including threats, development, testing, possession, and use.
 - **Status:** **120 countries** have signed, but **no nuclear-armed nation** has joined, including **India**.
- **Partial Test Ban Treaty (PTBT):**
 - **Signed:** **1963** by the **USA, USSR, and UK**.
 - **Scope:** Prohibits nuclear test detonations **in the atmosphere, underwater, and outer space**; underground testing is allowed.
- **Nuclear Non-Proliferation Treaty (NPT):**
 - **Goal:** Aims to prevent nuclear weapon spread, promote nuclear energy cooperation, and encourage nuclear disarmament.
 - **Signatories:** **191 countries**; nuclear-weapon states under the treaty are **USA, Russia, UK, France, and China**.
 - **Conditions:** Non-nuclear-weapon states (countries without nuclear weapons as of 1968) agree not to pursue them; nuclear states are to work toward disarmament.
 - **Non-Signatories:** **India, Israel, Pakistan, and South Sudan** have never joined.
 - **Iran and North Korea:** Iran signed but faces non-compliance issues; North Korea signed in 1985 but later withdrew.
- **Comprehensive Test Ban Treaty (CTBT):**
 - **Adoption:** **1996** by the **UN General Assembly**.
 - **Objective:** Prohibits all forms of nuclear tests (space, underwater, underground).
 - **Current Status:** Signed by **184 countries** (168 ratified), yet not in force due to non-ratification by key nuclear-capable states, including **China, Egypt, Iran, Israel, USA**.
 - **Non-Signatories:** **India, Pakistan, and North Korea**.

2. IAEA Safeguards and India

- **IAEA Comprehensive Safeguards Agreement:**
 - **Agreement with India:** Despite not being a part of NPT, India signed the **IAEA Comprehensive Safeguards Agreement** in **2009**.
 - **Additional Protocol:** India signed in 2009, which came into effect in **2014**.
 - **Facilities Under Safeguards:** **20 out of 22** civilian nuclear facilities are under **IAEA safeguards** in India.

3. Export Control Regimes

- **Nuclear Suppliers Group (NSG):**
 - **Founded:** **1974** after India's **Pokhran test**.

- **Members:** **48-member** regime controls the export of nuclear technology and materials.
- **India's Special Waiver:** India, despite being a non-NPT member, received a special waiver in **2008**, allowing civil nuclear trade with **14 countries**, including **USA, Russia, France, Japan, and Australia**.
- **Australian Group:**
 - **Established:** **1985** during the Iran-Iraq war's use of chemical weapons.
 - **Objective:** Controls exports of materials for **chemical and biological weapons**.
 - **Members:** Includes **India, USA, Canada, EU, Turkey, and Japan**.
- **Wassenaar Arrangement:**
 - **Purpose:** Controls exports of **conventional arms and dual-use technologies**.
 - **Established:** **1996**.
 - **Members:** **42 countries** including **India, USA, Japan, Russia, and South Africa**.
- **Missile Technology Control Regime (MTCR):**
 - **Founded:** **1987** to restrict the spread of weapon delivery systems.
 - **Criteria:** Limits exports of delivery systems with **500 kg payload** for ranges over **300 km**.
 - **India's Membership:** Joined **MTCR in 2018**, allowing it to **increase BrahMos range** to **450 km** and access predator drones.

4. Nuclear-Weapon-Free Zones

- **Antarctica:** Prohibited by the **Antarctic Treaty**.
- **Outer Space:** Prohibited by the **Outer Space Treaty**.
- **Seabed:** Restricted under the **Seabed Arms Control Treaty**.

SEVERE CYCLONIC STORM DANA AND TROPICAL CYCLONES

Severe Cyclonic Storm Dana struck the **Odisha coast** on **October 24** with wind speeds reaching **100-110 kmph** and gusts of **120 kmph**.

Understanding Tropical Cyclones

- **Definition:**
 - **Tropical Cyclones** develop between the **Tropic of Cancer** and the **Tropic of Capricorn**.
 - **World Meteorological Organization (WMO)** uses "Tropical Cyclone" to refer to weather systems with winds exceeding **Gale Force** (≥ 34 knots or **63 kmph**).
- **Formation:**
 - Develops over **warm ocean waters near the equator**.
 - Fueled by oceanic heat and driven by **easterly trade winds, high planetary winds**, and their own intense energy.
- **Characteristics:**
 - **Eye of the Storm:** The center is calm, with **low air pressure** and light winds.
 - **Speed:** Average wind speeds around **120 kmph**.
 - **Isobars:** Cyclones have closed isobars, increasing wind velocity.
 - **Seasonal:** They form seasonally over the ocean and move **east to west** under trade winds.

Classification of Cyclones by IMD

- **Indian Meteorological Department (IMD)** categorizes cyclones based on wind speeds:
 - **Depression:** 31-49 kmph
 - **Deep Depression:** 50-61 kmph
 - **Cyclonic Storm:** 62-88 kmph
 - **Severe Cyclonic Storm:** 89-117 kmph
 - **Very Severe Cyclonic Storm:** 118-166 kmph
 - **Extremely Severe Cyclonic Storm:** 167-221 kmph
 - **Super Cyclonic Storm:** ≥ 222 kmph

Cyclone Categories by Saffir-Simpson Scale

- **Saffir-Simpson Hurricane Wind Scale** categorizes tropical cyclones based on sustained wind speeds:
 - **Category 1:** 119-153 kmph
 - **Category 5:** ≥252 kmph (most destructive).
 - **Major Cyclones:** Category 3 and above due to high damage potential.

Regional Terminology for Tropical Cyclones

- **Hurricanes:** Caribbean Sea and Atlantic Ocean.
- **Tornados:** West Africa and Southern USA.
- **Typhoons:** Northwest Pacific Ocean (affecting Japan, China, Philippines).
- **Cyclones:** Southwest Indian Ocean, Southeast Indian Ocean, and Southwest Pacific Ocean.
- **Willy-Willies:** Informally used for cyclones in Australia.

Naming of Cyclones

- **Cyclone Dana:**
 - **Suggested by:** Qatar.
 - Names for cyclones in the **Indian Ocean** are provided by **WMO/ESCAP Panel on Tropical Cyclones**.
- **Naming Process:**
 - Six **Regional Specialized Meteorological Centres (RSMCs)** and five **Tropical Cyclone Warning Centres (TCWCs)** are responsible for cyclone advisories and naming.
 - **IMD** serves as an RSMC for the **WMO/ESCAP** region, which includes **13 member countries** (e.g., India, Bangladesh, Oman, Qatar).
 - Each member contributes to a pre-approved list of **169 cyclone names** (13 from each country) released in **2020**.

Cyclone Landfall

- **Definition:**
 - Landfall occurs when the **center (eye) of a cyclone** reaches the coast, moving from water to land.
- **Characteristics:**
 - The **eye** is a calm region with light winds, often clear or partly cloudy.
 - During landfall, **outer bands** may have already brought **heavy rain, strong winds, and storm surge** to the coast.
 - **Direct Hit:** Refers to the high-wind core or **eyewall** coming ashore, even if the eye remains offshore.

INCLUSION OF "SOCIALIST" AND "SECULAR" IN THE PREAMBLE

A recent statement by the **Leader of Congress in Lok Sabha** pointed out that "**socialist**" and "**secular**" were missing from the **Preamble copies** provided to MPs.

Background of the Preamble

- **Original Exclusion:** The words "**socialist**" and "**secular**" were not originally part of the **Preamble**.
- **42nd Amendment (1976):** These terms were included through this amendment, aligning with the **Objectives Resolution** adopted by the **Constituent Assembly** on **January 22, 1947**.

Introduction of "Socialist" and "Secular" in the Preamble

- **Socialist:**
 - **Political Context:** Under **Indira Gandhi's government**, "socialist" was introduced to emphasize a **pro-poor, socialist image**.
 - **Unique Model:** Unlike socialism in the **USSR or China**, Indian socialism did not involve full nationalization of production.
 - **Selective Nationalization:** Indira Gandhi clarified that India's socialism would involve **nationalization** only where deemed necessary.
- **Secular:**

- **Unity in Diversity:** Emphasized India's commitment to **religious neutrality** and **equal protection of all faiths**.
- **Non-Religious State:** The state focuses on **human relations** rather than religious affiliations.
- **Legal Foundation: Secularism** in India is not about religious sentiments but a matter of **constitutional law**, supported by **Articles 25-28**.
- **Debate on Secularism:** Critics argue that secularism, since the **42nd Amendment**, has led to "**vote-bank politics**" and "**minority appeasement**".

Was Secularism Already Implicit in the Constitution?

- **Foundational Philosophy:** Even before the **42nd Amendment**, secularism was an integral part of the Constitution's **philosophy**.
- **Implicit in Articles:** **Articles 25, 26, and 27** were incorporated with a secular intent.
- **Constituent Assembly's Deliberation:** The Assembly chose not to include "secular" in the Preamble to allow future societies to decide **state policy** based on changing contexts.
 - **Dr. B R Ambedkar's View:** Argued that enshrining such policies in the Constitution would limit democratic flexibility.
- **Constituent Assembly's Stance:**
 - On **15th November 1948**, **Professor KT Shah** proposed adding "secular" and "socialist" to the **Preamble**, which was rejected by the **Constituent Assembly**.
 - Other attempts to incorporate "secular" into **Article 18** were also dismissed.
- **Timing of Amendment:**
 - Petitioners argued that the **42nd Amendment** (adding "secular" and "socialist" in 1976) contradicted the **Constitution's adoption date (26th November 1949)**.
 - The Court countered by viewing the Constitution as an evolving document, with "socialist" and "secular" reflecting India's evolving identity.
- **Representation of People Act, 1989:**
 - Petitioners contended that requiring political parties to endorse **socialism and secularism** for registration limited **free speech under Article 19(1)(a)**.

Past Legal Discussions and Petitions

- **Supreme Court Petitions:**
 - Various petitions have sought the removal of "**socialist**" and "**secular**" from the Preamble.
 - **Arguments Against:**
 - These terms were **not originally intended** in the Preamble.
 - **Parliament's Amending Power** under **Article 368** does not extend to altering fundamental principles.
 - Shift from **socialist to welfare to neo-liberal** approaches raises questions on continued relevance.
 - **2008 Supreme Court Decision:** Rejected a plea to remove "socialist," stating that socialism, broadly interpreted, **aligns with democratic welfare** ideals and has **no fixed meaning** but varies with time.

REGIONAL CONNECTIVITY SCHEME (RCS-UDAN)

The Prime Minister inaugurated three new airports under **RCS-UDAN** in **Rewa (Madhya Pradesh)**, **Ambikapur (Chhattisgarh)**, and **Saharanpur (Uttar Pradesh)** to improve **air travel accessibility** in underserved regions.

About the Regional Connectivity Scheme (RCS-UDAN)

- **Launch Year:** **2016**
- **Ministry:** Ministry of Civil Aviation
- **Full Form:** **Ude Desh Ka Aam Naagrik (UDAN)**
- **Objective:** To connect **remote areas**, boost **tourism** and **economic growth**, and promote **last-mile connectivity** in **unserved** air routes.
- **Impact:** Over **144 lakh** passenger travels facilitated in seven years.
- **Inaugural Flight:** First RCS-UDAN flight connected **Shimla to Delhi** in **2017**.

Versions of UDAN

- **UDAN 1.0:**
 - **Flight Routes:** 128 routes awarded to connect 70 airports (with 36 newly operational airports).
- **UDAN 2.0:**
 - **Feature:** Inclusion of **helipads** for the first time.
- **UDAN 3.0:**
 - **Feature:** Introduction of **seaplanes** for **water aerodromes**.
 - **Focus:** Enhance connectivity in the **North-East Region**.
- **UDAN 4.0:**
 - **Focus:** Emphasis on **North-Eastern regions, hilly states, and islands**.
 - **Operation:** Includes **helicopters** and **seaplanes**.
- **UDAN 5.0:**
 - **Aircraft Priority:** Category-2 and Category-3 aircraft.
- **UDAN 5.1:**
 - **Enhancements:** Boosts **helicopter routes** with increased **funding**, reduced **airfare caps**, and mandates one **destination as a priority area**.
- **UDAN 5.2:**
 - **Focus:** Improves **last-mile connectivity** using **small aircraft**, promoting tourism in remote areas.
- **UDAN 5.3 and 5.4:**
 - **Objective:** To **operationalize previously discontinued routes** and enhance **point-to-point air connectivity**.

Other Major Initiatives for the Aviation Sector

- **National Civil Aviation Policy (NCAP):**
 - **Aim:** Make **flying affordable and accessible**, foster **civil aviation growth**, promote **tourism and employment**, support **regional connectivity** through fiscal measures and infrastructure, and improve **business ease** via **deregulation and e-governance**.
- **Open Sky Agreement:**
 - **Definition:** Bilateral agreements between two countries providing rights for **airlines** to offer **international passenger and cargo services**.
- **Digi Yatra for Seamless Travel:**
 - **Feature:** A digital platform facilitating a **contactless experience** for air travelers, featuring **facial recognition** and **paperless check-in**.

INTERNATIONAL CONTAINER TRANSSHIPMENT PORT (ICTP) AT GALATHEA BAY

- **New Major Port:** The **International Container Transshipment Port (ICTP)** at Galathea Bay, Great Nicobar Island, has been designated as **India's 13th major port**.
- **Previous Designation:** **Kamarajar Port** on the **Coromandel Coast (Chennai)** was named the **12th major port**.

About ICTP at Galathea Bay

- **Strategic Location:**
 - Located along the **East-West international trade and shipping route**.
 - **Proximity** to key transshipment hubs like **Singapore, Klang, and Colombo**.
 - **40 nautical miles** from the **Malacca Strait**, which handles **35% of global sea trade**.
 - Positioned to serve as a **transshipment hub** for cargo from **India's east coast, Bangladesh, and Myanmar**.
- **Economic Advantage:**
 - **Dependency Reduction:** Aims to decrease India's reliance on **foreign ports** for transshipment, as **75% of India's transshipped cargo** is currently handled abroad.
 - **Cost Savings:** Potential annual savings of **USD 200-220 million** in transshipment charges.

About Great Nicobar Island

- **Geography:**

- **Largest and southernmost** of the **Nicobar Islands**.
- The **Andaman and Nicobar Islands** consist of **836 islands**, split into two groups: **Andaman Islands (north)** and **Nicobar Islands (south)**, separated by the **10° Channel**.

Significance of the ICTP Project

- **Key Factors for Success:**
 - **Strategic Location:** Close (**40 nautical miles**) to the major **international shipping trade route**.
 - **Natural Depth:** Water depth **over 20 meters**, allowing for high-capacity transshipment operations.
 - **Cargo Handling:** Positioned to handle transshipment cargo from **neighboring Indian ports** and other regional ports.

Ports in India

- **Current Major Ports:** India has **12 operational Major Ports** managed by the **central government** and approximately **200 non-major ports** under **state control**.
- **Legislation:** The **Major Port Authorities Act, 2021** governs the **regulation, operation, and planning** of Major Ports, assigning **administration, control, and management** of these ports to the **Boards of Major Port Authorities**.

COMMONWEALTH GAMES (CWG) 2026

- **Current Issue:** CWG 2026 in Glasgow has excluded six of the twelve sports in which **India won medals** in the **2022 Commonwealth Games: Badminton, Cricket, Hockey, Squash, Table Tennis, and Wrestling**.
- **Indian Response:** India has **protested** the exclusion of these sports as they represent **India's top-performing events**.

Reason for Exclusion

- **Budget Constraints:** Glasgow reduced the number of sports due to a **tight budget**.
- **Host Change:** Originally scheduled in **Victoria, Australia**, but it withdrew due to **high costs**, transferring hosting rights to Glasgow, which has limited the event to **four venues**.

About CWG 2026

- **Edition:** **23rd Commonwealth Games**
- **Location:** **Glasgow, Scotland**
- **Dates:** **23rd July to 2nd August 2026**
- **Return to Glasgow:** This marks a return to the city **12 years** after the **2014 Commonwealth Games**.
- **Excluded Games**
 - **Hockey:**
 - Part of CWG since **1998**.
 - **India's CWG Ranking:** Second-highest in history, with a total of **six medals – 1 gold, 4 silver, and 1 bronze**.
 - **Birmingham 2022 Performance:** Men's team secured **silver**, and the women's team won **bronze**.
 - **Wrestling:**
 - India has earned a total of **114 medals** in wrestling, including **49 gold, 39 silver, and 26 bronze**.
 - In the **Birmingham 2022 CWG**, India won **12 wrestling medals**, including **six gold**.
 - **Badminton:**
 - At the **Birmingham Games**, India won **six medals** in badminton, including **three gold**.
 - **Table Tennis:**
 - **Introduced in 2002**.
 - India has won a total of **20 medals** in table tennis at the CWG, achieving medals in every edition since.
 - **Squash and Cricket:**
 - Both were introduced in the **1998 CWG in Kuala Lumpur, Malaysia**.

Key Facts about Commonwealth Games

- **Nature of Event:** **Quadrennial international multisport event** involving athletes from the **Commonwealth of Nations**.
- **Governing Body:** Managed by the **Commonwealth Games Federation (CGF)**.

- Responsible for the **organization and management** of the **Commonwealth Games and Commonwealth Youth Games**.
- **Headquarters:** Based in the **UK**, with operations across **72 member nations and territories**.
- **Inception:** The **first Commonwealth Games** took place in **Hamilton, Ontario, Canada** in **August 1930**.

About the Commonwealth of Nations

- **Member Countries:** Comprises **56 countries**, primarily **former British colonies**.
- **Established:** Formed by the **London Declaration in 1949**.
- **Geographic Spread:** Predominantly located across **Africa, the Americas, Asia, and the Pacific**.
 - Three European members: **Cyprus, Malta, and the United Kingdom**.
- **Developed Nations:** **Australia, Canada, and New Zealand** are the developed member states of the Commonwealth.

GLOBAL HUNGER INDEX (GHI) 2024

India is placed **105th out of 127 countries** in the **Global Hunger Index 2024** with a score of **27.3**, indicating a **"serious" hunger situation** driven by persistent food insecurity and malnutrition.

Understanding the Global Hunger Index (GHI)

- **Report and Publishing:** The **GHI** is an annually published report from **Concern Worldwide** and **Welthungerhilfe**, assessing hunger at various levels.
- **Objective:** Serves as a framework to monitor and measure hunger globally, regionally, and nationally over time.
- **Scoring System:** A scale from **0 to 100** is used, where **0** denotes no hunger and **100** indicates the worst hunger level.

Components of GHI Score

1. **Undernourishment:** Portion of the population lacking sufficient calories to maintain health, based on standards from the **Food and Agriculture Organization (FAO)**.
2. **Child Stunting:** Rate of children under five with below-average height for their age, indicating long-term undernutrition.
3. **Child Wasting:** Rate of children under five with low weight for height, signaling acute malnutrition.
4. **Child Mortality:** Percentage of children who die before reaching five years, highlighting a combination of poor nutrition and adverse living conditions.

Background on Publishing Organizations

- **Concern Worldwide:** A humanitarian organization committed to tackling poverty and distress in some of the world's poorest areas.
- **Welthungerhilfe:** A German aid organization established in **1962** as part of the **Freedom from Hunger Campaign**.

Key Insights from GHI 2024

- **India-Specific Data:**
 - **2024 GHI Score:** **27.3**, a slight improvement from **28.7** in 2023, categorized as "serious."
 - **Undernourished Population:** **13.7%**.
 - **Stunted Children:** **35.5%**.
 - **Wasting Among Children:** **18.7%**, the highest globally.
 - **Child Mortality Rate:** **2.9%**.
- **Global Overview:**
 - **World GHI Score 2024:** **18.3**; a minor improvement from **18.8** in 2016, labeled "moderate."
 - **Neighboring Countries:** **Bangladesh, Nepal, and Sri Lanka** rank in the "moderate" category, performing better than India.
- **Acknowledgment of India's Initiatives:**
 - Recognition for **Poshan Abhiyan** (National Nutrition Mission), **PM Garib Kalyan Yojana (PMGKAY)**, and the **National Mission for Natural Farming** in the effort to improve food and nutrition.

- **GDP and Hunger:** Highlights that **economic growth alone** does not ensure reduced hunger or better nutrition, emphasizing the need for **pro-poor policies** and efforts to address socio-economic disparities.

India's Response to the GHI 2024 Report

- **Criticism of Methodology:** The **Ministry of Women and Child Development** criticized the report's failure to include **Poshan Tracker** data, which shows **7.2% child wasting**.
- **Indicators Focused on Child Health:** The government argued that three of the four indicators center on children's health, which may not accurately represent the hunger situation across all age groups.
- **Concerns on Sample Size:** Doubts raised regarding the "Proportion of Undernourished Population" data due to reliance on a small sample survey.

INDIAN JOINT MILITARY EXERCISES 2024

- **Purpose:** The Indian Army engages in joint military exercises to enhance **coordination with other nations' militaries**, understand diverse combat tactics, and train with modern equipment.
- **Types of Exercises:**
 - **Domestic Exercises:** Conducted within India for inter-service and intra-service training.
 - **Bilateral Exercises:** Between India and another nation, promoting defense cooperation.
 - **Multilateral Exercises:** Involving multiple countries to improve international defense ties.

Domestic Military Exercises of India 2024

- **Gandiv Vijay**
- **Paschim Lehar**
- **Vayu Shakti**
- **Vijay Prahar**

Key Bilateral Military Exercises 2024

Participating Countries	Branch	Exercise Name
India – Australia	Army	AUSTRA HIND
	Navy	AUSINDEX
India – Bangladesh	Army	SAMPRITI
	Navy	IN-BN CORPAT
	Air Force	Table Top Ex
India – China	Army	HAND IN HAND
India – France	Army	SHAKTI
	Navy	VARUNA
	Air Force	GARUDA
India – Indonesia	Army	GARUDA SHAKTI
	Navy	IND-INDO CORPAT
India – Japan	Army	DHARMA GUARDIAN
	Navy	JIMEX
India – Kazakhstan	Army	PRABAL DOSTYK
India – Kyrgyzstan	Army	KHANJAR
India – Maldives	Army	EKUVERIN
India – Mongolia	Army	NOMADIC ELEPHANT
	Army	IMBEX
India – Myanmar	Navy	IMCOR
	Army	SURYA KIRAN
India – Oman	Army	AL NAGAH
	Navy	Naseem-al-Bahr
	Air Force	EASTERN BRIDGE-IV
India – Russia	Army	INDRA

	Navy	INDRA NAVY
	Air Force	INDRA
India – Seychelles	Army	LAMITIYE
India – Sri Lanka	Army	MITRA SHAKTI
	Navy	SLINEX
India – Thailand	Army	MAITREE
	Navy	INDO-THAI CORPAT
	Air Force	SIAM BHARAT
India – United Kingdom	Army	AJEYA WARRIOR
	Navy	KONKAN
	Air Force	INDRADHANUSH-IV
India – USA	Army	YUDHABHAYAS & VAJRA PRAHAR
	Navy	MALABAR (Multilateral)
	Air Force	RED FLAG 16-1
India – Vietnam	Army	VINBAX

Multilateral Military Exercises of India 2024

Exercise Name	Participating Countries
RIMPAC	Australia, Brunei, Canada, Chile, China, Colombia, Denmark, France, Germany, India, Indonesia, Japan, etc.
MALABAR	India, USA, Japan
COBRA-GOLD	Asia-Pacific countries
Samvedna	South Asian Region Nations

Indian Air Force Exercises 2024

Exercise Name	Details	Participating Countries
Garuda	Large force employment and combat drills	India, France
Eastern Bridge	Joint operations and mutual understanding	India, Oman
SIAM Bharat	HADR tabletop exercise	India, Thailand
Desert Eagle	Air combat operations	India, UAE
Red Flag	Advanced aerial combat training	India, USA
Desert Knight-21	Joint air exercise featuring Rafale aircraft	India, France

Indian Army Exercises 2024

Exercise Name	Details	Participating Countries
Yudh Abhyas	Counter-terrorism and peacekeeping	India, USA
Nomadic Elephant	Counter-insurgency and jungle warfare	India, Mongolia
Shakti	Semi-urban counter-terrorism	India, France
Hand-in-Hand	Counter-terrorism and disaster relief operations	India, China
Dharma Guardian	Counter-terrorism and jungle warfare	India, Japan
Khanjar	Counter-terrorism in high-altitude terrain	India, Kyrgyzstan

Indian Navy Exercises 2024

Exercise Name	Details	Participating Countries
SLINEX	Maritime operations	India, Sri Lanka
INDRA Navy	Anti-terrorism and naval drills	India, Russia
Varuna	Joint operations and maritime security	India, France
Konkan	Maritime cooperation	India, United Kingdom
Naseem Al Bahr	Maritime security operations	India, Oman
SIMBEX	Maritime defense and operational readiness	India, Singapore

SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION (DRR)

India highlighted the **need for increased funding for DRR** and **development of early warning systems** as priorities, given that current funding largely supports disaster response.

Sendai Framework for Disaster Risk Reduction

- **Framework Duration: 2015–2030**
- **Adoption:** Adopted by **UN member states** at the **3rd World Conference on Disaster Risk Reduction** in Sendai, Japan.
- **Successor:** Replaced the **Hyogo Framework for Action (2005–2015)**, making it the most comprehensive global accord on DRR.
- **Integration with Global Agendas:** Works in alignment with other international agendas, such as:
 - **Paris Agreement on Climate Change**
 - **Addis Ababa Action Agenda on Financing for Development**
 - **New Urban Agenda**
 - **Sustainable Development Goals (SDGs)**
- **Primary Responsibility:** The **State** has the main responsibility for DRR, though other stakeholders like **local governments** and the **private sector** share this role.

Priority Areas and Global Targets of the Sendai Framework

1. **Understanding Disaster Risk**
2. **Strengthening Disaster Risk Governance**
3. **Investing in DRR for Resilience**
4. **Enhancing Disaster Preparedness for Effective Response** and **"Building Back Better"** in recovery, rehabilitation, and reconstruction.

Sendai Framework Midterm Review Meeting

- **Meeting Details:**
 - Organized by the **President of the UN General Assembly**.
 - **Location:** **UN Headquarters, New York**.
 - **Purpose:** Provided a platform for UN Member States to assess emerging DRR issues, suggest adjustments, and strive toward the outcomes of the Sendai Framework.
- **Key Highlights by the Indian Delegation:**
 - **Global Recognition:** Disaster risk reduction is now a priority topic in **G20 and G7** agendas.
 - **Financial Resources:**
 - India has allocated **\$6 billion** for DRR efforts from **2021 to 2025** for state and local governments.
 - An additional **\$23 billion** is available for **preparedness, response, and recovery** initiatives.
 - **Achievements:** Loss of lives due to cyclones has decreased to less than **2%**. India is also developing programmes to mitigate risks from other hazards, including **landslides, forest fires, heatwaves, and lightning**.

Global Initiative and G20 Contributions

- **Early Warning for All by 2027:** Launched by the **UN Secretary-General**, aiming for universal early warning coverage.
- **G20 Working Group on DRR:** Established under **India's 2023 Presidency**, focusing on international collaboration for DRR.

India's Recommendations

- **Financial Strategy:** Advocates for a **comprehensive financial structure** to address all aspects of DRR, including the **role of the State in early warning systems**.
- **International Cooperation:** Calls for **multi-country partnerships** to increase access to **hazard and risk data** and improve **disaster risk governance** across nations.

SHAKTI'S WIN AT THE 66TH GRAMMY AWARDS (2024)

Shakti, a fusion music group, won the **66th Grammy Award** in the **Best Global Music Album** category for their album **"This Moment"**.

- **Album Details:**
 - "This Moment," Shakti's **third studio album**, released on **23rd June 2023**.
 - Marks Shakti's return after **46 years** since their original formation.
- **Band Members:**
 - **Zakir Hussain** (tabla maestro)
 - **Shankar Mahadevan** (singer)
 - **John McLaughlin**
 - **Ganesh Rajagopalan**
 - **Selvaganesh Vinayakram**
- **Description:** Shakti is noted as a **unique cross-cultural fusion** group that merges **Eastern and Western musical traditions**, establishing a foundation for **world music**.
- **Additional Wins for Zakir Hussain:**
 - **Best Global Music Performance** for the piece **"Pashto"**.
 - **Best Contemporary Instrumental Album** for **"As We Speak"**, featuring **Rakesh Chaurasia** on the flute, the nephew of the legendary flautist **Hariprasad Chaurasia**.

About the Grammy Awards

- **Full Name:** Originally called the **Gramophone Award**.
- **Organizers:**
 - **National Academy of Recording Arts & Sciences (NARAS)** – for all recordings.
 - **Latin Academy of Recording Arts & Sciences (LARAS)** – for Spanish and Portuguese recordings.
- **Purpose:** Initiated in **1959** to honor musical achievements of the **year 1958**.
- **Award Symbol:** Honorees receive a **golden statuette shaped like a gramophone**.

India's Performance at the Grammy Awards 2024

- **Shakti's Album:** "This Moment" won the **Best Global Music Album**.
- **Zakir Hussain's Wins:**
 - Awarded **Best Global Music Performance** for "Pashto."
 - Won **Best Contemporary Instrumental Album** for "As We Speak," featuring **Rakesh Chaurasia**.

INS SAMARTHAK

INS 'Samarthak', a **multi-purpose vessel (MPV)** for the **Indian Navy**, was recently launched by **Larsen and Toubro**.

- **Significance:** It is the **first of two MPVs** commissioned by the Indian Navy.
- **Construction:** Designed and built by **L&T Shipyard** at **Kattupalli** under the **'Make in India'** and **'Atmanirbhar Bharat'** (Self-Reliant India) initiatives.

Key Features of INS Samarthak

- **Multi-role Capabilities:**
 - Supports **development and testing** of advanced weapons and sensors.
 - Engages in **maritime surveillance, patrolling, launching and recovery** of surface/aerial targets.
 - Provides **humanitarian assistance** and contributes to **sea pollution control**.
- **Dimensions:**
 - **Length:** **107 meters**
 - **Width:** **18.6 meters**
 - **Displacement:** Over **3,750 tonnes**
- **Speed:** Maximum speed of **15 knots**.

Points on L&T's Kattupalli Shipyard

- **Location:** Situated in **Ennore**, around **45 km north of Chennai**, Tamil Nadu.
- **Facilities:** Equipped with **shiplift, dry berths, and wet berths**, allowing for concurrent construction and repair of vessels.
- **Current Projects:**
 - Building **two MPVs** for the Indian Navy.
 - Constructing **three Cadet Training Ships** and **six other defence vessels** for the Indian Navy through a **Public-Private-Partnership** model.
- **International Collaborations:** Repairing the **US Naval Ship Charles Drew** under a **Master Ship Repair Agreement** with the **US Navy**.

About Larsen & Toubro (L&T)

- **Nature:** Larsen & Toubro (L&T) is an **Indian multinational company** operating in **technology, engineering, construction, manufacturing, and financial services**.
- **Sectors Served:** Key sectors include **Hydrocarbon, Infrastructure, Power, Process Industries, and Defence**.
- **Global Presence:** Operates in **over 50 countries** worldwide.
- **Sustainability Leadership:** L&T was the **first Indian company in engineering & construction** to publicly disclose its sustainability performance.

GLOBAL MULTIDIMENSIONAL POVERTY INDEX (MPI) 2024

Multidimensional poverty encompasses more than just income poverty. It includes multiple deprivations that impact individuals' well-being in daily life.

- **Key Dimensions:**
 - **Health:** Indicators include **child mortality** and **malnutrition**.
 - **Education:** Assessed through **years of schooling** and **school attendance**.
 - **Living Standards:** Includes **access to clean water, sanitation, electricity, cooking fuel, housing quality, and essential assets**.
- **Measurement:**
 - An individual is considered **multidimensionally poor** if deprived in **one-third or more of the weighted indicators** as per the **United Nations Development Programme (UNDP)**.
 - The MPI assesses poverty at an **individual level**.

About the Global Multidimensional Poverty Index (MPI)

- **Purpose:** The **MPI** serves as a global metric to assess acute multidimensional poverty across over **100 developing countries**.
- **Established:** **2010**
- **Published by:**
 - **Oxford Poverty and Human Development Initiative (OPHI)**
 - **Human Development Report Office of the UNDP**
- **MPI Dimensions and Indicators:**
 - **Health:** Evaluated through **nutrition** and **child/adolescent mortality**.
 - **Education:** Indicators include **years of schooling** and **school attendance**.
 - **Standard of Living:** Evaluated through access to **housing, household assets, cooking fuel, sanitation, drinking water, and electricity**.

Key Findings of the Global MPI 2024

- **Acute Poverty:** Over **1.1 billion people** live in **acute poverty** worldwide.
- **Countries with the Highest Poverty Levels:**
 - **India:** 234 million
 - **Pakistan:** 93 million
 - **Ethiopia:** 86 million
 - **Nigeria:** 74 million

- **Democratic Republic of the Congo: 66 million**
- **Combined Impact:** These five countries represent **48.1% of the global poor**.
- **Child Poverty:**
 - **Children under 18:** Around **584 million** children (27.9% of all children) live in extreme poverty.
 - **Adults:** **13.5%** of adults face extreme poverty.
- **Regional Distribution:**
 - **Sub-Saharan Africa and South Asia:** Together, these regions host **83.2%** of the world's poorest individuals.
 - **Low-Income Countries:** Account for **34.8%** (400 million) of the global poor.
 - **Middle-Income Countries:** Account for **65.2%** (749 million) of the global poor.
- **Poverty in Conflict-Affected Areas:**
 - **Conflict Impact:** In 2023, over **117 million people** were displaced due to **violent conflict, disasters, or other crises**.
 - **Global Poor in Conflict Zones:** Nearly **40%** (455 million) of the global poor live in areas affected by conflict.
 - **Active War Zones: 218 million**
 - **Fragile or Conflict-Affected Regions: 335 million**
 - **Low Peace Environments: 375 million**

National Multidimensional Poverty Index (NMPI) by NITI Aayog

- **Framework:** Based on the **Alkire Foster methodology**, internationally recognized for measuring multidimensional poverty.
- **Indicators:**
 - **NMPI** includes **12 indicators** compared to the **10 indicators** used in the **Global MPI**.

BHUTANESE PM TSHERING TOBGAY'S RECENT VISIT TO INDIA

Bhutanese Prime Minister **Tshering Tobgay's recent visit to India** (March 13-17, 2024) emphasised bilateral cooperation in **development, connectivity, and sustainability**.

Key Highlights of the Bilateral Meeting

- **Development and Connectivity Focus:**
 - Discussed bilateral agreements for **development projects**, focusing on the ambitious **Gelephu Mindfulness City** project on Bhutan's border with Assam, aimed at stimulating Bhutan's economy and reducing youth migration.
- **India's Support for Bhutan's 13th Five-Year Plan:**
 - India pledged **₹10,000 crore** for Bhutan's development, doubling support from the previous ₹5,000 crore.
- **Energy and Infrastructure Collaboration:**
 - India showcased advancements in **green hydrogen technology**.
 - Continued focus on **hydropower cooperation**, with India aiding in the development of Bhutan's hydropower sector, which is essential for Bhutan's economy.
- **Regional Economic Hub:**
 - Bhutan's **Gelephu Mindfulness City** project, a **1,000 sq km** initiative for economic development and regional connectivity, requires **India's assistance with rail and road connectivity** to support international access.

India-Bhutan Diplomatic and Cultural Relations

- **Treaty Foundation:** Diplomatic ties established in **1968** under the **1949 Treaty of Friendship**, updated in **2007**.
- **Cultural Ties:**
 - **India-Bhutan Foundation** (2003) promotes **education, culture, and science exchanges**.
 - **Pilgrimage sites** in India remain integral to Bhutanese culture.
- **Civilian Honor:** Bhutan awarded PM Modi the **Order of the Druk Gyalpo**, Bhutan's highest civilian honour, for India's support during COVID-19.

Key Areas of Bilateral Cooperation

- **Hydropower:**
 - India helped construct **four major hydroelectric projects (HEPs)** in Bhutan, supporting its energy and economic needs.
 - Bhutan exports electricity to India's **Day Ahead Market (DAM)**, strengthening economic ties.
- **New and Emerging Sectors:**
 - **Space Cooperation:** Launched the **India-Bhutan SAT** (November 2022), aiding natural resource management and radio communication.
 - **Fin-tech Initiatives:** Launched **RuPay Card** (2019, 2020) and **BHIM app** (2021), enhancing cashless and cross-border payments.
- **Trade and Commerce:**
 - India remains Bhutan's top trading partner, with **bilateral trade increasing to USD 1,615 million in 2022-23**.
 - **2016 Trade and Transit Agreement** ensures **duty-free transit** for Bhutanese goods through India.
- **Healthcare:**
 - India provided **COVID-19 vaccines and medical supplies**, and helped in building hospitals in Bhutan.
- **Indian Diaspora in Bhutan:**
 - Approximately **50,000 Indians** work in Bhutan, contributing to various sectors.

Strategic Significance of Bhutan for India

- **Strategic Location:** Bhutan serves as a **buffer state** between India and China, vital for protecting India's **Siliguri Corridor**.
- **Biodiversity and Conservation:** **Joint conservation efforts** support Bhutan's rich biodiversity and regional environmental goals.

SC ASKS PARLIAMENT TO CONSIDER BAN ON CHILD BETROTHALS

The **Supreme Court (SC) of India** has recommended that Parliament amend the **Prohibition of Child Marriage Act (PCMA), 2006** to fully ban child marriages, citing violations of children's rights to **choice and childhood**.

Supreme Court's Key Observations on Child Rights

- **Violation of Rights:** Child marriage infringes on children's rights to **autonomy, free choice, and childhood**.
- **Article 21 Violation:** SC held that child marriages violate the **right to life and liberty under Article 21**.
- **International Law:** Cited **Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)** against minor betrothals.
- **Reduction in Prevalence:** Since **PCMA's enactment**, child marriage rates have dropped from **47% to 23.3%** in recent years.

Prohibition of Child Marriage Act (PCMA), 2006

- **Objective:** The PCMA aims to prevent child marriages and support victims.
- **Legal Age:** Sets **marriageable age at 18 for girls and 21 for boys**.
- **Offence Classification:** Declares child marriage a **criminal offence** with penalties for those aiding or conducting such marriages.
- **Reporting:** Incidents of child marriage can be reported before or after they are solemnized.
- **Nodal Officers:** **District Collectors** serve as nodal officers to enforce the Act, alongside **Child Marriage Prohibition Officers (CMPOs)** appointed across states.
- **Petition for Nullity:** Only the minor can file for annulment; **CMPOs or guardians** may assist if the child is still a minor.
- **Punishment:** Offences under the PCMA are **cognizable and non-bailable** with imprisonment and fines.
- **Protection Provisions:** Ensures **legal, medical aid, and rehabilitation** for child marriage survivors, and safeguards the rights of children born from such marriages.

Supreme Court's Recommendations for Effective Implementation

- **District-Level CMPOs:** Appoint dedicated CMPOs in each district for enforcement.
- **Quarterly Reporting:** Mandate **quarterly progress reports** by CMPOs on state/UT websites.
- **Regular Performance Review:** Quarterly evaluations by the **Ministry of Women and Child Development**.
- **Specialised Police Units:** Establish police units focused solely on preventing child marriages.
- **Disciplinary Measures:** Enforce strict penalties against public servants who neglect duties related to child marriage cases.

UNICEF Insights on Child Marriage in India

- **Global Proportion:** India hosts **one-third** of the world's child brides.
- **Regional Concentration:** Over half of India's child brides reside in **Uttar Pradesh, Bihar, West Bengal, Maharashtra, and Madhya Pradesh**.
- **State Prevalence:** High child marriage rates in **West Bengal, Bihar, and Tripura** ($\geq 40\%$) vs. **Lakshadweep** ($\leq 1\%$).
- **Educational Impact:** **Less than 20%** of married girls continue schooling post-marriage.

Measures Taken to Combat Child Marriage

- **Legislative Efforts:**
 - **PCMA, 2006:** Criminalizes child marriage and stipulates penalties.
 - **Juvenile Justice Act, 2015** and **Domestic Violence Act, 2005** provide further legal protections.
- **Government Policies:**
 - **Beti Bachao Beti Padhao** and **Sukanya Samriddhi Yojana** aim to discourage child marriages.
 - **State Programs:** Initiatives like **Rajasthan's Action Approach, West Bengal's Kanyashree, and Rupashree Schemes**.

BISHNOI, BLACKBUCK AND CHINKARA

In 1998, actor **Salman Khan** and others allegedly hunted **blackbucks** in **Kankani village, Rajasthan**, leading to significant backlash from the **Bishnoi community**, known for their commitment to protecting wildlife and the environment.

Why Bishnoi Protect Blackbuck and Chinkara?

- **Founding Principles:** The Bishnoi, a sect founded by **Guru Jambheshwarji in 1485**, follow **29 principles** emphasising compassion for nature, wildlife, and tree protection.
 - **Rule 19:** Prohibits the felling of green trees.
 - **Rule 18:** Advocates compassion towards all living beings.
- **Guru Jambheshwarji's Teachings:** His **120 shabdhas (statements)** promote **equality, modesty, and tolerance**, denouncing harm to animals.
- **Reverence for Wildlife:** Bishnoi believes harming animals leads to karmic consequences. Folklore suggests they may be **reincarnated as deer**, further reinforcing protection of blackbucks.

Significance of Blackbuck and Chinkara Protection

- **Key Species:** Blackbuck and chinkara are commonly found around Bishnoi villages, with the community ensuring their protection.
- **Historical Sacrifice:**
 - **Khejarli Massacre (1730):** **363 Bishnoi, led by Amrita Devi**, sacrificed their lives to protect Khejri trees from being felled by Maharaja Abhay Singh's soldiers.
 - This commitment to conservation extends to protecting blackbucks, chinkara, and other species from hunters.

Bishnoi Community: Core Beliefs and Conservation Efforts

- **Eco-Conscious Principles:** Founded on **29 principles** aimed at environmental preservation.
- **Historical Roots:** Founded by **Guru Jambheshwar in 1485**, the community primarily resides in **western Rajasthan**.

- **Sacrifice for Ecology:** Known for **Khejarli Massacre** in 1730, where **363 Bishnoi** sacrificed their lives for tree conservation.
- **Wildlife Sanctuaries:** Bishnoi villages act as sanctuaries for blackbucks, chinkaras, and the **Great Indian Bustard**.

About Blackbuck (*Antelope cervicapra*)

- **Common Name:** Indian Antelope
- **Native Range:** Found in **India and Nepal**, especially in **Rajasthan, Gujarat, Madhya Pradesh, Tamil Nadu, Odisha**.
- **Physical Characteristics:** Males have dark upper parts and white underparts, while females are fawn-coloured.
- **Habitat:** Grasslands, savannas, dry forests, and open woodlands.
- **Protection Status:**
 - **Wildlife Protection Act, 1972:** Schedule I
 - **IUCN:** Least Concern
 - **CITES:** Appendix III
- **Threats:** Habitat loss, illegal hunting, and natural calamities.
- **Cultural Significance:** Revered by Hinduism as a symbol of purity, and considered lucky in Buddhism.
- **Protected Areas:**
 - **Velavadar Blackbuck Sanctuary** – Gujarat
 - **Point Calimere Wildlife Sanctuary** – Tamil Nadu
 - **Tal Chhapar Sanctuary** – Rajasthan

About Chinkara (*Indian Gazelle*)

- **Scientific Name:** *Gazella bennettii*
- **Native Range:** Primarily in **India, Pakistan, and Iran**.
- **Habitat:** Arid grasslands, scrublands, and deserts.
- **Physical Characteristics:** Light chestnut coat with slender, straight, ringed horns (both sexes have horns).
- **Social Structure:** Typically found in small groups or as solitary animals.
- **Protection Status:**
 - **Wildlife Protection Act, 1972:** Schedule I
 - **IUCN:** Least Concern
 - **CITES:** Appendix III
- **Threats:** Habitat degradation, hunting, and agricultural expansion.
- **Protected Area:** **Melghat Tiger Reserve** (Maharashtra)

Key Takeaways on Bishnoi Environmental Practices

- **Environmental Advocacy:** Bishnoi lifestyle integrates strict vegetarianism, prohibits killing of animals, and emphasises tree conservation.
- **Legacy of Conservation:** Known for joining the **Chipko Movement (1973-74)**, the Bishnoi have a history of safeguarding natural resources.
- **Recognition:** The community has received awards like the **Indira Gandhi Paryavaran Puraskar** (1987) and **UNEP Global 500 Roll of Honour** (1992) for environmental contributions.

INDIA LAUNCHES 4TH NUCLEAR-MISSILE SUBMARINE

India recently launched its fourth SSBN, named **S4***, at the **Ship Building Centre (SBC)** in **Visakhapatnam**, marking a major boost in India's nuclear deterrence capabilities.

Details on INS Aridhman (S4*):

- **Launch:** The submarine, called **S4*** was launched into water at SBC in Visakhapatnam.
- **Indigenous Content:** Comprises **approximately 75% indigenous components**, reflecting significant local industry involvement.
- **Specifications:**
 - **Displacement:** Around **7,000 tonnes**, making it larger than its predecessor **INS Arihant**.
 - **Missile Capacity:** Equipped with **K-4 submarine-launched ballistic missiles (SLBM)** with a **range of 3,500 km**, crucial for enhancing India's nuclear second-strike capability.
- **Role in Nuclear Triad:**
 - The S4* supports India's nuclear triad, providing **second-strike capability** from underwater, reinforcing India's strategic defence.
 - Expected future integration of **K-5 SLBM** with a **5,000 km range** for expanded deterrence.

Current Operational SSBNs in India

1. **INS Arihant (S2)** - Commissioned in **August 2016**.
2. **INS Arighaat (S3)** - Commissioned in **August 2024**.

Key Features of SSBNs

- **Purpose:** Designed for **nuclear deterrence** with second-strike capabilities, ensuring retaliation potential post-nuclear attack.
- **Capabilities:**
 - SSBNs can remain **submerged for extended periods**, reducing detection risks and enhancing survivability.
 - Equipped with **nuclear-powered propulsion**, allowing unlimited operational range, constrained only by crew needs and maintenance.
- **Classification:**
 - **SSBN** stands for **Ship Submersible Ballistic Nuclear**—denoting nuclear-powered ballistic missile submarines.
 - These submarines fall under the **Strategic Forces Command of India**.

INS Arihant (S2) Overview

- **Displacement:** **6,000 tonnes**.
- **Power Source:** Powered by an **83 MW pressurized light-water reactor** using enriched uranium.
- **History:** Launched in **2009** and commissioned in **2016**, marking India's entry into the SSBN class of submarines.
- **Technological Advancement:** Successors like **INS Arighaat** and **INS Aridhman** include various technological upgrades.

INS Arighaat (S3) Overview

- **Displacement:** **6,000 tonnes**.
- **Missiles:** Armed with **K-15 SLBMs** (range over **700 km**).
- **Speed:** Can reach **12–15 knots (22–28 km/h)** on the surface and **up to 24 knots (44 km/h)** submerged.
- **Nuclear Reactor:** Powered by **83 MW nuclear reactors**, allowing prolonged underwater operations.
- **Indigenization:** **60% indigenous content**, doubling from **30% in INS Arihant**.
- **Strategic Role:** Enhances **India's nuclear strike capability**, bolstering the **sea-based leg of the nuclear triad**.

INDIA-US CULTURAL PROPERTY AGREEMENT

India and the USA signed their **first-ever Cultural Property Agreement (CPA)** during the **46th World Heritage Committee session** in New Delhi, aimed at combating **illicit trafficking of Indian antiquities**.

Objective of the CPA

- To create a **structured framework** for preventing illegal export of Indian antiquities to the USA and ensure their **swift repatriation**.
- Aligned with the **1970 UNESCO Convention on Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property**.

Significance of the Agreement

- **Quick Seizure and Repatriation:** Facilitates prompt action on Indian antiquities seized by **US Customs** and enables their **return to India**.
- **Cultural Diplomacy:** Enhances **India's cultural diplomacy** efforts, preserving cultural heritage and supporting **global cultural security**.
- **Global Collaboration:** Reinforces the **Kashi Culture Pathway** and **New Delhi Leaders' Declaration (2023)** under India's **G20 Presidency**, promoting cultural property protection as part of international relations.

Details of the CPA

- **Restricted Imports:**
 - Applies to **archaeological materials** dating from **1.7 million years ago to 1770 CE**.
 - Includes **ethnological materials** like religious, civic, royal architectural items, and manuscripts from **2nd century BCE to 1947 CE**.
 - **Designated List:** The USA will maintain a list of restricted items, offering to return any forfeited objects to India.
- **Existing Agreements:**
 - The USA has similar agreements with **28 countries**, including **China, Egypt, Greece, Italy, and Turkey**.

Historical Context and Repatriation Efforts

- **Antiquities Returned:** India has **repatriated 358 antiquities** since **1976**, with **345 artifacts** returned since **2014**.
- **US Role:** The USA recently returned **262 antiquities** to India, highlighting the progress made under the new CPA.

Definitions and Legal Aspects

- **Antiquity Definition:**
 - Defined under the **Antiquities and Art Treasures Act of 1972** in India as any object at least **100 years old**.
 - Includes **coins, sculptures, paintings, epigraphs, and scientific, historical, or aesthetic documents** aged **75 years or more**.
- **Provenance:**
 - Refers to **ownership history** tracing the object from its original maker to the current owner.

UNESCO 1970 Convention - Key Principles

- **Adoption:** Established on **November 14, 1970**, with **145 ratified countries**.
- **Prevention Measures:**
 - **Inventories and export certificates, trader approval, criminal/administrative sanctions, and education campaigns.**
- **Restitution Provisions:**
 - **Article 7:** Requires seizure and return of stolen cultural property.
 - **Article 13:** Mandates national responsibility for restitution.
- **International Cooperation:**
 - **Article 9:** Encourages bilateral treaties and control over import/export of cultural property.

INCREASE IN MSP PRICES

The **Union Cabinet Committee on Economic Affairs (CCEA)** has approved **revised Minimum Support Prices (MSP)** for six major **rabi crops** for the **2025-26 marketing season**.

- **MSP for Wheat** has been increased by **₹150 per quintal** from the previous season, setting it at **₹2,425 per quintal** for 2025-26, up from **₹2,275** in 2024-25.
- The increase aligns with the **Union Budget 2018-19** pledge to set MSPs at least **1.5 times the All-India weighted average cost of production**.

MSP Rates for Rabi Crops (2025-26)

- **Wheat:** ₹2,425 per quintal (**₹150 increase**)
- **Rapeseed & Mustard:** ₹5,950 per quintal (**₹300 increase - highest increase**)
- **Lentil (Masur):** ₹6,700 per quintal (**₹275 increase**)
- **Gram:** ₹5,650 per quintal (**₹210 increase**)
- **Safflower:** ₹5,940 per quintal (**₹140 increase**)
- **Barley:** ₹1,980 per quintal (**₹130 increase**)

Government's Stated Rationale for the MSP Hike

- **MSP Margins Over Cost of Production:**
 - **Wheat:** 105%
 - **Rapeseed & Mustard:** 98%
 - **Lentil:** 89%
 - **Gram and Barley:** 60%
 - **Safflower:** 50%
- **Objective:** To support **farmers' incomes** and **encourage crop diversification**, which can reduce reliance on select staples, thereby balancing the agricultural economy.
- **Union Agriculture Minister's Statement:** The MSP hike demonstrates the government's focus on **farmers' welfare** and **remunerative prices**.

Understanding Minimum Support Price (MSP)

- **Definition:** MSP is a **price guarantee** from the government to farmers to buy their crops at a minimum rate, aimed at **shielding farmers from price volatility**.
- **Authority:** The **Cabinet Committee on Economic Affairs (CCEA)**, led by the Prime Minister, sets MSPs based on **recommendations** from the **Commission for Agricultural Costs and Prices (CACP)**.
- **Purpose:**
 - **Prevent Distress Sales:** Ensures that farmers do not sell crops at prices below MSP during surplus years.
 - **Support Food Security:** Government procures MSP crops for **Public Distribution System (PDS)** and maintains **buffer stocks**.
 - **Encourage Crop Diversification:** Offers farmers choices beyond staple crops.

Historical Background of MSP in India

- **First MSP Announcement:** In **1967** by Agriculture Minister **Jagjivan Ram**.
- **Institutional Setup:** The **Agricultural Prices Commission** (now **CACP**) was set up in **1985** to systematically calculate MSP for major crops.
- **Policy Objective:** The MSP framework emerged to secure farmer incomes post-independence and respond to price crises, particularly for **staple crops** like wheat and rice.

Current Coverage of MSP in India

- **Crops Covered:** MSPs are set for **22 mandated crops** and **Fair and Remunerative Price (FRP)** for sugarcane.
 - **Kharif Crops:** 14, including paddy, maize, and soybeans.
 - **Rabi Crops:** 6, including wheat, barley, gram, lentil, rapeseed, mustard, and safflower.
 - **Commercial Crops:** Cotton and jute.
- **Implementation Challenges:**

- **Limited Practical Coverage:** In practice, MSP benefits largely go to **wheat and rice** farmers due to procurement infrastructure.
- **Regional Imbalances:** MSP benefits vary by state; well-developed procurement networks in some states mean **higher access to MSP** than others.

Calculating MSP - Production Cost Types

- **Types of Costs Considered** by CACP for MSP:
 - **A2 Cost:** Covers out-of-pocket expenses like seeds, labour, fertilisers, and water.
 - **A2+FL Cost:** Adds family labour to A2 costs.
 - **C2 Cost:** Includes comprehensive costs with interest on capital and rent on land, used as a **benchmark reference**.
- **MSP Calculation Basis:** MSPs are determined based on **A2+FL** costs to ensure a fair return to farmers while **C2 costs** serve as a benchmark.

Significance of the MSP for Wheat

- **Wheat Production:** India's **second-largest crop** with production estimated at **113.92 million tonnes** for 2023-24.
- **Top Wheat-Producing States:** Uttar Pradesh, Madhya Pradesh, and Punjab.
- **Procurement:** In the 2023 season, **26.6 million tonnes** of wheat were procured, benefiting **22 lakh farmers**.

WHO APPROVES FIRST MPOX DIAGNOSTIC TEST

The **World Health Organization (WHO)** has approved the first **mpox (monkeypox) diagnostic test** under the **Emergency Use Listing (EUL)**, enhancing access to accurate testing amid ongoing outbreaks.

Mpox Diagnostic Test Details

- **Test Approved:** Alinity m MPXV Assay by **Abbott Molecular Inc.**
 - **Detection:** Uses **Polymerase Chain Reaction (PCR)** technology to detect **mpox virus DNA** from **skin lesion samples**.
 - **Purpose:** Enables quick and reliable detection, crucial for timely **treatment** and **control of mpox** outbreaks.
 - **Requirements:** Conducted by **trained lab personnel** in a laboratory setting.

Mpox Global Outbreak Overview (2022-2024)

- **Cases:** **103,048 confirmed cases** reported across **121 countries** since January 2022.
- **Deaths:** **229 deaths** reported by September 2024.
- **Affected Regions:** Notable concentration in **Democratic Republic of Congo (DRC)**, with other cases reported in **Burundi, Nigeria, and neighbouring African countries**.
- **New Variants:**
 - **Clade Ib:** Spreading faster, primarily through **sexual contact**, particularly in Africa.
 - **Clade Ia:** Primarily affecting **children** with multiple transmission modes.

Mpox Overview and Transmission

- **Viral Origin:** Mpox, previously called monkeypox, is caused by the **monkeypox virus** within the **Orthopoxvirus** genus, related to **smallpox**.
- **Transmission:**
 - **Primary:** From **animals to humans**, especially **rodents and primates**.
 - **Secondary:** **Human-to-human** through **physical contact, contaminated objects**, and possibly **sexual transmission**.
- **Symptoms:** Fever, headache, muscle aches, swollen lymph nodes, and a **rash** progressing from **macules** to **papules, vesicles, and pustules**.

Current Testing and Vaccine Efforts

- **Testing Gap:** Only **37% of suspected cases** in the DRC have undergone testing, highlighting significant **resource limitations**.

- **Vaccination:** **Mpox vaccines** are available, with recent donations to the DRC. The **JYNNEOS® vaccine** has been approved for those at high risk.
- **Treatment:** **Tecovirimat** and other antiviral drugs have shown effectiveness; **isolation** is advised for infected individuals.

Genomic Details of Mpox

- **Variants and Clades:**
 - **Clade I** and **Clade II:** The two main mpox clades; Clade I is associated with higher mortality.
 - **Clade IIb:** Adapted for **human-to-human transmission**, marked by a significant **zoonotic spillover** event.
- **Genomic Accordion Mechanism:**
 - Enables **gene duplication and deletion**, allowing the virus to adapt to human hosts.

Comparative Overview: Smallpox, Mpox, and Chickenpox

FEATURE	SMALLPOX	MPOX (MONKEYPOX)	CHICKENPOX
Virus	Variola virus	Monkeypox virus	Varicella-zoster virus (VZV)
Severity	Highly severe, often fatal	Milder, rarely fatal	Mild
Status	Eradicated (1980)	Endemic in parts of Africa	Common but reduced due to vaccination
Transmission	Respiratory droplets, lesions	Contact with animals, lesions	Respiratory droplets, lesions
Symptoms	Fever, severe fatigue, rash	Rash, swollen lymph nodes, fever	Fever, itchy rash
Vaccination	Not required post-eradication	High-risk individuals	Routine for children and adults

JAMMU AND KASHMIR ELECTIONS

The Government of India revoked the special status of Jammu and Kashmir, leading to its reorganisation into two Union Territories: Jammu & Kashmir (with a legislative assembly) and Ladakh (without a legislative assembly).

Significance of the 2024 Elections

- **First Elections Post-Reorganization:** These elections are the first since the abrogation of Article 370, marking a pivotal moment in the region's political landscape.
- **Restoration of Democratic Processes:** The elections signify a return to electoral democracy in Jammu and Kashmir after a decade, with the last assembly elections held in 2014.

Electoral Framework

- **Legislative Assembly Composition:** The Union Territory of Jammu and Kashmir has a 90-member Legislative Assembly.
- **Reserved Seats:** The Jammu and Kashmir Reorganisation Act, 2019, allows for the nomination of up to five members to the Assembly: two representing women if underrepresented, two from the Kashmiri migrant community (one being a woman), and one from displaced persons from Pakistan-occupied Jammu and Kashmir.

Election Phases and Voter Turnout

- **Phase 1 (September 18, 2024):** Voting occurred in 26 constituencies, recording a voter turnout of 61.38%.
- **Phase 2 (September 25, 2024):** Another 26 constituencies voted, with a turnout of 57.31%.
- **Phase 3 (October 1, 2024):** The final phase covered 40 constituencies, achieving a turnout of 65.65%.
- **Overall Turnout:** The cumulative voter turnout across all phases was 63.88%.

Election Results

- **Party Performance:**
 - **Jammu & Kashmir National Conference (JKNC):** Secured 42 seats.
 - **Bharatiya Janata Party (BJP):** Won 29 seats.
 - **Indian National Congress (INC):** Obtained 6 seats.
 - **Jammu & Kashmir Peoples Democratic Party (JKPDP):** Captured 3 seats.
 - **Jammu & Kashmir People Conference (JPC):** Gained 1 seat.
 - **Communist Party of India (Marxist) [CPI(M)]:** Won 1 seat.
 - **Aam Aadmi Party (AAP):** Secured 1 seat.
 - **Independents:** 7 seats were won by independent candidates.
- **Government Formation:** The JKNC, in alliance with the INC, achieved a majority with a combined total of 48 seats, enabling them to form the government. Omar Abdullah sworn in as new Chief Minister.

Key Constituency Highlights

- **Budgam:** JKNC leader Omar Abdullah won the Budgam assembly seat by a margin of over 18,000 votes.
- **Ganderbal:** Omar Abdullah also secured victory in the Ganderbal constituency.

Powers and Limitations of the New Assembly

- **Legislative Authority:** The Assembly can legislate on matters in the State List, except for "Public Order" and "Police." It can also legislate on subjects in the Concurrent List, provided such laws do not conflict with central legislation.
- **Financial Legislation:** Any Bill related to financial obligations requires the recommendation of the Lieutenant Governor (LG) before introduction in the Assembly.
- **Role of the Lieutenant Governor:** The LG holds significant authority, especially in areas outside the Assembly's purview, including public order, police, All India Services, and the Anti-Corruption Bureau.

Recent Developments

- **Election of Assembly Speaker:** Abdul Rahim Rather of the JKNC was elected as the Speaker of the Jammu and Kashmir Assembly on November 4, 2024.
- **Resolution for Restoration of Autonomy:** The Assembly passed a resolution requesting the central government to restore the region's partial autonomy, which was removed in 2019.

Historical Context

- **Accession to India (1947):** Maharaja Hari Singh signed the Instrument of Accession on October 26, 1947, integrating Jammu and Kashmir into the Union of India.
- **Treaty of Amritsar (1846):** The princely state of Jammu and Kashmir was established when the British sold Kashmir to Gulab Singh, the Dogra ruler of Jammu, for 7.5 million Nanakshahee rupees.

WORLD ENERGY OUTLOOK 2024

- **Released by:** International Energy Agency (IEA)
- **Objective:** Provides analysis and strategic insights on the global energy system.
- **India-Specific Findings**
 - **Economic Growth:** India was the **fastest-growing major economy in 2023** with a **7.8% growth rate**.
 - **Population Milestone:** India became the **most populous country in 2023**, surpassing China, despite declining birth rates.
 - **Energy Demand Growth:** India's energy demand will rise more than any other country over the next decade.
 - **Industrial Expansion:**
 - By 2035, **iron and steel production** will grow by **70%**, and **cement production** by **55%**.
 - **Air conditioners** will increase more than **4.5 times**, leading to higher electricity consumption.

- **Coal Dependence:**
 - Coal remains a significant energy source, with an expected **50% rise** in industrial coal use by **2035**.
 - **60 GW of new coal-fired power** capacity is expected by **2030**.
- **Net Zero Target:** India aims for **net zero emissions by 2070**.
 - Clean power generation will be **20% higher** by 2035.
 - Growth in **electric vehicles (EVs)** will lead to peak oil consumption in the **2030s**.
- **EV Market:**
 - India is a **leading market for two/three-wheelers** and the **fourth-largest for passenger cars**.
 - Over the next decade, **37 million cars** and **75 million two/three-wheelers** will be added.
 - **Oil demand** from road transport will rise by **40% by 2035**.
- **Government Support:** Initiatives like **PM-KUSUM** and the **National Solar Mission** support India's clean energy ambitions.

Global Highlights

- **Energy Security:**
 - Rising geopolitical risks, especially in the **Middle East**.
 - **20% of the world's oil and LNG** passes through the **Strait of Hormuz**.
- **Clean Energy Transition:**
 - **Record-high clean energy investments** in solar and wind in 2023 with **560 GW of renewable capacity** added.
 - By **2030, renewables** will dominate electricity generation, surpassing fossil fuels.
- **Surplus in Oil & Gas:** By the late **2020s**, a surplus in oil and LNG is expected.
- **Electric Vehicles (EVs):** Projected to make up **50% of global car sales by 2030**.
- **Renewable Dominance:** By **2030, low-emission sources** like solar PV, wind, and nuclear will generate **over 50% of the world's electricity**.

3 YEARS OF PM GATISHAKTI NATIONAL MASTER PLAN

Prime Minister urged state governments and private sectors to use the **Gati Shakti portal** for planning infrastructure projects and economic zones.

About PM GatiShakti

- **Launch:** Announced on **India's 75th Independence Day**; officially launched in **October 2021**.
- **Objective:** To create a **Rs. 100 lakh crore (trillion) integrated infrastructure plan** for seamless connectivity across India.
- **Budget Allocation:** **Rs. 7.5 trillion** allocated for **2022-23**, up from **Rs. 5.54 trillion** in 2021-22.
- **16 Ministries Collaboration:** Integrates efforts of **16 ministries** through a single digital platform, focusing on **multi-modal connectivity**.

Key Components of PM GatiShakti

- **Infrastructure Schemes Included:**
 - Major schemes like **Bharatmala, Sagarmala, inland waterways, UDAN**, etc.
 - Covers **economic zones** (e.g., **textile clusters, pharmaceutical hubs, defence corridors, agri zones**).
- **Technology Use:** Uses **ISRO satellite imagery** and **spatial planning tools** by **BiSAG-N** for data insights.
- **Data Layers:** **200+ GIS-based data layers** for comprehensive planning, showing infrastructure projects, forest lands, and industrial estates.

The 6 Pillars of PM GatiShakti

1. **Comprehensiveness:** Centralises all government infrastructure data, allowing departments to view each other's projects.
2. **Prioritisation:** Enables departments to **prioritise projects** based on **cross-sectoral interactions**.
3. **Optimization:** Identifies **optimum routes** for goods transport, reducing time and costs.
4. **Synchronisation:** Synchronises inter-departmental activities to **avoid delays**.
5. **Analytical Tools:** **200+ data layers** with GIS tools for effective decision-making.

6. **Dynamic Monitoring: Real-time monitoring** via satellite imagery, updating project progress on a centralised platform.

Targets Under PM GatiShakti

- **11 Industrial Corridors; 2 Defence Corridors** (Tamil Nadu and Uttar Pradesh)
- **4G Connectivity** in all villages
- Expand **renewable energy capacity to 225 GW** (from 87.7 GW)
- **National Highway Network:** Increase to **2 lakh km**
- Expand **transmission network to 4,54,200 circuit km**
- Creation of **220 new airports, heliports, and water aerodromes**
- Railways **cargo handling capacity to 1,600 million tons** (up from 1,210 million tons)
- **Gas pipeline network:** Add **17,000 km**
- Establish **202 fishing clusters, harbours, and landing centres**

Achievements of PM GatiShakti

- **District-Level Expansion:** Extended to **27 aspirational districts** with plans for **750 districts**.
- **Global Showcase:** Showcased to **30 countries** and featured in international forums like **UNESCAP**.
- **Technological Integration:** Real-time infrastructure planning using advanced geospatial tools.
- **Urban and Rural Impact:** Used in districts like **Dahod (Gujarat)** for irrigation and **Arunachal Pradesh** for tourism development around **Bichom Dam**.
- **Skill Development:** Ministry of Skill Development using GatiShakti to place training institutes near **industrial clusters and economic zones**.

LIVING PLANET REPORT 2024

World Wildlife Fund (WWF) reported a significant **73% decline** in the average size of monitored wildlife populations between **1970-2020**.

About the Living Planet Report

- **Publisher:** World Wildlife Fund (WWF)
- **Publication Frequency:** Biennial
- **Collaborators:** Zoological Society of London (ZSL)
- **Purpose:** Tracks **global biodiversity trends** and provides data on the **health of ecosystems** using the **Living Planet Index (LPI)**.
- **Scope of LPI:**
 - **Monitors 5,495 species** across **35,000 populations** worldwide.
 - Serves as an **early indicator of extinction risks** and ecosystem health.

Key Findings

1. **Overall Wildlife Population Decline:**
 - **73% decline** in monitored wildlife populations over **50 years**.
 - **Index Comparison:** This decline represents a severe increase from the **69% decline** reported in 2022.
2. **Ecosystem-Specific Declines:**
 - **Freshwater Ecosystems:** **85% decline** in populations, the most affected.
 - **Terrestrial Ecosystems:** Populations declined by **69%**.
 - **Marine Ecosystems:** **56% decline** observed.
3. **Regional Wildlife Population Declines:**
 - **Latin America and Caribbean:** **95% decline**, the highest across regions.
 - **Africa:** **76% decline** in monitored wildlife populations.
 - **Asia-Pacific:** Recorded a **60% decline**.
 - **North America:** Observed a **39% decline**.
 - **Europe and Central Asia:** **35% decline**.
4. **Conservation Successes:**

- **Mountain Gorillas (East Africa):** Population increased by **3% annually** from **2010-2016** due to conservation efforts.
- **Bison (Central Europe):** Population growth from **0 to 6,800** between **1970-2020**.

India-Specific Findings

- **Consumption Patterns:**
 - **India's Sustainability:** Recognized as a model for sustainable consumption, requiring less than one Earth for its dietary habits.
 - **Global Contrast:** Countries like the **United States** and **Argentina** show higher resource demands (e.g., Argentina's dietary footprint would require **7.42 Earths**).
- **National Millet Campaign:**
 - **Focus:** Promotion of **millets**, traditional and climate-resilient grains.
 - **Recognition:** Praised for supporting a shift towards sustainable agriculture.

World Wildlife Fund (WWF)

- **Founded:** **1961**; **Headquarters:** **Gland, Switzerland**.
- **Mission:** Conservation of global biodiversity, reduction of threats to natural ecosystems.
- **Key Publications:**
 - **Living Planet Report**
 - **Living Planet Index**
 - **Ecological Footprint Calculation**
- **WWF-India:** Established as a **charitable trust in 1969**; operates through a decentralised structure with offices across India.

INDIA'S BIODIVERSITY TARGET UNDER CBD

India launched its updated **National Biodiversity Strategy and Action Plan (NBSAP) 2024-2030** at the **16th UN Convention on Biological Diversity (CBD COP16)** held in **Cali, Colombia**.

- Aims to protect **30% of terrestrial, inland water, and marine areas** by **2030** and minimise biodiversity loss in high-value areas.

Overview of NBSAP 2024-2030

- **Alignment:** Follows the **Kunming-Montreal Global Biodiversity Framework (KMGBF)**.
- **National Targets:** Sets **23 targets** aligned with the **23 global biodiversity goals** established under the KMGBF.
- **Coordinating Body:** **Ministry of Environment, Forest and Climate Change (MoEFCC)** leads the coordination efforts.

Key Biodiversity Targets of NBSAP

1. **Conservation Goals:**
 - **30% protection** of land and ocean areas by **2030**.
 - **50% reduction** in the introduction of invasive alien species.
2. **Ecosystem Restoration:**
 - Restoration focus on **forests, wetlands, rivers, and coastal ecosystems**.
 - Integration of **high-resolution geospatial data** to identify critical biodiverse areas and endangered ecosystems.
3. **Community Rights and Participation:**
 - Ensuring rights and participation of **indigenous peoples, local communities, women, and youth** in biodiversity conservation.
 - Emphasis on **community-driven conservation** efforts for degraded ecosystem restoration.
4. **Sustainable Consumption:**
 - Goals include reducing **food waste by 50%** and promoting sustainable consumption patterns.
5. **Pollution Control:**
 - **Halve nutrient loss** and **reduce pesticide risks** to protect biodiversity.
6. **Regulatory Protection:**
 - **Compensatory afforestation** and protection policies for ecosystems outside formal sanctuaries.

7. Genetic Resources and Benefit Sharing:

- Promoting **fair and equitable sharing** of benefits from genetic resources and digital sequence information.

CBD and Kunming-Montreal Global Biodiversity Framework (KMGBF)

- **CBD Background:**

- Established under **UN Environment Programme (UNEP)** in 1993.
- Objectives: **Conservation, sustainable use, and fair benefit-sharing** of biodiversity.

- **KMGBF:**

- Adopted at **COP15 in 2022**, known as the "Paris Agreement for Nature".
- Contains **4 global goals** and **23 targets** to halt and reverse biodiversity loss by **2030**.
- **"30x30 Target"**: Aim to protect **30% of global land and marine areas** by 2030.

Financial Commitment

- **Past Expenditure:** India spent around **₹32,200 crore** on biodiversity protection from **2017-2022**.
- **Projected Annual Expenditure:** Estimated at **₹81,664.88 crore** per year through **2029-2030**.

Outcomes of COP16

1. Cali Fund:

- A voluntary fund mechanism to **share benefits** from the use of **digital sequence information (DSI)** on genetic resources.
- Firms encouraged to contribute **1% of profits or 0.1% of revenue**.

2. Indigenous and Local Communities Program:

Sets tasks to **ensure contributions** from indigenous peoples and local communities towards CBD objectives.

3. Guidelines on Invasive Species:

Proposes managing invasive species, including aspects like **e-commerce** and multi-criteria methodologies.

4. Biodiversity and Health: Global Action Plan on Biodiversity and Health

under the **One Health** approach to address zoonotic and non-communicable diseases.

5. Synthetic Biology:

Expert guidance on **synthetic biology's impacts** and potential benefits.

6. Risk Assessment Protocol:

New voluntary guidance for assessing risks posed by **living modified organisms (LMOs)** with engineered gene drives.

India's Biodiversity Conservation Framework

- **Biological Diversity Act of 2002** and **2023 Amendments** serve as the core of India's legal biodiversity protection framework.
- **Biodiversity Planning and Legislation:**
 - India committed to **strengthening environmental legislation** to prioritize ecosystem restoration and habitat connectivity.
 - NBSAP focuses on **ecosystem restoration, species recovery programs**, and sustainable management of marine areas.

19TH EAST ASIA SUMMIT

The **Prime Minister of India** attended the **19th East Asia Summit (EAS)** on **11 October 2024** in **Vientiane, Lao PDR**.

Key Highlights of the Summit

1. Indo-Pacific Vision and ASEAN Centrality:

- Emphasized **ASEAN's pivotal role** in shaping the **Indo-Pacific regional framework**, aligning with **India's Indo-Pacific Ocean's Initiative (IPOI)** and **ASEAN Outlook on the Indo-Pacific**.
- Advocated for a **development-oriented Indo-Pacific** approach over expansionist strategies to promote stability and prosperity.
- Highlighted India's commitment to a **free, open, inclusive, prosperous, and rules-based Indo-Pacific**, which is crucial for **regional peace and progress**.

2. India's Act East Policy:

- **EAS participation** is a cornerstone of **India's Act East Policy**, aimed at strengthening India's relations with **East Asian and Southeast Asian nations**.
- The policy underlines India's focus on **enhancing economic, cultural, and strategic cooperation** with the ASEAN region.
- 3. **Global and Regional Peace:**
 - Stressed on the **significant impact of conflicts** on the **Global South**.
 - Advocated for **peaceful conflict resolution** through **dialogue and diplomacy**, underlining that solutions are not achievable on battlefields.
 - Reiterated the importance of **adhering to the UN Convention on the Law of the Seas (UNCLOS)** to ensure **freedom of navigation** and **airspace** in the Indo-Pacific region.
 - Called for the creation of a **strong and effective Code of Conduct** in maritime activities to reduce regional tensions.
- 4. **Security Challenges:**
 - Emphasised the threats from **terrorism, cybersecurity, and maritime challenges**, and stressed the need for **collective global efforts** to address these issues.
 - Extended support for **ASEAN's Five-Point Consensus (5PC)** on Myanmar, with India supporting ongoing **humanitarian assistance**.
- 5. **Higher Education and Cultural Ties:**
 - Recalled support from EAS countries for the revival of **Nalanda University**.
 - Invited EAS nations to the **Heads of Higher Education Conclave** at Nalanda University, promoting educational and cultural ties in the region.
 - Acknowledged **Buddhism** as a cultural link with Southeast Asia, strengthening India's ties with countries like **Myanmar, Thailand, and Cambodia**.

About the East Asia Summit (EAS)

1. **Establishment:**
 - The EAS was established in **2005** as an **ASEAN-led initiative** to address strategic, political, and economic issues in the Indo-Pacific.
 - **ASEAN Centrality** is a key principle, and **ASEAN member states rotate the chair position annually**.
 - Originated from the **ASEAN Plus Three** (China, Japan, South Korea) summit held in **1997**.
2. **Members:**
 - **18 Member Countries:**
 - **10 ASEAN members:** Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.
 - **8 non-ASEAN members:** Australia, China, India, Japan, New Zealand, South Korea, Russia, and the United States.
3. **Objectives:**
 - Promote **peace, stability, and prosperity** in East Asia and the Indo-Pacific through **dialogue and collaboration**.
 - Operates on principles of **openness, inclusiveness, respect for international law**, and **ASEAN centrality**.
4. **Significance:**
 - **Economically:** EAS countries represent about **53% of the global population** and contribute to **60% of global GDP (2023)**.
 - **India-ASEAN Economic Ties:** India is ASEAN's **7th largest trading partner**, with ASEAN as India's **4th largest**. India-ASEAN trade surpassed **USD 130 billion** in the past decade.
 - **Strategically:** Supports major infrastructure and digital connectivity projects in the region, such as:
 - **India-Myanmar-Thailand Highway**
 - **Kaladan Multi-Modal Transit Transport**
 - **Culturally:** Strong Buddhist ties connect India with Southeast Asian nations; **Nalanda University** restoration fosters India's commitment to Buddhist heritage.

Importance of the East Asia Region

1. **Economic Growth:**
 - East Asia houses some of the world's **largest economies** like **China, Japan, and South Korea**, known as the global manufacturing hub.
2. **Diplomatic and Geopolitical Significance:**
 - The region is a **key diplomatic hotspot** involving major global powers like **the US, China, and Russia**, influencing global peace and stability.
 - **Great Power Rivalries:** East Asia plays a central role in **US-China geopolitical competition**.
3. **Strategic Waterways:**
 - Includes critical maritime routes such as the **South China Sea** and the **East China Sea**, which hold strategic and economic importance due to **territorial disputes** and **shipping lanes**.

CLASSICAL LANGUAGES OF INDIA

The **Union Cabinet** granted **classical language status** to **Marathi, Pali, Prakrit, Assamese, and Bengali**, bringing the total to **11 classical languages** in India.

Overview of Classical Languages in India

1. **Initial Six Classical Languages:**
 - India originally recognized **six classical languages**:
 - **Tamil** (declared in **2004**)
 - **Sanskrit** (**2005**)
 - **Kannada** and **Telugu** (**2008**)
 - **Malayalam** (**2013**)
 - **Odia** (**2014**)
2. **Newly Recognized Languages:**
 - **Marathi, Pali, Prakrit, Assamese, and Bengali** have now been included, increasing the list to **11 languages**.
3. **Constitutional Status:**
 - All **classical languages** are listed in the **Eighth Schedule** of the Indian Constitution, which consists of **22 recognized languages**.

Criteria for Classical Language Status

The **criteria** for designating a language as classical was established by the **Linguistic Experts Committee** and have been revised in **2005 and 2024**. Key benchmarks include:

1. **High Antiquity:** The language must have **early texts or recorded history** spanning **1,500–2,000 years**.
2. **Ancient Literature:** Possession of a **rich body of ancient literature** or texts considered valuable heritage by generations.
3. **Knowledge Texts:** Presence of **knowledge texts, including prose, poetry, epigraphical, and inscriptional evidence**.
4. **Distinct Evolution:** The language and literature should be distinct from its **modern form** or may have **discontinuity** with its later dialects or offshoots.

Benefits of Classical Language Status

1. **Educational and Scholarly Support:**
 - **Two annual international awards** are presented to eminent scholars in the classical language field:
 - **Presidential Award of Certificate of Honour**
 - **Maharshi Badrayan Samman Award**
2. **Research and Academic Development:**
 - **University Grants Commission (UGC)** is encouraged to create **Professional Chairs in Central Universities** and research institutions for classical languages.
 - Establishment of **Centers of Excellence** for classical language studies, with a notable center at the **Central Institute of Indian Languages (CIIL) in Mysore**.

Other Provisions for Language Promotion

1. Eighth Schedule:

- The **Eighth Schedule** of the Indian Constitution includes **22 languages** for official promotion and enrichment:
 - Includes **Assamese, Bengali, Hindi, Kannada, Kashmiri, Malayalam, Marathi, Nepali, Odia, Punjabi, Sanskrit, Tamil, Telugu, Urdu, and others.**

2. Constitutional Provisions:

- **Article 344(1)**: Mandates the President to establish a commission every five years for the progressive use of **Hindi**.
- **Article 351**: Requires the Union to **promote the spread of the Hindi language** and its use.

3. Government Initiatives:

- **Project ASMITA**: Targets the creation of **22,000 books** in various Indian languages over five years.
- **New Education Policy (NEP)**: Plans to convert **Sanskrit universities** into **multi-disciplinary institutions**.
- **Central Institute of Indian Languages (CIIL)**: Promotes classical languages and supports academic programs for languages like **Kannada, Telugu, Malayalam, and Odia**.

4. Central Sanskrit Universities Bill, 2019:

- Granted **central university status** to three Sanskrit institutions:
 - **Rashtriya Sanskrit Sansthan** (Delhi)
 - **Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth** (Delhi)
 - **Rashtriya Sanskrit Vidyapeeth** (Tirupati)

SC STRIKE DOWN 'CASTEIST' PROVISIONS IN INDIA'S PRISON MANUALS

Supreme Court of India declared **caste-based division of labour in prisons unconstitutional**.

Judges: The ruling was delivered by a **three-judge Bench** led by **Chief Justice Y. Chandrachud**.

Background of the Case

1. Public Interest Litigation (PIL):

- Filed by **journalist Sukanya Shantha**, challenging discriminatory provisions in **state prison manuals**.
- Focused on prison practices in **Uttar Pradesh, West Bengal, Odisha, Maharashtra, Tamil Nadu, and Kerala**.

2. Examples of Discrimination:

- **Tamil Nadu**: Segregation of prisoners by caste at **Palayamkottai Central Jail** (e.g., Thevars, Nadars, Pallars).
- **Rajasthan**: **Rajasthan Prison Rules, 1951** assigned latrine duties to the **Mehtar caste** (Scheduled Caste), while prisoners from higher castes worked in kitchens.

Colonial Legacy in Prison Manuals

1. Criminal Tribes Act, 1871:

- Enacted by the British to label certain communities as "**criminal tribes**," stereotyping them as "**born criminals**".
- **Repealed in 1952**; these groups were reclassified as **Denotified Tribes (DNTs)**, yet prison manuals continued to label them as habitual offenders.

2. Continuing Discrimination:

- **West Bengal Jail Code**: Excluded certain tribes from positions based on "natural tendency to escape."
- **Andhra Pradesh, Tamil Nadu, Kerala Manuals**: Broadly defined **habitual criminals**, stigmatising entire communities without convictions.

Violation of Fundamental Rights

1. **Article 14**: Right to Equality **Supreme Court** ruled that **caste-based classifications** in prison are unconstitutional unless aimed at uplifting marginalised communities.
2. **Article 15(1)**: Prohibition of Discrimination Assigning menial tasks to marginalised groups, while permitting higher castes to perform other roles, constitutes **direct discrimination**.
3. **Article 17**: Abolition of Untouchability Caste-based occupational roles were deemed as perpetuating **untouchability**, violating **Article 17** and the **Protection of Civil Rights Act, 1955**.

4. **Article 21:** Right to Life and Dignity The court ruled that **caste-based assignments** in prison infringe on prisoners' **right to dignity** and **rehabilitation**, violating **Article 21**.
5. **Article 23:** Prohibition of Forced Labour Assigning "degrading" labour based on caste was interpreted as **forced labour**, as defined in **People's Union for Democratic Rights v. Union of India (1982)**.

Supreme Court Directives

1. **Amendment of Prison Manuals:** All **States and Union Territories** were directed to revise prison manuals within **three months** to remove discriminatory practices.
2. **Removal of Caste Columns:** Ordered removal of **caste-based entries** from **prison registers** for both undertrials and convicts.
3. **Reform of Model Prison Manual and Act:**
 - **Model Prison Manual, 2016** and **Model Prisons and Correctional Services Act, 2023** flagged for discriminatory provisions.
 - Revisions mandated to ensure elimination of discriminatory terminology, including redefinitions of "habitual offenders."
4. **Monitoring Compliance:** **District legal services authorities** and **boards of visitors** to conduct regular inspections for compliance with directives.
5. **Instructions to Police:** Directed police to **avoid arbitrary arrests** of **denotified tribes**, in line with previous Supreme Court guidelines.

Additional Information: Denotified, Nomadic, and Semi-Nomadic Tribes (DNTs)

1. **Definition and Background:**
 - Known as "**Vimukt Jatis**," these communities were historically labelled as "born criminals" under the **Criminal Tribes Act, 1871**.
 - Officially denotified in **1952**, yet many continue to face **social ostracization**.
2. **Social and Economic Marginalisation:**
 - Most DNTs are included within **Scheduled Castes (SCs)**, **Scheduled Tribes (STs)**, and **Other Backward Classes (OBCs)**.
 - DNTs lack private land or home ownership and face persistent discrimination despite **constitutional protections**.

Constitutional and Legal Provisions Against Caste-Based Discrimination

1. **Article 14:** Ensures **equality before law**.
2. **Article 15:** Prohibits **discrimination** on grounds of **caste, religion, race, sex, and place of birth**.
3. **Article 17:** Abolishes **untouchability**.
4. **The Protection of Civil Rights Act, 1955:** Enforces Article 17.
5. **SC/ST (Prevention of Atrocities) Act, 1989:** Protects **Scheduled Castes and Scheduled Tribes** from discrimination and violence.

COLOMBO SECURITY CONCLAVE CHARTER

India, Maldives, Mauritius, and Sri Lanka signed a **Charter and MoU** to establish the **Colombo Security Conclave (CSC) Secretariat** in **Colombo, Sri Lanka**.

Absent Members: Bangladesh did not attend; Seychelles participated as an **observer**.

About Colombo Security Conclave (CSC)

1. **Origins:**
 - **Established:** Formed initially in **2011** as the **NSA Trilateral on Maritime Security** among **India, Sri Lanka, and Maldives**.
 - **Objective:** Aimed to enhance **maritime security** in the **Indian Ocean Region (IOR)**.
 - **Reactivation:** Revived and rebranded as **Colombo Security Conclave** in **2020**.
2. **Membership:**
 - **Founding Members:** India, Sri Lanka, and Maldives.

- **Additional Members:**
 - **Mauritius** joined in **2022**.
 - **Bangladesh** joined as a full member in **2024**.
 - **Seychelles** has **observer status**.
- 3. **Key Objectives:**
 - To **strengthen regional security** by addressing **transnational threats**.
 - **Core Goals:**
 - **Maritime Safety and Security:** Ensure safe maritime navigation and combat risks like **piracy** and **illegal fishing**.
 - **Counter-Terrorism and Radicalisation:** Coordinate to prevent **terrorism** and **radicalisation**.
 - **Combating Trafficking and Transnational Crime:** Disrupt **networks of trafficking** in drugs, arms, and human trafficking.
 - **Cybersecurity and Protection of Critical Infrastructure:** Protect essential infrastructure from **cyber threats**.
 - **Humanitarian Assistance and Disaster Relief (HADR):** Enhance regional cooperation in disaster response.
- 4. **CSC Secretariat: Location:** Established in **Colombo, Sri Lanka** as per the recent Charter and MoU.

Defence Exercises and Dialogues under CSC

1. **Defence Exercises:**
 - **Exercise Dosti XV** (November 2021): Conducted by **India, Sri Lanka, and Maldives** in the Maldives.
 - **Arabian Sea Exercise:** Joint exercise held under CSC involving **India, Sri Lanka, and Maldives**.
2. **Dialogues and Meetings:**
 - **First Dialogue:** Held in **2011** in the Maldives.
 - **Subsequent Meetings:** Conducted in **Sri Lanka (2013)** and **India (2014)**.
 - **Revival in 2020:** Re-branded as Colombo Security Conclave after a period of **dormancy** due to India-Maldives tensions and **China's influence** in the region.

Strategic Importance of the Indian Ocean for India

1. **Geopolitical Centrality:**
 - The **Indian Ocean** extends from **Africa to Australia**, positioning India near critical **maritime routes** and **choke points** like the **Straits of Malacca and Hormuz**.
2. **Trade and Economic Security:**
 - **Trade Routes:** Approximately **95% of India's trade by volume** and **68% by value** transit through the Indian Ocean.
 - **Energy Security:** **80% of India's crude oil imports** arrive via the Indian Ocean.
3. **Resource Wealth:**
 - **Minerals:** The Indian Ocean holds **40% of the world's offshore oil production** and is rich in **nickel, cobalt, and copper**.
 - **Fishing Grounds:** The Indian Ocean has extensive fishing grounds, supporting **14 million people** in India's fishing industry.
4. **Strategic Advantage:**
 - As a **resident power in the Indian Ocean**, India has a key role in **monitoring maritime security** and ensuring **freedom of navigation** in this crucial region.

USCIRF INTERNATIONAL RELIGIOUS FREEDOM REPORT

India has strongly **rejected the 2024 USCIRF Report**, which calls for India to be designated as a "**Country of Particular Concern**" (CPC) for religious freedom violations. India dismissed the report as **biased** and politically motivated.

About USCIRF

1. **Establishment:**
 - **Founded:** Created by the **International Religious Freedom Act (IRFA)** of 1998.
 - **Function:** USCIRF is an **independent, bipartisan U.S. federal agency** responsible for monitoring international religious freedom violations.
2. **Mandate and Functions:**
 - Reviews **religious freedom conditions globally** and makes **policy recommendations** to the U.S. **President, Secretary of State, and Congress**.
 - Uses **international standards** such as **Article 18 of the Universal Declaration of Human Rights (UDHR)**, which affirms the **right to freedom of thought, conscience, and religion**.
3. **Composition:**
 - **Commissioners:** Appointed by the **U.S. President and Congressional leaders**. Current position holding **Stephen Schneck**.
 - Supported by a **professional, nonpartisan staff**.
4. **Annual Report:**
 - Assesses **religious freedom violations worldwide**, identifying **Countries of Particular Concern (CPC)** for severe violations.
 - Provides **policy recommendations** and documents religious freedom conditions and incidents in various countries.

Key Points from the 2024 USCIRF Report on India

1. **Designation of India as a CPC:**
 - "**Country of Particular Concern**" (CPC) status recommended for India due to **systematic religious freedom violations**.
2. **Highlighted Issues:**
 - **Incidents of Violence:** Reports of **lynchings, assaults, and vigilante attacks** on religious minorities.
 - **Legal Discrimination:** Criticises laws like the **Citizenship (Amendment) Act (CAA)**, **anti-conversion laws**, and **cow slaughter laws** for allegedly targeting minorities.
 - **Arrests of Religious Leaders:** Arbitrary detentions of minority religious leaders.
 - **Destruction of Religious Sites:** Reports of **demolition** of places of worship.
 - **Hateful Rhetoric:** Accusations of **inflammatory statements** by officials, allegedly inciting **violence against minorities**.
3. **Response from India:**
 - India has dismissed the report, citing **agenda-driven biases** and questioning the USCIRF's political motivations.

Understanding Human Rights and UDHR

1. **Human Rights:**
 - Rights that are **inherent to all human beings** regardless of factors like **race, sex, nationality, or religion**.
 - Includes **right to life, liberty, freedom of expression, and freedom from torture and slavery**.
 - **Article 1 of UDHR:** Affirms that "**all human beings are born free and equal in dignity and rights**."
2. **Universal Declaration of Human Rights (UDHR):**
 - **Adopted:** 1948, post-World War II, as a common standard for **human rights** globally.
 - **Rights Included:** Covers **30 rights and freedoms** such as civil, political, economic, social, and cultural rights.
 - **Non-Binding:** Not a treaty, but its principles are widely integrated into national laws and have influenced **over 70 human rights treaties** globally.
 - **Global Influence:** Played a foundational role in various **freedom movements** and **decolonization** efforts.

3. Related Legal Provisions in India:

- **Articles 12-35** of the **Indian Constitution** provide various **Fundamental Rights**, including **Right to Equality (Article 14)**, **Right to Freedom (Article 19)**, **Right Against Exploitation (Article 23)**, and **Right to Freedom of Religion (Article 25)**.

International Human Rights Instruments Related to USCIRF's Mandate

1. **International Covenant on Civil and Political Rights (ICCPR):**
 - Works with the **UDHR** to form the **International Bill of Human Rights**.
 - Promotes **civil liberties**, including **freedom of religion** and **freedom of expression**.
2. **International Covenant on Economic, Social, and Cultural Rights (ICESCR):**
 - Complements **civil and political rights** with a focus on **social, economic, and cultural entitlements** like the **right to education** and **right to health**.
3. **Vienna Declaration and Programme of Action (1993):**
 - Reinforced the principles of **UDHR** and laid groundwork for **international cooperation in human rights protection**.

NATIONAL MARITIME HERITAGE COMPLEX

The **Union Cabinet** has approved the **National Maritime Heritage Complex (NMHC)** project at **Lothal, Gujarat**, a key initiative to showcase India's rich maritime heritage. This project aligns with India's efforts to promote cultural heritage and bolster its global maritime image.

Project Overview

1. **Project Details:**
 - **Aim:** To create the **world's largest maritime museum complex** dedicated to India's **4,500-year-old maritime legacy**.
 - **Location:** **Lothal, Gujarat**.
 - **Nodal Authority:** **Ministry of Ports, Shipping, and Waterways (MoPSW)**.
2. **Development and Funding:**
 - The **Directorate General of Lighthouses and Lightships (DGLL)** will fund the construction of a **Lighthouse Museum**, projected to be the **world's tallest**.
 - **Project Partners:** Managed by **Tata Projects Ltd**; designed by architect **Hafeez Contractor**.
3. **Key Features:**
 - **Phase 1A (Completion by 2025):** Focus on **replica of Lothal township**, aquatic gallery, jetty walkway, and **Indian Navy & Coast Guard gallery**.
 - **Phase 1B:** Construction of the **Lighthouse Museum** and eight specialised galleries with exhibits like **INS Nishank** and **Sea Harrier** aircraft.
 - **Phase 2:** Development of **Coastal State Pavilions** by respective **coastal states and union territories**.
 - **Total Land:** 400 acres allocated by the **Government of Gujarat**.
4. **Significance:**
 - Expected to **boost tourism**, generate **22,000 jobs**, and promote **regional economic growth**.
 - Serves as a **hub for cultural exchange, research, and learning** on maritime history.

About Lothal

1. **Historical Importance:**
 - **One of the oldest Indus Valley Civilization (IVC) sites** and the only known **port-town** from the period.
 - **Discovered:** In **1954** by **S.R. Rao**, Indian archaeologist.
2. **Location:**
 - **Situated:** Along the **Bhogava River**, a tributary of the **Sabarmati**, in Gujarat's **Bhal region**.
 - **Etymology:** "**Lothal**" derives from Gujarati words "**Loth**" (**dead**) and "**thal**" (**mound**), meaning "**mound of the dead**."
3. **Trade and Architecture:**
 - Known for its **dockyard** which is the **oldest artificial tidal dockyard** globally, used to facilitate trade with **Mesopotamia, Egypt, and Africa**.

- **Urban Planning:** Divided into two sections—**Citadel (Upper Town)** and **Lower Town**.
- 4. **Cultural Significance:**
 - Nominated for **UNESCO World Heritage Status** in **2014**.
 - Discovery of **bead factories, seals, pottery, and terracotta art** like animal figures with movable parts.

Related Indus Valley Civilization Sites

1. **Key Sites and Findings:**
 - **Harappa (Pakistan):** Granaries, stone symbols, mother goddess figure, wheat, barley, and mirror artefacts.
 - **Dholavira (Gujarat):** Known for its **water harnessing systems, reservoirs, and stadium**.
 - **Mohenjo-Daro (Pakistan):** Famous for the **bronze dancing girl, bearded priest sculpture, great bath, and granary**.
 - **Kalibangan (Rajasthan):** Bangle factory, toy carts, camel bones, decorated bricks.
 - **Banawali (Haryana):** Notable for **toy ploughs, barley grains, and radial street layout**.

MALDIVES' PRESIDENT STATE VISIT TO INDIA

Maldives President **Mohamed Muizzu** made a four-day state visit to **India**, marking a pivotal step towards mending ties and strengthening bilateral cooperation.

- **India's Assurance:** India reinforced its stance as the Maldives' "**first responder**" in times of crisis, underscoring the close ties between the two nations.

Strategic Importance of Maldives for India

1. **Geographical Proximity:**
 - Located approximately **70 nautical miles from Minicoy** and **300 nautical miles from India's west coast**.
 - Situated along critical **Indian Ocean sea-lanes**, particularly near the **8° N and 1½° N channels**, essential for global maritime trade.
2. **Key Maritime Neighbor:**
 - **Integral to India's "Neighbourhood First"** policy and the **SAGAR (Security and Growth for All in the Region)** vision.
 - **Geopolitical Stability:** Vital for ensuring a secure Indian Ocean and managing maritime challenges.
3. **Strategic Counterbalance to China:**
 - Part of **China's "String of Pearls" strategy** in South Asia.
 - Countering **China's Belt and Road Initiative (BRI)** projects in the region.

Areas of Cooperation

Political and Diplomatic Ties

- **Early Recognition:** India was one of the first countries to recognize **Maldives' independence in 1965** and established a mission in **Malé in 1972**.
- **Multilateral Support:** Both countries collaborate in **SAARC, UN, Commonwealth, NAM, and South Asia Free Trade Agreement (SAFTA)**.

Security and Defence Collaboration

- **Action Plan for Defence (2016):** Consolidates India's role as a **net security provider**.
- **Military Training:** India trains **70% of the Maldivian National Defence Force (MNDF)** personnel.
- **Joint Exercises:** **Exercise Ekuverin** focuses on counter-terrorism and interoperability.
- **Operation Cactus (1988):** India helped thwart a coup attempt in Maldives.
- **Other Operations:**
 - **Operation Neer:** Assistance during a water crisis in Malé (2014).
 - **COVID-19 Aid:** Rapid medical and vaccine support during the pandemic.

Economic and Trade Relations

- **Bilateral Trade:** India was the Maldives' **second-largest trade partner in 2022** and the largest in **2023**, with trade reaching **\$1 billion**.
- **Key Exports:** Essential items like **rice, wheat, sugar, onions, and construction materials**.

- **Financial Support:**
 - In 2022, India extended **\$100 million in financial aid** to support economic recovery.
 - **Currency Swap Agreement** with the Maldives Monetary Authority for up to **\$200 million**.

Development Cooperation and Infrastructure

- **Major Projects:**
 - **Indira Gandhi Memorial Hospital and Maldives Polytechnic** for healthcare and education.
 - **Greater Malé Connectivity Project (GMCP):** India's largest infrastructure project in the Maldives, connecting Malé with **Villingili, Gulhifalhu, and Thilafushi** islands.
 - **Gulhifalhu Port and Hulhumalé Cricket Stadium** projects under **\$800 million Exim Bank LoC**.

Recent Developments During President Muizzu's Visit

1. **Financial Assistance:** India provided **\$100 million in Treasury bills (T-bills)** and a **currency swap arrangement of \$400 million and ₹30 billion** to help stabilise the Maldivian economy.
2. **Comprehensive Economic and Maritime Security Partnership:** A new partnership framework focused on **economic growth, security, and people-centric development** in the Indian Ocean Region (IOR).
3. **Infrastructure Projects:** Prioritisation of **Greater Malé Connectivity Project (GMCP)** and **commercial port** development in Thilafushi.
 - Proposed **feasibility study** to connect Thilafushi and Giraavaru islands.
4. **Trade and Digital Cooperation:** Agreement to explore a **bilateral Free Trade Agreement (FTA)** and **local currency trade settlement**.
 - Launch of **India's Unified Payments Interface (UPI)** and **RuPay card** in Maldives to improve digital transactions.
5. **Defence and Security Cooperation:** Completion of **MNDF "Ekatha" harbour project** at Uthuru Thila Falhu, supported by India to enhance Maldivian defence capabilities.
6. **Health and Food Security Initiatives:** Establishment of **Jan Aushadhi Kendras** to provide affordable Indian generic medicines.
 - Collaboration on **agricultural economic zones** and **fish processing facilities** for food security.
7. **People-to-People and Cultural Linkages:** Agreement to open consulates in **Bengaluru (India)** and **Addu City (Maldives)**.
 - Establishment of **educational institutions, skill centres, and an ICCR Chair** at Maldives National University.

India's Multifaceted Strategy in the Indian Ocean Region

1. **Regional Cooperation:** **QUAD (India, US, Japan, Australia)** collaboration to ensure a **free and open Indo-Pacific**.
 - **Neighbourhood Diplomacy:** Strengthening ties with **Sri Lanka, Bangladesh, and Nepal** to counterbalance China's regional influence.
2. **Defence Modernization:** Enhancing **naval and air capabilities** and increasing **border security** to deter threats.
3. **Economic Initiatives:** Investments in **SAARC, BIMSTEC, and blue economy** to enhance regional economic connectivity and resilience.
4. **Infrastructure Alternatives to China's BRI:** Developing **connectivity projects** such as **ports, roads, and railways** in neighbouring countries to provide an alternative to Chinese investments.

INDIA ELIMINATES TRACHOMA AS A PUBLIC HEALTH PROBLEM

The **World Health Organization (WHO)** has declared **India trachoma-free**, recognizing the country for eliminating trachoma as a public health problem.

- India becomes the **third country in the WHO South-East Asia Region** to achieve this milestone, following **Nepal and Myanmar**.

What is Trachoma?

1. Definition:

- Trachoma is a **contagious bacterial eye infection** caused by **Chlamydia trachomatis**, leading to inflammation of the eyelids.
- Repeated infections can cause scarring, eyelash misalignment, and **eventually blindness** if untreated.

2. Transmission:

- Spread occurs through **direct or indirect contact** with infected eye or nose discharges, especially among children.
- High-risk factors include **poor sanitation, overcrowded living conditions, and limited access to clean water**.

3. Global Impact:

- According to WHO, **150 million people worldwide** are affected, and **6 million** are at risk of blindness.
- Major prevalence is in **rural regions of Africa, Asia, Central and South America**, with **Africa** being the most affected.

Global Efforts and WHO SAFE Strategy

- **SAFE Strategy by WHO:**
 - Surgery for trichiasis
 - Antibiotics like **azithromycin**
 - Facial cleanliness
 - Environmental improvements (better water and sanitation access)
- **WHO Alliance for Global Elimination of Trachoma:**
 - Launched in **1996** with a global elimination target by **2030**.
- By **October 2024, 20 countries** globally had eliminated trachoma as a public health problem.

Trachoma in India - Historical Overview

1. Early Challenges:

- Trachoma was one of the **leading causes of blindness** in India during the **1950s-60s**, especially in hyper-endemic regions.
- High prevalence was noted in **Punjab, Rajasthan, Western Uttar Pradesh, and Garhwal (Uttarakhand)**, with prevalence rates exceeding **50%**.

2. Decline in Prevalence:

- By **2005**, trachoma's contribution to blindness reduced to **4%**.
- A **2006-07 survey** showed a marked decline, prompting further governmental action.

Indian Government's Efforts to Eliminate Trachoma

1. National Trachoma Control Program (1963):

- Launched to tackle trachoma, later integrated with the **National Program for Control of Blindness (NPCB)**.

2. National Programme for Control of Blindness & Visual Impairment (NPCBVI):

- Launched in **1976** with a goal to reduce blindness prevalence to **0.3% by 2020**.
- The program incorporated WHO's **SAFE strategy** to ensure a holistic approach to trachoma prevention.

3. Infective Trachoma-Free Status (2017):

- India was declared free from infective trachoma in **2017**.
- Continuous surveillance for trachoma cases from **2019 to 2024** was conducted across all districts.

4. National Trachomatous Trichiasis (TT only) Survey (2021-2024):

- Conducted in **200 endemic districts** as per WHO's requirements for trachoma elimination.
- Findings were compiled by **NPCBVI** and submitted to WHO, resulting in the official declaration.

5. Role of Other Government Initiatives:

- **Swachh Bharat Mission** and **Jal Jeevan Mission** contributed significantly by improving sanitation and water access, crucial factors in reducing trachoma transmission.

Significance of WHO Declaring India Trachoma-Free

1. Public Health Achievement:

- Recognition from WHO places India among the countries with high public health standards, particularly in tackling **neglected tropical diseases (NTDs)**.

2. "Gold-Tier" Health Status:

- The elimination of trachoma reflects significant improvements in **sanitation, hygiene, and access to clean water** across the country.
- Highlights India's commitment to addressing public health challenges through sustained and strategic intervention.

3. Alignment with Global Health Targets:

- Achieving trachoma elimination aligns India with WHO's **2021–2030 NTD roadmap** targeting the eradication and control of **20 neglected diseases** by 2030.

Economic Impact

- **Global Economic Loss:** WHO estimates blindness and visual impairment due to trachoma cost between **\$2.9–5.3 billion annually**.
- India's trachoma elimination not only enhances public health but also reduces economic burdens associated with **loss of productivity and healthcare expenses** related to blindness.

Key Takeaways

- **India's Milestone:** Recognized as the third country in South-East Asia to eliminate trachoma as a public health issue.
- **Trachoma Control Timeline:** Understanding India's journey from the **1963 control program** to the **2024 WHO declaration** offers insights into sustained public health interventions.
- **Global Health Partnerships:** Emphasizes India's collaboration with **WHO** and alignment with international health targets, an important aspect of **India's global health diplomacy**.

CAN CLAIM JUVENILITY AT ANY STAGE: SC

The **Supreme Court** overturned a murder conviction upon discovering the accused was a juvenile at the time of the offence, establishing that juvenility claims can be made at any stage of legal proceedings, including post-conviction.

Case Background - State of Madhya Pradesh v. Ramji Lal Sharma & Another

- **Initial FIR:** Filed on **17th January 2002** in Bhind, Madhya Pradesh, under **Sections 302, 307, and 34 of IPC** and **Section 3(2)(v) of the SC/ST Act**.
- **Trial Outcome:** The **Special Judge** convicted the accused on **24th February 2006**; sentenced to life imprisonment and fined **₹5,000**.
- **Appeals:**
 - The **Madhya Pradesh High Court** acquitted the accused in **2018**.
 - The **Supreme Court** restored the conviction on **9th March 2022**.
- **Juvenility Claim:**
 - Accused, **Brijnandan alias Brajesh Sharma**, claimed juvenility after the Supreme Court's final verdict.
 - Discrepancies in birth dates: school records showed **4th October 1984**; Aadhaar showed **10th March 1984**.
 - Supreme Court directed the **Sessions Court, Bhind**, to verify the juvenility claim.
 - **Outcome:** The accused was proven to be **17 years, 3 months, and 13 days** old at the time of the offence, qualifying as a juvenile.

Supreme Court Observations

- **Juvenile Status Confirmed:** The Court acknowledged the accused's juvenile status and vacated the conviction.
- **Bail Bond Cancelled:** The bail bond was cancelled, as the applicant was on interim bail.

- **State's Objection Overruled:** The Court dismissed objections about the delay in filing the juvenility claim.
- **Precedent Set: Claims of juvenility** can be raised **even post-conviction**, ensuring juvenile justice access beyond procedural limitations.

Juvenile Justice (Care and Protection of Children) Act, 2015

- **Section 9:** Outlines procedure for handling juvenile claims:
 - **Non-Empowered Magistrates:**
 - Must record their opinion if the accused appears to be a child.
 - Transfer the accused and all records to the Juvenile Justice Board (JJB).
 - **Juvenility Claims:**
 - Claims can be raised at any legal stage.
 - Recognizes both current juvenility and juvenility at the time of offence.
 - **Court's Responsibility:**
 - Conduct a detailed inquiry.
 - Gather substantive evidence excluding affidavits.
 - Record findings on age with maximum accuracy.
 - **Procedural Flexibility:**
 - Juvenility claims are valid **even after case finalisation** or if the person turned 18 before the Act.
 - **Protective Custody:** Detained in a "place of safety" during the inquiry if required.
 - **Jurisdiction Transfer:** Regular courts must transfer jurisdiction to JJB once juvenility is confirmed.

Relevant Case Law

1. **Ashok v. State of Madhya Pradesh (2020):**
 - Supreme Court addressed juvenility claims raised for the first time post-conviction.
 - Discrepancies in birth records led to ordering a fresh juvenility inquiry.
2. **Rahul Kumar Yadav v. The State of Bihar (2024):**
 - Supreme Court held that the **Juvenile Justice Act, 2015** allows juvenility claims at any stage, even post-conviction.
 - Directed thorough inquiry by Additional Sessions Judge following the Juvenile Justice Act guidelines.
3. **Abuzar Hossain v. State of West Bengal (2012):**
 - Supreme Court emphasised **juvenility claims can be raised at any legal stage**.
 - Both documentary and oral evidence, including medical examination, can be considered in the absence of conclusive records.

Juvenile Justice (Care and Protection) Amendment Act, 2021

- **Non-Cognizable Offences:**
 - Offences against children with **imprisonment of 3-7 years** are classified as non-cognizable.
- **Adoption Procedures:**
 - District Magistrates empowered to issue adoption orders, expediting pending cases.

Juvenile Justice Act, 2015

- **Juvenile Trials:**
 - Enables trials of juveniles aged **16-18 years** as adults in cases involving heinous crimes.
- **Adoption:**
 - Streamlines adoption for orphans, surrendered, and abandoned children.
 - **Central Adoption Resource Authority (CARA)** designated as the adoption authority.
- **Child Care Institutions (CCI):**
 - Mandatory registration of all CCIs under the Act.

Concerns with the Juvenile Justice Amendment Act, 2021

- **Reclassification as Non-Cognizable:**
 - Crimes with **3-7 years imprisonment are now** classified as non-cognizable, hindering direct reporting.
 - Concerns arise as parents or child rights bodies generally report such cases, but procedural barriers may limit reporting.

Understanding Cognizable vs. Non-Cognizable Offences

- **Cognizable Offences:**
 - Police can **arrest without a warrant** and start an investigation without court approval.
 - Includes severe crimes like **murder, rape, and kidnapping**.
- **Non-Cognizable Offences:**
 - **Arrest requires a warrant**; investigation needs magistrate's approval.
 - Examples include **forgery, cheating, defamation**.

Statistics on Crimes Against Children in CCIs

- **NCRB Data:**
 - Crimes in CCIs rose by over **700% from 2017 to 2019**.
 - **2017:** 278 cases involving 328 child victims.
 - **2019:** 1,968 cases involving 2,699 child victims.

LIFE AND LEGACY OF RATAN TATA

Early Life and Education

- **Born:** 28th December 1937, Mumbai, to Naval Tata.
- **Family:** Great-grandson of Jamsetji Tata, founder of the Tata Group.
- **Education:** Studied at **Campion School** (Mumbai), **Cathedral & John Connon School**, and **Bishop Cotton School** (Shimla).
- **Higher Education:** **Cornell University** (Architecture and Structural Engineering, 1962); **Harvard Business School** (Advanced Management Program, 1975).

Career with Tata Group

- **Joined Tata Group:** 1962 as a trainee at Tata Steel in Jamshedpur.
- **Chairman of Tata Sons:** Assumed leadership in 1991, focusing on modernization, innovation, and global expansion.
- **Key Reforms:** Promoted young talent, enforced retirement age policies, and modernised management practices.

Major Acquisitions and Growth

1. **Tata Motors - Jaguar Land Rover (JLR):** Acquired **JLR** from Ford in 2008, marking Tata Motors' entry into the luxury automobile segment globally.
2. **Tata Steel - Corus Group:** Acquired **Corus** in 2007 for **\$12 billion**, making Tata Steel the world's fifth-largest steelmaker.
3. **Tata Consultancy Services (TCS):** TCS became a global IT leader, solidifying India's reputation as a tech hub.
4. **Tata Tea - Tetley:** Bought **Tetley Tea** in 2000 for £119 million, elevating Tata Tea to one of the world's largest tea producers.

Innovations and Notable Contributions

- **Tata Nano:** Launched in **2008**, aimed to be the world's cheapest car for affordable transportation in India.
- **Corporate Social Responsibility:** Reinforced Tata Group's commitment to CSR, supporting education, healthcare, agriculture, and cultural initiatives through **Tata Trusts**.

Philanthropic and Social Contributions

1. **Education:** Donations to **Cornell University** and **IITs**; funded scholarships and research.
2. **Healthcare:** Contributions to **cancer research** and **Tata Memorial Hospital** (Mumbai).
3. **Rural Development:** Supported projects in sustainable agriculture, water supply, and rural electricity.
4. **Disaster Relief:** Provided aid in national and international crises, including earthquakes and floods.

Recognitions and Honours

- **Padma Bhushan** (2000) and **Padma Vibhushan** (2008).
- **Honorary Titles:** **Order of Australia** (2023), **Knight Grand Cross of the Order of the British Empire** (GBE, 2014).
- **Global Accolades:** **Time** magazine's most influential list, **Assam Baibhav** (2021), **IIT Bombay** Honorary Doctor of Science (2008), **Citizen Award** from Singapore (2008).

UK-MAURITIUS TREATY ON CHAGOS ARCHIPELAGO, DIEGO GARCIA

The United Kingdom (UK) agreed to cede sovereignty of the Chagos Islands to Mauritius.

- **Diego Garcia Exception:** The UK retains sovereign rights over Diego Garcia for military purposes under a 99-year agreement.

Chagos Archipelago Overview

- **Location:** Located in the **Indian Ocean**, approximately **500 km south of the Maldives** and **1,600 km southwest of India**.
- **Composition:** Consists of **58 islands**, with **Diego Garcia** being the largest and most strategically significant.

Historical Background

- **Discovery:** Discovered by Portuguese navigators in the **16th century**.
- **French Colonization:** Colonized by France in **1715**, along with Mauritius and Réunion.
 - French brought enslaved laborers from **Madagascar** and **Mozambique** and later workers from **southern India**.
- **British Control:** Britain took control in **1814** after Napoleon's defeat.
- **1965 Creation of BIOT:** British Indian Ocean Territory (BIOT) was established, incorporating the Chagos Islands as a key component.

Significance of Chagos Archipelago

1. **Geostrategic Location:**
 - Situated centrally in the **Indian Ocean**, enabling monitoring of key shipping routes.
 - Essential for **UK-US military operations** in regions like the Middle East, Africa, and South Asia.
2. **UK-US Military Base on Diego Garcia:**
 - Established a **fully operational military base** in 1986.
 - Used as a **logistics and intelligence hub** and a launch site for **US-led operations** in Iraq and Afghanistan post-9/11.
3. **Environmental Significance:**
 - Home to one of the largest **coral atolls** and diverse **marine biodiversity**.
 - Pristine conditions make it valuable for **scientific research and conservation**.

Chagos Islands Dispute Timeline

1. **1965 - UK Declares Overseas Territory:**
 - Declared Chagos Islands an overseas territory; detached from Mauritius.
 - Granted Mauritius **3 million pounds** for the "detachment."
2. **US Military Base Agreement:**
 - **1966 Agreement** between UK and US established BIOT as a military zone, with Diego Garcia serving as a major base.
3. **Forced Depopulation (1968-1973):**
 - **2,000 Chagossians** forcibly removed by the UK and US for military installations on Diego Garcia.
4. **Mauritius' Legal Pursuits:**
 - **2015:** Mauritius challenged UK sovereignty in the **Permanent Court of Arbitration** at The Hague, advocating for Chagossians' rights and sovereignty.
 - **UN General Assembly Resolution (2017):** Supported Mauritius' claim and sought an advisory opinion from the **International Court of Justice (ICJ)**.

- **ICJ Ruling (2019):** Ordered the UK to return the Chagos Islands to Mauritius, stating the 1965 detachment was illegal.

Key Points of the UK-Mauritius Agreement (2024)

- **Sovereignty Transfer:** Mauritius gains sovereignty over the entire archipelago except Diego Garcia.
- **Resettlement Rights:** Mauritius allowed to resettle Chagossians on the islands, excluding Diego Garcia.
- **Trust Fund:** UK to establish a fund to support Chagossians affected by the forced displacement.

India's Stance and Involvement

- **Support for Mauritius:** India supported Mauritius' sovereignty claims at the **UNGA in 2019**.
- **Deepening Ties:** India has strengthened ties with Mauritius, given the strategic significance of the Indian Ocean.
- **Recent Development:** **India-built airstrip** and **jetty** inaugurated at **Agaléga** (dependency of Mauritius) in the Indian Ocean, indicating India's strategic interest in the region.

Significance of the Chagos Islands

- **Military and Strategic:** The UK-US base on Diego Garcia serves as a key military asset in **Indian Ocean security**, impacting **global defense** and **intelligence**.
- **Geopolitical Stability:** The agreement settles the longstanding colonial dispute and strengthens the legal framework for Diego Garcia's operations.
- **Environmental Preservation:** Conservation efforts for the Chagos Archipelago's diverse ecosystem will likely benefit from clearer governance under Mauritius.

NATIONAL HEALTH ACCOUNT (NHA) ESTIMATES 2020-21 AND 2021-22

The **Union Ministry of Health and Family Welfare** recently released the **8th and 9th editions** of the NHA estimates for fiscal years 2020-21 and 2021-22.

- The reports offer insights into **India's healthcare spending trends** and indicate progress toward **Universal Health Coverage (UHC)**.

Key Findings of NHA Estimates 2020-21 and 2021-22

1. **Increase in Government Health Expenditure (GHE)**
 - **GHE as a percentage of GDP** grew from **1.13% (2014-15)** to **1.84% (2021-22)**.
 - **Share of GHE in General Government Expenditure (GGE)** increased from **3.94% in 2014-15** to **6.12% in 2021-22**.
 - In **per capita terms**, GHE rose from **Rs. 1,108 in 2014-15** to **Rs. 3,169 in 2021-22**.
 - Between 2020-21 and 2021-22, **GHE grew by 37%**, largely due to the **COVID-19 response**.
2. **Decline in Out-of-Pocket Expenditure (OOPE)**
 - **OOPE as a share of Total Health Expenditure (THE)** decreased from **62.6% in 2014-15** to **39.4% in 2021-22**.
 - This reduction is attributed to **increased public health spending**, reducing the financial burden on households.
3. **Rising Government Share in Total Health Expenditure (THE)**
 - The **government's contribution to THE** increased from **29% in 2014-15** to **48% in 2021-22**.
 - This shift reflects growing reliance on **public health services** and reduced financial strain on individuals.
4. **Total Health Expenditure (THE) Overview**
 - **THE for 2020-21:** **Rs. 7,39,327 crores**, accounting for **3.73% of GDP**.
 - **THE for 2021-22:** **Rs. 9,04,461 crores**, constituting **3.83% of GDP**.
5. **Growth in Social Security Expenditure (SSE) on Health**
 - **SSE share in THE** rose from **5.7% in 2014-15** to **8.7% in 2021-22**.
 - This increase includes **government-funded health insurance**, **medical reimbursements for government employees**, and **social health insurance programs**.
 - Enhanced SSE directly lowers **out-of-pocket healthcare expenses** for individuals.

6. Current Health Expenditure (CHE) Distribution

- **2020-21:** Union Government's share in CHE was **Rs. 81,772 crores (12.33%)**; State Governments' contribution was **Rs. 1,38,944 crores (20.94%)**.
- **2021-22:** Union Government's share rose to **Rs. 1,25,854 crores (15.94%)**; State contributions increased to **Rs. 1,71,952 crores (21.77%)**.

About National Health Accounts (NHA)

- **Prepared by:** National Health Accounts Technical Secretariat (NHATS) under the Union Ministry of Health & Family Welfare.
- **Framework:** Based on **System of Health Accounts (SHA) 2011** guidelines by the **World Health Organization (WHO)** for standardised tracking of health expenditures.
- **Purpose:** Tracks financial flows in India's health system, providing a clear view of fund allocation and usage in healthcare.
- **Updates:** NHA estimates are regularly revised to align with **changes in healthcare policies and programs** in India.

10 YEARS OF SWACHH BHARAT MISSION

2nd October 2014 by the **Ministry of Drinking Water and Sanitation** and the **Ministry of Housing and Urban Affairs**.

- **Aim:** To make India **Open Defecation Free (ODF)** by improving sanitation infrastructure, constructing toilets, and establishing waste management systems.
- **Phases:** Divided into **SBM-Gramin** (rural areas) and **SBM-Urban** (urban centres).

Key Components and Goals

1. **ODF Status:** A region is ODF if no individual is observed defecating in the open at any time of the day.
2. **Targeted Infrastructure:**
 - Financial support for **household toilets** and **community toilets** in underserved areas.
 - **Solid and Liquid Waste Management** in both rural and urban areas.
3. **Behavioural Change Initiatives:**
 - Nationwide awareness campaigns involving **private sector** and **NGOs** to shift mindsets on the importance of sanitation and hygiene.

Achievements

1. **Toilet Construction:**
 - Over **10 crore toilets** built across India.
 - Nearly **6 lakh villages** declared **ODF** by 2nd October 2019.
2. **SBM 2.0 (2021):**
 - Launched to **sustain ODF status** and focus on **waste management** (solid, liquid, plastic).
 - Urban India's **4,715 Urban Local Bodies (ULBs)** have achieved complete ODF status.
3. **Impact on Health:**
 - The **World Health Organization (WHO)** noted a **300,000 reduction in diarrhoea-related deaths** in 2019 compared to 2014 due to SBM.
 - Reductions in **malaria, stillbirths, and low birth weights** among children under five.
4. **Economic Benefits:**
 - Households in ODF villages report **annual health savings** of approximately **Rs. 50,000**.
5. **Safety and Dignity for Women:**
 - **93% of women** feel safer after household toilet installations (**UNICEF Report**).
6. **Groundwater Contamination:**
 - In ODF villages, groundwater contamination risks reduced by **12.7 times**.

About Swachh Bharat Mission

Launch and Objectives:

- **Initiation:** Launched on **2nd October 2014** by the Government of India.

- **Primary Goal:** To make India **Open Defecation Free (ODF)** by constructing individual and community toilets and implementing waste management systems.

Achievements:

- **Toilet Construction:** Over **10 crore (100 million)** toilets built nationwide.
- **ODF Villages:** Approximately **6 lakh (600,000)** villages declared ODF by **2nd October 2019**.
- **Urban ODF Status:** All **4,715 Urban Local Bodies (ULBs)** achieved ODF status.
- **SBM 2.0 Launch:** In **2021**, the government initiated SBM 2.0, focusing on creating garbage-free cities, managing faecal sludge, addressing plastic waste, and improving greywater management.

Health and Environmental Impact:

- **Reduction in Diseases:** Significant decline in diarrhoea-related fatalities, with **300,000 fewer deaths** in 2019 compared to 2014, attributed to enhanced sanitation facilities.
- **Women's Safety:** **93%** of women reported feeling safer after installing toilets in their homes.
- **Economic Benefits:** Households in ODF villages reported annual health-related savings averaging **Rs 50,000**.
- **Environmental Improvement:** In ODF-declared villages, the risk of groundwater contamination due to human waste is **12.7 times lower**.

Global Recognition:

- **International Acknowledgment:** Leaders from global organisations, including the **World Health Organization (WHO)** and the **World Bank**, have praised the mission's impact on improving sanitation and public health in India.

US-INDIA NUCLEAR COOPERATION AND SMALL MODULAR REACTORS

India and the US are revitalizing their **civil nuclear deal** focusing on **Small Modular Reactors (SMRs)**.

- **Holtec International's SMR-300** is central to this collaboration, with potential plans to utilize India's existing coal plant sites for SMR deployment, supporting India's **clean energy transition**.

What is SMR-300?

- **SMR-300:** A pressurized **light-water reactor** that uses **low-enriched uranium** to generate at least **300 MW of electricity**.
- **Compact Design:** Requires less land, ideal for **coal plant sites** in India.
- **Clean Energy Support:** Key to India's **clean energy goals**; SMRs provide a **low-carbon energy source** to meet growing demands, especially for sectors like **AI and data centers**.
- India aims to position itself as a significant player in the **global nuclear market**, competing with **Russia and China**.

Challenges in Implementing SMR-300 in India

- **Civil Liability for Nuclear Damage Act, 2010:** Assigns **liability to equipment manufacturers** for nuclear accidents, deterring foreign suppliers.
- **Export Regulations:** The **US Atomic Energy Act, 1954** restricts US firms from manufacturing nuclear components in India.
- **Legislative Limitations:** Lack of flexibility to amend **liability laws**, impacting collaboration with foreign entities.

Future Prospects

- **US-India SMR Collaboration** could strengthen ties, addressing both nations' **technological constraints** and **labor costs**.

India-US Nuclear Deal (123 Agreement)

- **Signed in 2008** following a 2005 statement by **PM Manmohan Singh** and **US President George W. Bush**.
- **Key Shift:** Marked a significant change in US policy, enabling **nuclear trade** with India despite its **non-signatory status** to the **Nuclear Non-Proliferation Treaty (NPT)**.

- **Provisions:**
 - Allows **US companies** to supply **nuclear fuel and technology** to India's civilian nuclear program.
 - India agreed to **IAEA inspections** of its civilian nuclear facilities.
 - **Benefits:**
 - Access to **US dual-use nuclear technology** for enrichment and reprocessing.
 - **Enhanced energy security** to meet India's growing energy needs.

About Small Modular Reactors (SMRs)

- **Definition:** **Advanced nuclear reactors** offering enhanced safety and efficiency with capacities from **<30 MWe to 300 MWe**.
- **Key Features:**
 - **Small:** Compact, deployable in varied locations.
 - **Modular:** Factory-assembled, easy to transport.
 - **Reactor:** Generates heat via **nuclear fission** for electricity.
- **Global Status:**
 - Over **80 SMR designs** in development; **two operational** (Russia and China).
 - Types:
 - **Land-based Water-Cooled SMRs** (PWRs, BWRs)
 - **Marine-Based Water-Cooled SMRs**
 - **High-Temperature Gas-Cooled Reactors (HTGRs)**
 - **Liquid Metal-Cooled SMRs** (Sodium, Lead)
 - **Molten Salt Reactors (MSRs)**
 - **Microreactors** (Power up to 10 MWe)

Operational SMRs:

- **Akademik Lomonosov** (floating power station, Russia)
- **High-Temperature Gas-Cooled SMR** (China)

Benefits and Challenges of SMRs

Benefits:

- **Scalability:** Can be adjusted to meet power needs.
- **Infrequent Refueling:** Refueling intervals of **3 to 7 years**, some up to **30 years**.
- **Passive Safety:** Uses physics to cool reactors automatically.
- **Renewable Integration:** Stabilizes grid, complements renewable sources.

Additional Important Information

- **Department of Atomic Energy (DAE):**
 - Established under the **Prime Minister** in **1954**, responsible for India's atomic energy policies.
 - Operates under the **Atomic Energy Act**.
- **Atomic Energy Commission (AEC):**
 - Formed in **1948** and reorganized under the **Department of Atomic Energy** in **1958**.
 - Key policymaking body for nuclear energy.
- **International Atomic Energy Agency (IAEA):**
 - **Established** in **1957** with **175 member countries** (India a founding member).
 - **Headquartered** in **Vienna, Austria**.
 - Promotes peaceful nuclear energy use while ensuring **non-proliferation** compliance.

HIRAKUD DAM RENOVATIONS

The **six-decade-old canal system** connected to **Hirakud Dam** in **Odisha** is set for **major renovation** to modernize irrigation infrastructure, minimize **water wastage**, and **boost agricultural productivity**.

Hirakud Dam

- **Location:** Built across the **Mahanadi River**, about **15 km** from **Sambalpur**, Odisha.
- **Construction:** Proposed by **M. Visveswaraya** in **1937** after recurring **floods in Mahanadi**. Construction occurred between **1952-53**, and it was inaugurated by **Prime Minister Jawaharlal Nehru** in **1957**.
- **Significance:**
 - It is the **longest major earthen dam** globally, stretching **25.79 km**.
 - Forms the **Hirakud Reservoir** (also called **Hirakud Lake**), one of **Asia's largest artificial lakes**, covering **746 sq. km** and declared a **Ramsar Site** in **2021**.

Purpose and Benefits of Hirakud Dam

- **Irrigation:**
 - Provides irrigation to **1,55,635 hectares** during **Kharif** season and **1,08,385 hectares** during **Rabi** season.
 - **Additional 436,000 hectares** of land in the **Mahanadi delta** also benefit from the water released by the dam.
- **Power Generation:** The dam has an installed capacity of **359.8 MW** for hydroelectric power.
- **Flood Control:** Provides **flood protection** to **9,500 sq. km** of the Mahanadi delta area.

Unique Features

- **Cattle Island:**
 - Located at an extreme point of **Hirakud Reservoir**.
 - Home to **wild cattle**, believed to be descendants of cattle abandoned during the dam's construction in the 1950s.

Key Objectives and Features of the Canal Renovation

- **Need for Renovation:**
 - Aging canal infrastructure, including **Bargarh and Sasan main canals**, is in disrepair.
 - **Earthen canals** cause **significant water loss**, reducing irrigation efficiency.
 - Water seepage has degraded some farmland, posing challenges to local farmers.
- **Renovation Plan:**
 - **Conversion of earthen canals to concrete** for improved water distribution.
 - Improved water availability in **tail-end areas** to benefit more farmers.
- **Impact on Farmers:** Aims to close the gap between **irrigation potential** and actual use, enhancing crop yields and supporting local agriculture.

Mahanadi River: Key Facts

- **Origin:** The river originates from the **Sihawa range of hills** in **Dhamtari district, Chhattisgarh**.
- **Mouth:** Flows into the **Bay of Bengal** at **False Point, Jagatsinghpur, Odisha**.
- **Tributaries:**
 - **Left Bank:** Seonath, Mand, Ib, Hasdeo, Kelo.
 - **Right Bank:** Ong, Jonk, Telen.
- **Basin Geography:**
 - Encompasses **Chhattisgarh and Odisha**, with minor portions in **Jharkhand, Maharashtra, and Madhya Pradesh**.
 - Bounded by **Central India hills** (north), **Eastern Ghats** (south and east), and **Maikala range** (west).
- **Significance:** Among India's major rivers, the **Mahanadi** ranks second in **water potential** and **flood-producing capacity** among peninsular rivers, after the **Godavari**.

Additional Context

- **Importance of SMRs in the Region:** India's **Net-Zero by 2070** target emphasizes the need for **sustainable energy**.
- **Ramsar Status of Hirakud Lake:** Recognition as a **Ramsar Site** highlights **biodiversity conservation** efforts in India.

3 YEARS OF AYUSHMAN BHARAT DIGITAL MISSION

The **Ayushman Bharat Digital Mission (ABDM)** recently marked its **third anniversary on 27th September 2024**, commemorating its transformative role in **digital healthcare accessibility, efficiency, and transparency** across India.

About Ayushman Bharat Digital Mission (ABDM)

- **Launch:** Initiated on **27th September 2021** by the **National Health Authority (NHA)** under the **Ministry of Health and Family Welfare**.
- **Objective:** To establish a **comprehensive digital health ecosystem** in India, enabling **interoperable digital health records** and improving healthcare accessibility.

Key Features of ABDM

- **Unique Health Identifier (ABHA ID):**
 - Over **67 crore ABHA IDs** issued, providing unique digital health IDs for secure health data management.
- **Healthcare Professionals Registry (HPR):**
 - Repository of healthcare professionals, covering both **modern and traditional systems**.
 - Registered **4.7 lakh healthcare professionals** to enhance digital health connectivity.
- **Health Facility Registries (HFR):**
 - Repository of **1.3 lakh healthcare facilities**, including **17,000 private facilities** (hospitals, clinics, labs, pharmacies).
- **Health Information Exchange and Consent Manager (HIE-CM):**
 - Empowers citizens to securely access and share health records based on **informed consent**.
- **Unified Health Interface (UHI):**
 - Facilitates **health service discovery and delivery**, enhancing healthcare accessibility.
- **National Health Claims Exchange (HCX):**
 - Simplifies the insurance payment process, standardising claims.
- **Data Privacy and Security:**
 - Aligns with the **Digital Personal Data Protection Act, 2023**, ensuring the **security and confidentiality** of health information.

Key Initiatives

- **Scan and Share OPD Registration:**
 - QR-code-based service that reduces waiting time by allowing **patients to scan and share demographic details**.
 - Over **5 crore OPD tokens** issued, saving **2.5 crore man-hours**.
- **Digital Health Incentive Scheme (DHIS):**
 - Financial incentives to promote digital health adoption; offers up to **₹4 crore** for participation.
- **Microsites for Private Sector Adoption:**
 - Over **106 microsites operationalized** to address ABDM adoption challenges in the private sector.
- **End-to-End ABDM Adoption Pilot:**
 - A pilot to digitise **131 healthcare facilities** nationwide, establishing benchmarks for digitization.
- **New Portals:**
 - **National Medical Register (NMC)** and **National Dental Register (NDR)** for streamlined healthcare data management.

Achievements of ABDM

- **Integration:** Over **236 private entities**, including **labs, pharmacies, and digital solution providers**, integrated with ABDM to support interoperability.
- **Healthcare Facilities and Professionals:**
 - **3.3 lakh health facilities** registered in the **National Healthcare Providers Registry (NHPR)**.
- **Health Records Linked:** Over **42 crore health records** linked to ABHA IDs, facilitating seamless medical history access and improved healthcare delivery.
- **Public Sector Contribution:** Major institutions like **AIIMS Delhi** and **AIIMS Bhopal** contributed significantly through **Scan and Share OPD registrations**.

Additional Context

- **National Health Authority (NHA):**
 - Established on **2nd January 2019** under the **Society Registration Act, 1860**.
 - Responsible for implementing **public health insurance schemes**.

FUNCTIONALITY AND ESSENTIALLY TEST FOR INPUT TAX CREDIT (ITC)

The **Supreme Court** recently ruled that **real estate companies** can claim **Input Tax Credit (ITC)** on construction costs for commercial buildings used for **renting or leasing**.

Input Tax Credit (ITC) Under GST

- **Definition:** ITC allows businesses to **claim credit for GST paid on inputs** (purchases) to offset the tax on **output** (sales), ensuring tax is levied only on **value addition**.
- **Mechanism:**
 - Businesses pay GST on purchases (input) and collect GST on sales (output).
 - **Net tax payable** = Output Tax - Input Tax Credit.

Example:

- Input tax: ₹10,000, Output tax: ₹25,000.
- Net tax payable = ₹15,000.

Eligibility for Input Tax Credit (ITC)

1. **For Capital Goods:** GST-registered entities can claim ITC on **capital goods** like machinery, equipment, and furniture used in business.
2. **For Raw Materials:** ITC can be claimed on **raw materials** (e.g., chemicals, metals) used in production or service provision.
3. **For Input Services:** ITC applicable for services used in business, e.g., **transport, telecommunication, banking**.

Non-Eligible ITC Claims

- ITC cannot be claimed for:
 - **Employee travel expenses** during leave.
 - **Personal-use goods/services**.
 - **CSR-related expenses**.
 - Purchases by entities under the **GST Composition Scheme**.

Types of GST

- **State GST (SGST):** Levied by the state on intra-state transactions.
- **Central GST (CGST):** Levied by the central government on intra-state transactions.
- **Integrated GST (IGST):** Levied on inter-state transactions.

Supreme Court Ruling on ITC for Real Estate

- **Case:** Chief Commissioner of Central GST vs. Safari Retreats, 2024.
 - Allowed ITC on **construction costs** for commercial buildings meant for **leasing or renting**.
 - **"Plant and Machinery" Clarification:** Buildings used for renting may qualify as **plant and machinery** under **Section 17(5)(d)** of CGST Act, 2017.
 - **Case-Specific Assessment:** ITC eligibility for a building depends on its role in the business.

Functionality and Essentially Tests for ITC

- **Functionality Test:** Determines if a building supports business operations like **plant or machinery**.
- **Essentiality Test:** ITC applicable only on **essential goods and services** for property construction (e.g., **cement, steel**).

Goods and Services Tax (GST) Overview

- **GST:** Introduced on **1st July 2017** under the **101st Constitution Amendment Act, 2016** with the vision of **One Nation, One Tax**.
- **Tax Slabs:** 0%, 5%, 12%, 18%, and 28%.
- **GST Council:** Established under **Article 279A(1)** to guide GST implementation.

Avoiding Cascading Effect with ITC

- **Pre-GST:** Separate central and state taxes (like excise duty and VAT) led to **tax on tax**.
- **Post-GST:** Central and state taxes merged, enabling ITC across the supply chain, ensuring tax is only on **value addition**.

Reversal of Input Tax Credit

- **Definition: Reversal of ITC** occurs when previously claimed ITC is cancelled and added back to tax liability.
- **Conditions for Reversal:**
 - **Non-payment of invoices (180 days):** ITC is reversed if invoices are unpaid beyond 180 days.
 - **Credit note issued to Input Service Distributor (ISD):** Reduces previously claimed ITC.
 - **Personal Use:** If inputs or capital goods are partially used for personal purposes, ITC must be reversed proportionally.

Rule 86A in GST Rules (Introduced 2019)

- **Rule 86A:** Allows GST officers to **restrict ITC access** if obtained unlawfully, requiring **material evidence** to prove fraudulent or ineligible ITC claims.

Updates in ITC Regulations

- **Union Budget 2021:** Amended **CGST Rule 36(4)**, removing 5% additional ITC over GSTR-2B.
- **Budget 2022:** Restricted ITC to only those invoices appearing in **GSTR-2B** as reported by the supplier.

INDIA'S BALANCE OF PAYMENT

Balance of Payments (BoP) records all **economic transactions** between a country's residents and the rest of the world over a specific period (typically a year).

- Includes **transactions by government bodies, firms, and individuals** involving **goods, services, income, transfers, foreign investments, and loans**.
- Also referred to as the **Balance of International Payments**.

Importance of Balance of Payments

- Reflects a country's **financial and economic status**.
- Acts as an **indicator** for currency appreciation or depreciation.
- Assists governments in formulating **fiscal and trade policies**.

Components of Balance of Payments

1. Current Account:

- Records **goods, services, and investment income flows**.
- **Subcomponents:**
 - **Balance of Trade (BoT):** Exports minus imports of goods.
 - **Net Services:** Export minus import of services.
 - **Net Primary Income (Factor Income):** Earnings from foreign investments minus payments to foreign investors.
 - **Net Cash Transfers.**
- **Formula:** Current Account = Trade Gap + Net Current Transfers + Net Income Abroad.

- **Trade Gap:** Exports - Imports.
- **Surplus** implies the country is a net lender; **Deficit** implies a net borrower.
- 2. **Capital Account:**
 - Tracks **international sales and purchases of assets** (e.g., money, stocks, bonds).
 - Includes **net external borrowings, Foreign Direct Investment (FDI), and portfolio investments**.
 - **Deficit** shows more money leaving the economy, **Surplus** shows more money entering.
- 3. **Errors and Omissions:**
 - Addresses **discrepancies** when BoP does not balance.
 - Reflects inaccuracies in recording international transactions.
- 4. **Foreign Exchange Reserves:**
 - Includes **RBI's foreign currency assets** and **Special Drawing Rights (SDR)** balances.
 - Changes in foreign exchange reserves adjust any BoP surplus or deficit.

Balance of Trade vs. Balance of Payments

- **Balance of Trade (BoT):**
 - Only includes **goods transactions**.
 - Provides a **partial view** of economic status.
 - Component of the **Current Account**.
- **Balance of Payments (BoP):**
 - Includes **goods, services, capital transfers**.
 - Provides a **complete view** of a country's economic position.
 - Consists of **Current and Capital Accounts**.

Disequilibrium in Balance of Payments

- Occurs when the sum of the **Current and Capital Accounts** does not equal zero (excluding foreign reserves).
- **Deficit** or **Surplus** adjustments are made through **foreign reserves**.

Causes of Disequilibrium in BoP

1. **Economic Factors:**
 - Imbalance between **exports and imports**.
 - **Large development expenditures**.
 - **High domestic prices** leading to increased imports.
 - **Cyclical fluctuations** like recession.
 - **Inflation or deflation**.
2. **Political Factors:**
 - **High population growth** in poor countries.
 - **Political instability** and **capital outflows**.
3. **Social Factors:**
 - Changes in **fashions, tastes, and preferences** impacting imports and exports.

Types of BoP Disequilibrium

- **Temporary Disequilibrium:** Short-term, due to events like crop failure.
- **Fundamental Disequilibrium:** Persistent deficit or surplus, often requiring significant adjustment.
- **Cyclical Disequilibrium:** Caused by **business cycle fluctuations**.
- **Structural Disequilibrium:** Due to **long-term structural changes** like technology shifts.

Measures to Address BoP Imbalances

1. **Automatic Correction:**
 - Adjustments occur through **market forces** (exchange rates, prices, and capital flows).
2. **Deliberate Measures:**
 - **Monetary Contraction:** Reduces money supply to control aggregate demand.
 - **Devaluation:** Lowers the currency's value to boost exports and reduce imports.
 - **Exchange Control:** Government controls foreign exchange reserves to regulate imports.
3. **Trade Measures:**

- **Export Promotion:** Reducing export duties and providing incentives.
- **Import Control:** Raising import duties, quotas, or licensing.
- 4. **Miscellaneous Measures:**
 - **Foreign Loans:** Borrowing from foreign institutions to address deficits.
 - **Foreign Investments:** Encouraging capital inflows through incentives.
 - **Tourism Development:** Increasing foreign exchange earnings.
 - **Import Substitution:** Promoting domestic production of previously imported goods.

Balance of Payments Crisis (BoP Crisis)

- Also known as a **currency crisis**, occurs when a country cannot pay for essential imports or service its debts.
- Often follows **large capital inflows**, leading to rapid economic growth and eventual capital outflows due to debt concerns.
- Results in a **currency depreciation** and economic strain as reserves deplete.

Global Institutions in Tackling BoP Crisis

1. **IMF (International Monetary Fund):**
 - Provides **financial assistance** and promotes **exchange rate stability**.
 - Loans offer countries time to implement necessary adjustments for sustainable growth.
2. **BRICS Contingent Reserve Arrangement (CRA):**
 - Offers **short-term liquidity support** through currency swaps among BRICS nations to address BoP crises.

ANNUAL SURVEY OF INDUSTRIES REPORT 2022-23

The **Ministry of Statistics and Programme Implementation (MoSPI)** recently released the **Annual Survey of Industries (ASI)** for 2022-23, providing detailed insights into India's organized manufacturing sector.

About the Annual Survey of Industries (ASI)

- **Primary Data Source:** ASI is the principal source for **industrial statistics** in India's organized manufacturing sector.
- **Conducting Agency:** Conducted by the **National Statistical Office (NSO)** under MoSPI, ASI has been conducted annually since **1959**.
- **Legal Framework:** Operates under the **Collection of Statistics Act, 2008**, amended in 2017.

Objectives:

1. Estimate the **manufacturing sector's contribution** to the **Gross Domestic Product (GDP)**.
2. Analyze the **structure of industries** by type.
3. Identify **factors influencing industrial growth** to support policymaking.

Scope and Coverage of ASI

- **Factories Registered** under the **Factories Act, 1948:**
 - Factories with **10+ workers using power**.
 - Factories with **20+ workers without power**.
- **Special Coverage:** Includes **bidi and cigar manufacturing** under the **Bidi and Cigar Workers (Conditions of Employment) Act, 1966**.
- **Electricity Undertakings:** Covers electricity generation, transmission, and distribution entities not registered with the Central Electricity Authority (CEA).

Key Findings from ASI 2022-23

Employment Growth in Manufacturing

- **7.5% Increase** in employment from **1.72 crore in 2021-22** to **1.84 crore in 2022-23**, marking the highest growth in 12 years.
- **Top Sectors by Employment:** Food products, textiles, basic metals, apparel, motor vehicles.

Gross Value Added (GVA) and Output Growth

- **Manufacturing GVA** grew by **7.3%**, reaching **₹21.97 lakh crore** in 2022-23.

- **Output Growth:** Total industrial output increased by **21.5%**, reflecting post-Covid recovery.

Main Drivers of Manufacturing Growth

- **Key Sectors:** Basic metals, coke and refined petroleum products, food products, chemicals, motor vehicles.
- These sectors contributed **58% of the total manufacturing output**.

Regional Performance

- **Top 5 States by GVA:** Maharashtra, Gujarat, Tamil Nadu, Karnataka, Uttar Pradesh.
- **Top 5 States by Employment:** Tamil Nadu, Maharashtra, Gujarat, Uttar Pradesh, Karnataka.

Capital Investment

- **Gross Fixed Capital Formation (GFCF)** surged by **77%** to **₹5.85 lakh crore** in 2022-23.
- **Net Fixed Capital Formation** increased by **781.6%**, indicating renewed capital investment.

Factory Growth Post-Pandemic

- Number of factories rose from **2.49 lakh in 2021-22** to **2.53 lakh in 2022-23**, showing full recovery from Covid-19.

Informal Sector Employment Decline

- Employment in the **informal sector** decreased by **1.5% (16.45 lakh)**, highlighting a shift towards formal employment.

Average Salaries

- **Average emolument per person** rose by **6.3%** to **₹3.46 lakh** in 2022-23.

Gross Value Added (GVA) and Net Value Added (NVA)

- **GVA:** Measures the **value added to goods and services** during production. Calculated by **GVA = GDP + subsidies on products - taxes on products**.
- **NVA:** Obtained by **deducting depreciation** from GVA, showing the net value after accounting for capital consumption.

INDIA AND UZBEKISTAN SIGN BILATERAL INVESTMENT TREATY IN TASHKENT

India and Uzbekistan recently signed a **Bilateral Investment Treaty (BIT)** in Tashkent to strengthen economic cooperation and provide a conducive investment environment.

Overview of the Bilateral Investment Treaty (BIT) with Uzbekistan

- **Purpose:** The BIT aims to boost **bilateral investments** and support businesses by ensuring **investor protection** and establishing a stable investment climate.
- **Investor Confidence:** Provides **non-discriminatory treatment** and an **independent forum for dispute settlement** through arbitration.
- **Key Provisions:**
 - **National Treatment:** Equal treatment of foreign investors in line with domestic investors.
 - **Protection from Expropriation:** Limits on the host country's ability to take over investments except for public purposes with fair compensation.
 - **Dispute Settlement Mechanism:** Investors must first exhaust local legal options before pursuing international arbitration.
 - **Transparency and Transfers:** Ensures clarity in regulatory measures and smooth fund transfers between countries.

Key Features of India's 2015 Model BIT

- **National Treatment:** Equal treatment for foreign investors as domestic investors, except in designated sectors.
- **Protection Standards:** Includes **Fair and Equitable Treatment** and **Full Protection and Security** under domestic laws.
- **Dispute Resolution:** Requires investors to resolve disputes within the host country's legal system before seeking arbitration.
- **Non-Discriminatory Treatment:** Ensures protection against discrimination and guarantees **Most-Favored-Nation (MFN)** treatment.

Historical Background and Evolution of India's BITs

- **First BIT Signed in 1994:** With the UK, initiating India's BIT framework to foster foreign investments.
- **2016 BIT Model Revision:** In response to **financial strain** from arbitration awards against India, the government revised BIT terms, reducing treaty obligations.
- **Challenges with 2016 BIT:**
 - **Narrow Definition of Investment:** Only direct investments are covered; portfolio investments and intangible rights are excluded.
 - **Domestic Remedy Exhaustion:** Requires investors to use domestic remedies before international arbitration, limiting investor confidence.
 - **Wide Discretion for Host State:** Host states can exempt certain disputes, like those involving taxation, from arbitration, providing broad discretionary power.

India-Uzbekistan Relations: Key Aspects of Cooperation

1. **Historical Ties:**
 - Relations date back to the **Silk Road**, with strong cultural and trade exchanges.
 - After Uzbekistan's **independence in 1991**, India strengthened its relationship with the country.
2. **Political Relations:**
 - **Strategic Partnership:** Established in 2018 during Uzbek President Shavkat Mirziyoyev's visit to India.
 - **Multilateral Collaboration:** Engagement through **UN, SCO, and India-Central Asia Dialogue**.
3. **Economic and Trade Relations:**
 - **Bilateral Trade Volume:** Approximately **USD 756.6 million** with major Indian exports including **pharmaceuticals, machinery, and textiles**.
 - **Pharmaceutical Presence:** Indian pharmaceutical companies supply about **25% of Uzbekistan's pharmaceuticals**.
 - **Information Technology:** Uzbekistan seeks India's expertise in IT and digital governance.
 - **Preferential Trade Agreement (PTA):** India and Uzbekistan are exploring a PTA to enhance trade ties.
4. **Defense Cooperation:**
 - **Joint Military Exercises:** Engage in exercises like **DUSTLIK** focused on counter-terrorism.
 - **Defense Training:** India provides military training to Uzbekistan's armed forces.
 - **Security Cooperation:** Collaborate on counter-terrorism, anti-radicalization, and intelligence sharing, especially in the context of Afghan security concerns.
5. **Cultural Relations:**
 - **Cultural Exchanges:** Focus on arts, music, dance, yoga; **Hindi language and Bollywood** are popular in Uzbekistan.
 - **People-to-People Ties:** Interest in traditional Indian medicine systems like **Ayurveda and Yoga**.
6. **Connectivity and Transportation:**
 - **Chabahar Port:** India, Uzbekistan, and Iran aim to use Chabahar Port for enhanced connectivity, bypassing Pakistan.
 - **International North-South Transport Corridor (INSTC):** Uzbekistan has shown interest in this corridor to reduce trade costs with Central Asia.
7. **Energy and Renewable Resources:**
 - **Natural Resources:** Uzbekistan's resources and India's interest in energy collaboration, including natural gas and renewables.
 - **Nuclear Cooperation:** Signed a civil nuclear cooperation agreement for peaceful energy uses.
8. **Developmental Assistance:**
 - **Lines of Credit:** India supports Uzbek infrastructure projects, such as road construction and water treatment.
 - **Capacity Building Programs:** Training for Uzbek professionals in health, IT, and agriculture under the **ITEC program**.

Government Initiatives for Investment Promotion in India

1. **Production-Linked Incentive (PLI) Scheme:** Incentives to encourage domestic manufacturing.
2. **Start-Up India and Atmanirbhar Bharat:** To support self-reliance and innovation.
3. **Ease of Doing Business Reforms:** Simplifying regulatory processes to attract investments.

4. **FDI Liberalization:** To attract foreign investors and enhance economic growth.

Recent Developments

1. **India-Central Asia Summit (2022):** India hosted the summit, focusing on trade, security, and energy collaboration with Central Asia.
2. **Common Security Concerns:** India and Uzbekistan share concerns over **terrorism in Afghanistan** and emphasize the importance of preventing the use of Afghan territory for terrorist activities.

57TH MEETING OF NATIONAL MISSION FOR CLEAN GANGA

Focus on **conservation and cleanliness** of the Ganga River, along with Information, Education, and Communication (IEC) activities for **Mahakumbh 2025**.

- **Sewage Treatment Plants (STPs):** Approved for **Katihar and Supaul in Bihar** and **Aligarh, Uttar Pradesh**. STPs remove sewage contaminants, making water safe for release into natural bodies.

Key Points

- **Monitoring of STPs:** Implementation of an **Online Continuous Effluent Monitoring System (OCEMS)** to strengthen real-time monitoring of STPs in the Ganga Basin.
- **IEC Activities for Mahakumbh 2025:** Approval for IEC-based projects, including 'Paint My City' and mural art, aimed at increasing awareness and beautification for Mahakumbh.
- **PIAS Project:** Restructuring of manpower in the **Pollution Inventory, Assessment, and Surveillance (PIAS)** project to improve monitoring of industrial pollution; led by the **Central Pollution Control Board (CPCB)**.
- **Smart Laboratory for Clean River (SLCR) Project:** Approved to rejuvenate small rivers across the country.
- **Turtle and Gharial Conservation:** Conservation breeding program for **freshwater turtles and gharials** at Kukrail Gharial Rehabilitation Center in **Lucknow, Uttar Pradesh**.

National Mission for Clean Ganga (NMCG)

- **Established:** Registered on **August 12, 2011** under the Societies Registration Act, 1860.
- **Legal Framework:** Originally under the **National Ganga River Basin Authority (NGRBA)** via the **Environment (Protection) Act, 1986**; post-2016, it operates under the **National Ganga Council**.
- **Management Structure:**
 - **Governing Council:** Oversees policy and direction.
 - **Executive Committee:** Authorized to approve projects up to **₹1,000 crore**.
- **Five-Tier Ganga Rejuvenation Structure:** Encompasses **national, state, and district levels** for comprehensive Ganga management.
 - **National Ganga Council:** Chaired by the **Prime Minister**.
 - **Empowered Task Force (ETF):** Led by the **Union Minister of Jal Shakti**.
 - **State and District Ganga Committees:** Operate at respective levels for localized action.

Namami Gange Programme

- **Launched:** 2014, with an outlay of **₹20,000 crore**.
- **Objective:** To address **pollution abatement, conservation, and rejuvenation** of the Ganga River.
- **Key Pillars:**
 - **Sewage Treatment Infrastructure**
 - **River-Surface Cleaning**
 - **Afforestation**
 - **Monitoring Industrial Effluents**
 - **River-Front Development**
 - **Biodiversity Conservation**
 - **Public Awareness Initiatives**
 - **Ganga Gram:** Model village development along the river.
- **Integrated Mission Approach:** Connects **economic growth with ecological sustainability**, emphasizing clean energy, biodiversity, and wetland development.

Case Study: Thames River Restoration

- **Background:** Declared “biologically dead” in the **1950s** due to pollution.
- **Great Stink of 1858:** Extreme pollution led to the construction of a sewage network.
- **Restoration Efforts:** Since the **1970s**, improved regulations and sewage treatment revived the river's ecosystem.
- **Outcome:** Installation of oxygenators and other measures restored **dissolved oxygen levels**, enhancing aquatic health.

National Ganga Council (NGC)

- **Established:** Formed in **2016** under the **Environment (Protection) Act, 1986**.
- **Objective:** To rejuvenate, protect, and manage the Ganga and its tributaries through coordinated action.
- **Governance:** Chaired by the **Prime Minister** and includes **Chief Ministers** from states through which the Ganga flows, like Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, and West Bengal.

Challenges in the Namami Gange Programme

- **Data and Monitoring Gaps:** As of December 2023, **457 projects** were initiated, but only **280** were completed. Functionality data for STPs is limited.
- **Neglect of Tributaries:** Tributaries like **Gomti** are often ignored, impacting broader cleanup efforts.
- **Industrial Pollution:** Industries, such as **Kanpur's tanneries**, continue to discharge untreated waste, leading to harmful contaminants in the river.
- **Financial Mismanagement:** The **CAG** reported low fund utilization (8-63%) between **2014-2017** and raised concerns over excessive spending on media.
- **Environmental Threats:** **Illegal sand mining** and riverfront development projects affect the river's natural flow.

PARAM RUDRA SUPERCOMPUTER

Prime Minister Narendra Modi inaugurated **three PARAM Rudra supercomputers** worth **₹130 crore**, enhancing India's high-performance computing (HPC) infrastructure.

- **Locations:** These supercomputers are stationed at **Pune (Giant Metre Radio Telescope - GMRT)**, **Delhi (Inter-University Accelerator Centre - IUAC)**, and **Kolkata (S.N. Bose Centre)**.
 - **Pune:** GMRT will utilize the supercomputer for astronomical research, including studies on **Fast Radio Bursts (FRBs)**.
 - **Delhi:** IUAC will leverage the system for advancements in **material science** and **atomic physics**.
 - **Kolkata:** S.N. Bose Centre will drive research in **physics, cosmology, and earth sciences**.

High-Performance Computing (HPC) System for Weather and Climate Research

- **Purpose:** Aimed at enhancing weather predictions, these HPC systems, named '**Arka**' and '**Arunika**', are stationed at:
 - **Indian Institute of Tropical Meteorology (IITM)** in Pune
 - **National Center for Medium Range Weather Forecast (NCMRWF)** in Noida
- **Significance:** These systems will improve **forecasting accuracy** for **tropical cyclones, thunderstorms, heat waves, droughts**, and other critical weather phenomena.

National Supercomputing Mission (NSM) Overview

- **Launch Year:** **2015**
- **Objective:** To establish an indigenous supercomputing infrastructure in India for socio-economic development.
- **Implementing Bodies:**
 - **Ministry of Electronics and Information Technology (MeitY)**
 - **Department of Science and Technology (DST)**
 - **Centre for Development of Advanced Computing (C-DAC)**, Pune, and **Indian Institute of Science (IISc)**, Bengaluru.
- **Mission Phases:**

- **Phase I:** Assembly of supercomputers.
- **Phase II:** Partial manufacturing of supercomputer components within India.
- **Phase III:** Complete indigenous design and development of supercomputers.

PARAM Series and Indigenous Development

- **Indigenous Technology:** NSM focuses on developing **processors, networking solutions, storage, and software** indigenously.
- **PARAM Series:** Includes notable supercomputers like **PARAM Rudra, PARAM Siddhi, PARAM Yuva-II**, and more, installed in institutions across India.

India's Supercomputers and Global Context

- **Notable Indian Supercomputers:**
 - **PARAM Rudra:** Deployed recently under NSM in **Pune, Delhi, and Kolkata**.
 - **Pratyush and Mihir:** For **weather forecasting**, located at **IITM Pune** and **NCMRWF Noida**.
 - **PARAM Siddhi:** Ranked **62nd globally** in 2020 among the **Top 500 most powerful supercomputers**.
- **Global Ranking:**
 - **Frontier (USA):** World's fastest supercomputer (as of 2023) with performance over **1 exaFLOP**.
 - **Fugaku (Japan):** Among the top supercomputers, widely used for applications like **drug discovery** and **climate modeling**.

National Knowledge Network (NKN)

- **Purpose:** NKN is a robust Indian network supporting supercomputing connectivity, essential for linking **academia, research centers, MSMEs, and startups**.
- **Digital and Make in India:** NSM supports these initiatives, promoting India's presence in **quantum computing, AI, and big data** technologies.

Key Facts about India's First Supercomputers

- **First Supercomputer:** **PARAM 8000**
- **PARAM Shivay:** The first supercomputer assembled indigenously, installed at **IIT (BHU)**.
- **Other PARAM Systems:** **PARAM Shakti** at **IIT Kharagpur**, **PARAM Brahma** at **IISER Pune**, and **PARAM Sanganak** at **IIT Kanpur**.

70TH NATIONAL FILM AWARDS (2022) AND DADASAHEB PHALKE AWARD

Key Awards at the 70th National Film Awards (2022)

- **Best Feature Film:** **Aattam (The Play)** – Directed by Anand Ekarshi
- **Best Non-Feature Film:** **Ayena (Mirror)** – Directed by Siddhant Sarin
- **Best Popular Film Providing Wholesome Entertainment:** **Kantara**
- **Best Actor:** Rishab Shetty for **Kantara**
- **Best Actress:** Nithya Menen for **Thiruchitrambalam**
- **Best Supporting Actor:** Pavan Raj Malhotra
- **Best Supporting Actress:** Neena Gupta
- **Best Film in AVGC (Animation, Visual Effects, Gaming & Comics):** **BRAHMASTRA-PART 1: SHIVA**
- **Best Book on Cinema:** "Kishore Kumar: The Ultimate Biography" – Authored by Anirudha Bhattacharjee & Parthiv Dhar
- **Dadasaheb Phalke Lifetime Achievement Award:** Mithun Chakraborty

National Film Awards

- **Established:** **1954**
- **Administration:** Managed by the **Directorate of Film Festivals** (Indian Government) since **1973**, along with the **International Film Festival of India** and **Indian Panorama**.
- **Awards Given:** Winners receive a **medallion, cash prize, and certificate of merit**.

- **Main Awards:**
 - **Swarna Kamal (Golden Lotus Award):** Given in **6 categories** under Feature Films, **2 categories** under Non-Feature Films, and **2 categories** under Best Writing on Cinema.
 - **Rajat Kamal (Silver Lotus Award):** Presented in all other categories.

Categories of National Film Awards

- **Feature Films:**
 - Encourages films with **high aesthetic and technical standards**.
 - Promotes **regional culture** and **national unity**.
 - **Swarna Kamal (Golden Lotus) Categories** include:
 - Best Feature Film, Best Direction, Best Children's Film, Best Popular Film Providing Wholesome Entertainment, Best Film in AVGC.
- **Non-Feature Films:**
 - Focuses on films with **social relevance** and **technical quality**.
 - **Swarna Kamal** categories include Best Non-Feature Film and Best Debut Film of a Director.
 - Encourages **cultural diversity** appreciation.
- **Best Writing on Cinema:**
 - Supports critical studies on **cinema as an art form**.
 - **Swarna Kamal** awards include Best Book on Cinema and Best Film Critic.
 - Promotes **information sharing** through books, reviews, and articles.

Eligibility Criteria for the National Film Awards

- **Production:** Films must be produced in **India** with **Indian nationals** as director and crew.
- **Certification:** Films must be certified by the **Central Board of Film Certification** between **1st January and 31st December** of each year.
- **Entry:** Over **100 films** participate in both **Feature and Non-Feature** categories.
- **Jury Independence:** Juries are appointed by the **Directorate of Film Festivals** and operate independently of government influence.

Dadasaheb Phalke Award

- **Significance:** Part of the **National Film Awards**, it is among the most prestigious awards in Indian cinema.
- **Named After:** **Dhundiraj Govind Phalke**, who made India's first film, **Raja Harishchandra** (1913).
- **Purpose:** Honors individuals for their **outstanding contributions** to the development of Indian cinema.
- **Instituted:** **1969**
- **Award Components:**
 - **Swarna Kamal (Golden Lotus)**
 - **Cash prize of Rs 10 lakh**
 - **Certificate, silk roll, and shawl**
- **Presentation:** The **President of India** presents the award.
- **First Recipient:** **Devika Rani Roerich** in **1969**

CYBER CRIME COORDINATION CENTRE (I4C)

The **I4C** recently issued an alert about **illegal payment gateways** using mule bank accounts created by **transnational cybercriminals** for money laundering.

- **Establishment:** Set up under the **Ministry of Home Affairs (MHA)** to combat cybercrime in a structured and comprehensive manner.
- **Location:** New Delhi

Key Functions of I4C

- **Nodal Role:** Serves as the **central agency** in the fight against cybercrime.
- **Research and Development:** Identifies **research problems** and supports the development of **new technologies** and **forensic tools** in collaboration with national and international research institutions.
- **Prevent Extremism and Terrorism:** Works to prevent the misuse of cyberspace by **extremist and terrorist groups**.
- **Cyber Law Updates:** Recommends **cyber law amendments** to keep pace with rapid technological advancements.
- **International Cooperation:** Coordinates activities related to **Mutual Legal Assistance Treaties (MLAT)** with other countries, in consultation with the MHA's nodal authority.

Components of I4C

1. **National Cybercrime Threat Analytics Unit (TAU):** Regular reporting of cybercrime threats.
2. **National Cybercrime Reporting Portal (NCRP):** A **24x7 platform** for citizens to report cybercrimes from anywhere in India.
3. **National Cybercrime Training Centre (NCTC):** Trains government and state law enforcement officials.
4. **National Cybercrime Research and Innovation Centre:** Focuses on creating **indigenous tools** to prevent cybercrime.
5. **Platform for Joint Cyber Crime Coordination Team:** Shares data on cybercrime methods among **states and UTs**.
6. **Cybercrime Ecosystem Management Unit:** Raises **mass awareness** on **cyber hygiene**.
7. **National Cybercrime Forensic Laboratory (Investigation) Ecosystem:** Assists law enforcement agencies in **cyber forensics investigations**.

I4C's Collaborative Efforts

- **Partnerships:** Brings together **academia, industry, public, and government** to address cybercrime through **prevention, detection, investigation, and prosecution**.
- **Cyber Crime Volunteers Program:** Mobilizes citizens with a passion for national service to support the fight against cybercrime.

Additional Initiatives by I4C

- **Citizen Financial Cyber Fraud Reporting and Management System:** Enables **real-time reporting** of financial cyber frauds, helping to prevent the diversion of funds by cybercriminals.
- **National Toll-Free Helpline – 1930:** Provides assistance to citizens for reporting online cyber complaints.
- **CyberDost:** A **social media handle** to spread **cyber awareness** among citizens.

Mutual Legal Assistance Treaty (MLAT)

- **Definition:** A system through which **countries assist each other** in the **prevention, investigation, and prosecution of crimes**, ensuring criminals cannot evade justice by hiding evidence in other countries.
- **Central Authority:** **Ministry of Home Affairs (MHA)** is the main authority in India for handling MLAT requests in criminal cases.
- **Legal Provision:** **Section 105 of the Criminal Procedure Code (CrPC)** outlines reciprocal agreements between **India and foreign governments** for serving **summons, warrants, and judicial processes**.

ISRO'S FIRST ANALOGUE SPACE MISSION

Recent Launch: Indian Space Research Organisation (ISRO) launched its first **analogue space mission** in **Leh**, marking a significant step in India's space exploration journey.

About Analogue Space Missions

- **Definition:** Analogue space missions are **simulated missions on Earth** designed to replicate the environment and challenges of actual space exploration.
- **Purpose:**
 - To **test technologies** and **study human behavior** in preparation for future **long-duration space missions**.
 - Simulates the **living conditions** astronauts might encounter on missions to places like the **Moon, Mars**, or **asteroids**.
- **Objectives:**
 - Replicates **conditions of living** in a habitat beyond Earth.
 - Addresses the **physical and psychological effects** of **isolation and confinement** essential for long-term space travel.
 - Creates a controlled environment for **studying the impact of deep-space missions** on humans.

India's Analogue Space Mission

- **Collaboration:** Jointly conducted by **ISRO's Human Spaceflight Centre, AAKA Space Studio, University of Ladakh, IIT Bombay**, and supported by the **Ladakh Autonomous Hill Development Council**.
- **Activities:**
 - Participants will engage in tasks to **simulate life on another planet**, such as **habitat design testing, resource management**, and **psychological studies** on the effects of isolation on crew members.

Significance of Analogue Missions

- **Testing Platform:** Offers a ground platform to test **new technologies** and **operational concepts** related to space habitats.
- **System Evaluations:** Assesses systems for **habitat design, life support, in-situ resource utilisation (ISRU)**, and **crew health monitoring**.
- **Supports India's Space Goals:** Contributes to **India's human spaceflight ambitions** and interplanetary missions, aligning with projects like **Gaganyaan**, which aims to send Indian astronauts into space.

Examples of Analogue Missions

- **NASA's NEEMO (NASA Extreme Environment Mission Operations):** Conducted **underwater** to replicate **microgravity**, allowing crews to practice tasks similar to those in space.
- **SIRIUS Program (UAE):** Focuses on understanding the **psychological effects of isolation** during extended missions and includes **international scientific collaborations**.
- **Arctic Mars Analogue Svalbard Expedition (AMASE):** Utilizes the **harsh conditions of the Svalbard archipelago** to test equipment and procedures for potential **Mars exploration**.

NAMO DRONE DIDI SCHEME

The Government has released the **Operational Guidelines of Namo Drone Didi Scheme**.

- According to the guidelines, the Scheme will be governed at the **Central level by the Empowered Committee** of the Secretaries from important departments.
- **Objective:** The scheme is designed to equip **14,500 selected Women Self-Help Groups (SHGs)** with drones from **2024-25 to 2025-26** to offer **rental services** for agriculture, specifically for **applying liquid fertilizers and pesticides**.

Operational Guidelines

- **Central Governance:**

- **Empowered Committee of Secretaries** from key departments will oversee the scheme at the central level, including:
 - **Department of Agriculture & Farmers' Welfare**
 - **Department of Rural Development**
 - **Department of Fertilizers**
 - **Ministry of Civil Aviation**
 - **Ministry of Women and Child Development**
- **Implementation and Monitoring:**
 - **Implementation and Monitoring Committee** led by the **Additional Secretary, Department of Rural Development** will ensure effective planning, monitoring, and execution with representatives from all stakeholders.
- **Financial Assistance:**
 - **Central Financial Assistance** of **80%** of the total cost of the drone and associated equipment, up to a maximum of **₹8 lakh**, will be provided to Women SHGs.
 - **Remaining Funds: Cluster Level Federations (CLFs) or SHGs** may apply for loans under the **National Agriculture Infrastructure Financing Facility (AIF)** for the remaining amount (procurement cost minus subsidy).
 - **Interest Subsidy: 3% interest subvention** on AIF loans will be offered to CLFs/SHGs.
 - CLFs/SHGs can also explore **alternative funding options** under other schemes of the **Ministry of Rural Development**.
- **Training:**
 - **One member** from each SHG will undergo a **15-day training program** covering both **drone pilot certification** and additional **agricultural training** for nutrient and pesticide application.
- **State-Level Implementation:**
 - **Lead Fertilizer Companies (LFCs)**, designated for each state, will serve as the **implementing agencies**.
 - LFCs will manage the **procurement of drones** through a fair process, and the **ownership** of the drones will be assigned to **CLFs of SHGs or individual SHGs**.
- **State Support:**
 - **State Departments of Agriculture** and **State Mission Directors of DAY-NRLM** will work closely to ensure effective implementation, with the help of a **State Level Committee**.
- **Monitoring System:**
 - The scheme will use a **Drone Portal**, an **IT-based Management Information System (MIS)**, to monitor **service delivery, funds flow, and disbursement**, providing end-to-end software support.

CRUISE BHARAT MISSION

The **Union Minister of Ports, Shipping & Waterways** launched the '**Cruise Bharat Mission**' from **Mumbai port** to enhance cruise tourism in India.

- **Objective of Cruise Bharat Mission:** To **double cruise passenger traffic within five years (by 2029)** and significantly boost cruise tourism in India.
- **Mission Duration and Phases:**
 - **Duration: 1 October 2024 to 31 March 2029**
 - **Phase 1 (01.10.2024 – 30.09.2025):** Focuses on **studies, master planning, and alliances** with neighboring countries. Emphasis on **modernising cruise terminals, marinas, and destinations** to enhance cruise circuits.
 - **Phase 2 (01.10.2025 – 31.03.2027):** Develops **new cruise terminals, marinas, and destinations** to expand high-potential cruise locations and circuits.
 - **Phase 3 (01.04.2027 – 31.03.2029):** Aims at **integrating cruise circuits across the Indian Subcontinent**, advancing the cruise ecosystem while continuing infrastructure development.

Strategic Pillars:

1. **Sustainable Infrastructure & Capital:**

- Addresses **infrastructure gaps** by developing **world-class terminals, marinas, water aerodromes, and heliports**.
- Incorporates **digitalisation** (e.g., **facial recognition**) and **decarbonisation** (e.g., **shore power**).
- Key Initiatives:
 - Creation of a **National Cruise Infrastructure Masterplan 2047**.
 - Establishing a **Special Purpose Vehicle (SPV)** under the **Indian Ports Association (IPA)** for cruise development.
 - Setting up a **Cruise Development Fund**.
- 2. **Operations Including Technology-Enabled:**
 - Streamlines **embarkation, disembarkation, and destination visits**.
 - Focus on **digital solutions** like **e-clearance systems** and **e-visa facilities**.
- 3. **Cruise Promotion & Circuit Integration:**
 - Focuses on **international marketing and investment**.
 - Links **cruise circuits** and hosts events like the "**Cruise India Summit**".
 - Forms alliances with **neighboring countries**.
- 4. **Regulatory, Fiscal & Financial Policy:**
 - Develops **fiscal and financial policies** specifically for cruise tourism.
 - Focus on **tax regulations, cruise laws**, and the creation of a **National Cruise Tourism Policy**.
- 5. **Capacity Building and Economic Research:**
 - Emphasizes **skill development** and establishing a **Centre of Excellence for cruise-related economic research**.
 - Formulates **National Occupational Standards** to promote **youth employment** in the cruise sector.
- **Nodal Ministry: Ministry of Ports, Shipping & Waterways**
- **Indian Ports Association (IPA):**
- Established in **1966** under the **Societies Registration Act**.
- Its purpose is to **promote the growth and development of Major Ports** under the Ministry of Ports, Shipping and Waterways.

ELECTION SYMBOLS IN INDIA

The **Supreme Court** recently dismissed a petition by the **Bharat Rashtra Samiti (BRS)** challenging the allotment of election symbols to two other parties, stating that voters could differentiate between similar symbols.

- **Allotment of Election Symbols in India:**
 - The **Election Commission of India (ECI)** is responsible for the **allotment of symbols**.
 - Allotment is governed by **The Election Symbols (Reservation and Allotment) Order, 1968**.
- **Purpose of the 1968 Symbols Order:**
 - Enables the **specification, reservation, choice, and allotment of symbols** in **Parliamentary and Assembly Constituencies**.
 - Recognizes political parties and grants exclusive symbols to **recognized parties**.
 - Symbols can be classified as either **reserved** (for recognized parties) or **free** (for other candidates).
- **Recognition of Political Parties:**
 - A party can be recognized as a **national** or **state party** if it meets specified criteria set by the ECI.
 - The ECI publishes **lists of parties and symbols** in the **Gazette of India**.
 - **Current Statistics:** **6 national parties, 26 state parties, and 2,597 registered unrecognised parties**.
- **Symbols for Unrecognised Registered Parties:**
 - Candidates from **unrecognised registered parties** select from **free, non-exclusive symbols**.
 - These parties lack the required vote percentage for recognized status.
 - Once elections are over, symbols chosen by these parties return to the pool of free symbols.
- **Symbols for Recognised Parties:**
 - **Recognised national and state parties** have exclusive symbols reserved for them.

- **Preference of Election Symbols:**
 - **Unregistered parties** submit a **list of ten preferred symbols** from the **free symbols list**.
 - Parties can propose up to **three new symbols** with designs, subject to EC approval, ensuring no resemblance to existing symbols or religious/communal associations.
- **Resolution in Case of Party Split:**
 - **Para 15 of the 1968 Symbols Order** empowers the **ECI** to resolve symbol disputes in case of **party splits**.
 - The ECI assesses **facts, circumstances**, and hears the **representatives** to make a binding decision.
 - For **unrecognised parties**, disputes are advised to be resolved **internally or through the courts**.
- **ECI's Criteria for Symbol Dispute Resolution:**
 - Based on **three tests** as per the **Sadiq Ali case**:
 - **Test of Aims and Objects of the Party Constitution**
 - **Test of Party Constitution**
 - **Test of Majority** (determined by party delegates/office bearers, MPs, and MLAs)
 - If support from elected MPs/MLAs is indecisive, the ECI may **freeze the symbol** and ask both factions to choose new symbols.
- **Outcome for Groups Without Parent Party's Symbol:**
 - **Pre-1997**: Splinter groups could gain recognition if they had enough MPs/MLAs.
 - **Post-1997 Rule**: Breakaway groups must **register as separate parties** to gain recognition based on future election performance.
- **Election Commission of India (ECI):**
 - The **Election Commission of India (ECI)** is a **constitutional body** established on **January 25, 1950**, with its headquarters in **New Delhi**. It conducts and regulates elections in India.
- **The Election Symbols (Reservation and Allotment) Order, 1968:**
 - Empowers the **ECI** to **recognize political parties and allot symbols** at Parliamentary and Assembly elections.
 - Governs the **specification, reservation, choice, and allotment of symbols** for political parties in India.

CCPA ISSUES GUIDELINES TO COMBAT GREENWASHING

The **Centre** has introduced new guidelines to curb **false or misleading claims** by companies regarding environmental benefits of their products.

- Issued by the **Central Consumer Protection Authority (CCPA)**, these rules require **scientific evidence** to support environmental claims made by companies.
- These guidelines complement the **existing Guidelines for Prevention of Misleading Advertisements (2022)**, which address **false or exaggerated advertising claims** more broadly.

Greenwashing

- **Definition**: Greenwashing refers to misleading practices where companies, organizations, or countries make **dubious or unverifiable claims** about their environmental or climate-friendly activities.
- Greenwashing **misrepresents climate progress**, rewarding **irresponsible behavior** and delaying genuine environmental action.
- **Examples of Greenwashing:**
 - **Volkswagen** (2015) manipulated emissions tests to appear eco-friendly.
 - Corporations like **Shell, BP, and Coca-Cola** have faced greenwashing allegations.
 - Governments may exaggerate **carbon absorption potential of forests** or overstate the impact of certain **environmental regulations**.
 - **Carbon trading and offset practices** have been scrutinized for lacking scientific credibility.

Global Efforts Against Greenwashing

- **UN Secretary-General António Guterres** called for **zero tolerance for greenwashing**, especially by **non-state actors** like corporations and financial institutions.
- Key recommendations:
 - **Ban new investments in fossil fuels**.
 - Set **short-term emission reduction targets**.

- **Stop deforestation activities.**
- Discourage **carbon offset mechanisms** at the early stages of net-zero commitments.

Reasons for Widespread Greenwashing

- The vast number of **emission-reducing processes and products** makes monitoring and verification challenging.
- **Lack of regulation and standardisation** in measuring, reporting, and certifying environmental claims.
- Many **organisations claiming expertise** in environmental areas lack robustness, but their services are used by corporations to enhance their eco-friendly image.

Key Principles in Advertising Guidelines for Greenwashing Prevention

- **Background:** Drafting began in **November 2023**, with a committee holding **three meetings** before releasing the final guidelines after public consultation.
- **Definition of Greenwashing in Advertising:** Greenwashing involves **concealing or exaggerating environmental benefits** through misleading terms, symbols, or imagery.
- **Allowance for Hyperbole: "Obvious hyperboles" or "puffery"** are allowed as long as they don't mislead consumers (e.g., "sustainable principles" may be used, but specific claims like "all products manufactured sustainably" must be backed by evidence).
- **Use of Generic Environmental Terms:** Terms like **"clean," "green," "eco-friendly,"** and **"sustainable"** require **supporting evidence** and must not be vague.
- **Clarification of Technical Terms:** Technical terms (e.g., **environmental impact assessment, greenhouse gas emissions**) must be explained clearly for consumers.
- **Requirements for Specific Environmental Claims:** Specific claims (e.g., **compostable, non-toxic, plastic-free**) must be **backed by scientific evidence, certifications, or third-party verification**.
- **Applicability:** The guidelines apply to **manufacturers, service providers, advertisers, advertising agencies, and endorsers** who promote products or services with environmental claims, prohibiting greenwashing practices.

Central Consumer Protection Authority (CCPA)

- **CCPA** is a regulatory body established under **Section 10 of the Consumer Protection Act (CPA), 2019**.
- Its mandate is to **prevent false or misleading advertisements** and **protect consumer rights**.
- Operates under the **Ministry of Consumer Affairs, Food and Public Distribution**.

Global Initiatives to Combat Greenwashing

- **UNFCCC COP27 Declaration:** UN Secretary-General urged **zero tolerance for greenwashing**, pressing corporations to amend practices.
- **EU Green Bond Standards: Approved in October 2023**, these standards promote **transparency in green finance**.
- **European Green Bond Label:** Requires that **85% of funds** are directed toward **sustainable activities**, supporting **climate neutrality goals**.

NPS VATSALYA SCHEME

The **Union Finance Minister** recently launched the **NPS Vatsalya scheme**.

About NPS Vatsalya Scheme

- **Extension of the National Pension Scheme (NPS)** specifically designed for **children**.
- **Eligibility Criteria:**
 - Open to **all minor citizens (below 18 years)**.
 - **Both child and parent** must be **Indian citizens** and comply with **Know Your Customer (KYC)** requirements.
- **Account Operation:**
 - Can be **opened in the name of a minor**, with **parent or guardian operating the account** on behalf of the child, who is the **beneficiary**.
 - Accessible through **various Points of Presence regulated by the Pension Fund Regulatory Authority of India (PFRA)**, including **major banks, India Post, pension funds, and the e-NPS online platform**.
- **Contribution Requirements:**

- **Minimum contribution** of Rs 1000 per annum.
- **No upper limit** on the maximum contribution.
- **Investment Options:**
 - **PFRDA provides multiple investment choices** allowing exposure to **government securities, corporate debt, and equity**.
 - Investment distribution is based on **risk preference** and **desired returns**.
- **Conversion to Regular NPS:**
 - Upon reaching the age of **18**, the account **seamlessly converts to a normal NPS account**.
- Withdrawal Rules**
- **Partial Withdrawals:**
 - Allowed after **three years of account opening**.
 - Up to **25% of the corpus** can be withdrawn for specific purposes, such as **education, medical treatment for certain illnesses, or disabilities over 75%**.
- **Full Withdrawals upon Maturity:**
 - At **age 18**, up to **Rs 2.5 lakh** can be withdrawn entirely.
 - For corpus amounts exceeding Rs 2.5 lakh, **20% can be withdrawn**, while the remaining **80% must be used for annuity purchase within the NPS**.
- **In Case of Death of Subscriber:**
 - If the subscriber passes away, the **entire corpus is transferred to the nominee**, typically the guardian.
 - In the event of the guardian's death, a **new guardian must be appointed** after completing a **new KYC**.
 - If **both parents die**, a **legal guardian** may manage the account without further contributions until the minor reaches **18 years**.

WORLD CITIES REPORT 2024

World Cities Day was officially designated on **October 31** by the **United Nations General Assembly** in 2013 through **resolution 68/239**.

- **First celebrated in 2014** to address challenges arising from **rapid urbanization**.
- Part of **Urban October**, which begins with **World Habitat Day** (first Monday of October).
- **Urban October:**
 - **UN-Habitat** projects urban population to reach **68% by 2050**.
 - Addresses urban challenges like **inequality, inadequate housing, and limited services**.
 - Promotes **sustainable urban development** through global activities and discussions.
- **World Cities Day 2024 Theme:**
 - The theme is **"Youth leading climate and local action for cities"**.
 - Focuses on the **role of young people** in addressing **urban climate and sustainability challenges**.
 - Previous themes include **"Financing Sustainable Urban Future for All"** (2023) and **"Act Local to Go Global"** (2022).
- **Significance of World Cities Day:**
 - Aims to **promote sustainable urban development**, stressing **environmental sustainability** and **economic inclusion**.
 - Highlights **urban challenges** like **pollution, housing shortages, and infrastructure issues**.
 - Aligns with **UN Sustainable Development Goal 11: "Make cities and human settlements inclusive, safe, resilient, and sustainable."**
 - Encourages **global cooperation** and **inspired actions** through showcasing successful initiatives.
- **World Cities Report 2024: Cities and Climate Action** (by UN-Habitat)
 - **Temperature Increases:** By **2040**, nearly **2 billion people** in urban areas will face a **0.5°C rise** in temperature.
 - **Climate Transitions:** **14% of cities** will experience drier climates, and **900 cities** may become more humid, especially tropical.
 - **Sea-Level Rise:** Over **2,000 cities** below **5 meters** above sea level will expose **1.4 billion people** to higher risks from **sea-level rise** and **storm surges by 2040**.

- **Disproportionate Impact:** Urban areas are both **significant GHG contributors** and vulnerable to **climate shocks** (e.g., floods, cyclones).
- **Investment Gap:** Building **climate-resilient systems** requires **USD 4.5-5.4 trillion annually**, yet current financing is only **USD 831 billion**, indicating a large **funding shortfall**.
- **Riverine Flooding:** By **2030, 517 million urban dwellers** will face **riverine flooding risks**, representing **14% of the global urban population**.
- **Decline of Green Spaces:** Urban green spaces fell from **19.5% in 1990** to **13.9% in 2020**, increasing environmental and social issues.
- **Increased Vulnerability of Informal Settlements:** Slums often located in **flood-prone** areas lack protective infrastructure and face climate risks.
- **Green Gentrification:** Climate interventions like parks may lead to **displacement of underprivileged communities** due to **rising property values**.
- **UN-Habitat:**
 - **Mandate:** Promotes **socially and environmentally sustainable urban development**.
 - **Global Focal Point:** Leads the UN system on **urbanisation and human settlement** issues.
 - **Mission:** Seeks to create **inclusive, safe, resilient, and sustainable urban areas**.
 - **Presence:** Active in **90+ countries**, offering **knowledge sharing, policy advice, and technical assistance**.
 - **Strategic Approach (2020-2023 Plan):** Focuses on a **holistic approach** to urban challenges.
 - **Roles:**
 - **Think:** Engages in **research, policy formulation, and global standard setting**.
 - **Do:** Provides **technical assistance and crisis response projects**.
 - **Share:** Uses **advocacy, communication, and outreach** to promote urban development.
 - **Partner:** Collaborates with **governments, civil society, academia, and private sector**.
- **Urban Areas and Global Warming:**
 - **Energy Consumption:** Urban areas contribute **71-76% of CO2 emissions** due to **energy-intensive industries, transport, and dense building networks**.
 - **Industrial Activities:** Fossil fuel-burning factories and power plants release **CO2, CH4, and N2O**.
 - **Land Use Changes:** Urban expansion reduces carbon storage capacity, with **urban land area** expected to triple by **2050**.
 - **Waste and Landfills:** Decomposing organic waste releases **methane**, a potent greenhouse gas.
 - **Urban Heat Island Effect:** Cities with concrete and asphalt surfaces **absorb and retain heat**, leading to hotter urban climates.
- **Impact of Global Warming on Cities:**
 - **Heatwaves:** Global warming has increased **heatwave frequency** and severity, especially in cities.
 - **Urban Heat Islands (UHIs):** UHIs are warmer than surrounding areas due to **heat-absorbing materials**.
 - **Coastal Flooding:** Rising seas due to melting glaciers threaten **coastal cities** and ecosystems.
 - **Wildfire Season:** Prolonged by warming temperatures, increasing fire risks.

FIRST GLOBAL TREE ASSESSMENT REPORT: IUCN

First Global Tree Assessment Report released, announced at **CBD COP16** in **Cali, Colombia**.

- **2024 UN Biodiversity Conference of the Parties (COP)** to the **UN Convention on Biological Diversity (CBD)** held in **Cali, Colombia**.
- **Objective:** To review progress toward the **2022 Montreal commitment** to conserve **30% of the planet's land and marine areas by 2030**.

Key Findings

- **Species at Risk:**
 - Of the **47,282 tree species** analyzed, **16,425 are threatened** with extinction.
 - Species like **magnolias, oaks, maples, and ebonies** are among the most endangered.
 - Threatened tree species **exceed the combined total of threatened birds, mammals, reptiles, and amphibians**.

- **192 countries** have tree species facing extinction risks.
- **Buchanania barberi**, a small tree from the **South Western Ghats of Kerala**, is **Critically Endangered** on the **IUCN Red List** since 2018. Conservation actions, such as germination trials, have been initiated to save it.
- **Main Threats:**
 - **Deforestation:** Land cleared for **crop and livestock production** drives tree extinction, especially in tropical areas like **South America**.
 - **Logging:** Over **5,000 tree species** are used for timber and more than **2,000 for food, medicine, and fuel**, increasing pressure on natural populations.
 - **Invasive Species, Pests, and Diseases:** Non-native species and pathogens impact tree health, especially in temperate regions.
 - **Climate Change:** Rising temperatures, sea-level rise, and extreme weather threaten trees, particularly in tropical and island ecosystems.
- **Ongoing Conservation Efforts:**
 - Initiatives in **Juan Fernández Islands, Cuba, Madagascar, and Fiji** have protected endangered tree species.
 - **Ghana, Colombia, Chile, and Kenya** have developed national strategies for tree conservation.
 - **Gabon** has dedicated key conservation zones specifically for tree species, supporting biodiversity protection.

Global Tree Assessment Report

- **Purpose:** Aims to assess all tree species worldwide for inclusion in the **IUCN Red List**, improving data for conservation decisions.
- **Launch:** Initiated in **2015**, the GTA supports prioritizing conservation, research, and funding for species at highest risk of extinction.
- **Collaborations:** Works with **over 60 botanical organizations, 25 IUCN groups**, and numerous tree specialists globally.

IUCN Red List

- The **IUCN Red List** is the leading global tool for assessing the **extinction risk** of animal, plant, and fungal species.
- **Categories** range from **NE (Not Evaluated)** to **EX (Extinct)**. **Critically Endangered (CR)**, **Endangered (EN)**, and **Vulnerable (VU)** species are deemed at risk of extinction.
- The Red List serves as an indicator for **Sustainable Development Goals** and **Aichi Targets**.
- The **IUCN Green Status of Species** tracks species' recovery and conservation success.
 - **Green Status Categories:** Include **Extinct in the Wild, Critically Depleted, Largely Depleted, Moderately Depleted, Slightly Depleted, Fully Recovered, Non-Depleted**, and **Indeterminate**.
 - The Green Status assesses the effect of conservation efforts on species' Red List status.

INDIA-US RELATIONS UNDER FIRST TRUMP TERM

Donald Trump has secured votes to become the **47th President of the U.S.**, prompting analysis of **India-US relations** during his first term and prospects for Trump's second term.

Trump's First Term (2017-2021) - Strengthening Indo-US Strategic Ties

- **Transition to Indispensable Allies:** India and the U.S. moved from strategic partners to **indispensable allies** with increased collaboration in **defence, counter-terrorism, and energy**.
- **Enhanced Cooperation:**
 - **High-level Diplomatic Engagement:** PM Narendra Modi's **2017 visit to the White House** established close diplomatic ties, culminating in **Trump's visit to India in 2020**.
 - **Counter-terrorism Support:** U.S. supported **India's counter-terrorism stance**, including advocating **global terrorist status for Jaish-e-Mohammad chief Masood Azhar** and pushing for **Pakistan's grey-listing by FATF**.
 - **Defence Technology and Trade:** India's defence imports from the U.S. totaled **\$18 billion**; India also gained **advanced American defence technology**.

- **Strategic Energy Partnership:** The **2018 Strategic Energy Partnership** facilitated India's import of **U.S. crude and LNG**, making the U.S. India's **sixth-largest hydrocarbon source**.
- **Confronting China:**
 - **Mutual Strategic Rival:** Trump's policies identified **China as a shared strategic threat**.
 - **Quad Alliance and Indo-Pacific Strategy:** His administration reinforced **Quad** and promoted the **Indo-Pacific strategy** to counter China's influence.

Challenges in India-US Relations During Trump's First Term

- **Energy Restrictions:** Trump pressed India to **halt oil imports from Iran**, affecting India's energy sourcing.
- **Trade and Tariffs:** Trade issues emerged, with Trump advocating for **lower tariffs** on certain products, including **Harley Davidson motorcycles**.
- **Immigration Policy:** Restrictive policies, including **H1-B visa limitations**, impacted India due to its reliance on **skilled migration** to the U.S.
- **Kashmir Mediation Controversy:** Trump's **offer to mediate on Kashmir** drew backlash from India, which opposes third-party intervention.

Trump's Return and its Impact on India-US Relations

- India foresees both **benefits and challenges** with Trump's second term, expecting continuity in **defence, energy, and strategic areas**, but potential **trade and diplomatic frictions**.

Opportunities for Stronger India-US Ties

- **Revival of Trade and Defence Deals:**
 - Possible resumption of **Free Trade Agreement talks**.
 - Expanded **U.S. military hardware sales** to strengthen India's defence.
- **Focus on Energy Independence:** Potentially renewed investments in energy, including the **Driftwood LNG project**, enhancing **India's energy security**.
- **Reduced Pressure on Domestic Issues:** Compared to the Biden administration, there may be **less scrutiny on issues like press freedoms, NGOs, and human rights** under Trump.
- **Regional Stance:**
 - Likely **continuation of reduced U.S. funding to Pakistan**.
 - Anticipated **crackdown on Khalistani organizations** in Trump's second term.

Potential Areas of Friction

- **Tariff Policy:** Trump's focus on **reducing trade tariffs** may lead to renewed disputes over **India's tariffs**.
- **Diplomatic Mis-steps:** Statements by Trump, such as on **Kashmir mediation** and **India-China conflicts**, previously triggered strong responses from New Delhi.
- **Unpredictable Sanctions on Oil Imports:**
 - India faced pressure to **halt oil imports from Iran and Venezuela** under Trump's policies, impacting **energy security**.
 - Similar policies may arise, affecting **India's energy strategy and regional diplomacy**.

ADB RELEASES ASIA-PACIFIC CLIMATE REPORT 2024

Asian Development Bank (ADB) published its **Asia-Pacific Climate Report 2024**, highlighting the economic impacts of climate change on the **Asia-Pacific (APAC)** region.

Key Highlights of the Asia-Pacific Climate Report 2024

Economic Impacts on Asia-Pacific Region

- **Projected GDP Reductions:**
 - By **2070**, high **GHG emissions** could cause a **17% decrease** in APAC GDP, potentially reaching a **41% decrease by 2100**.
 - **Country-specific projections by 2070:** India **24.7% decrease**, Bangladesh **30.5%**, Vietnam **30.2%**, and Indonesia **26.8%**.

Human and Environmental Consequences

- **Coastal Flooding Risks:**
 - Up to **300 million people** at risk of coastal flooding by **2070**.
 - Estimated annual damages could total **USD 3 trillion**.
- **Decrease in Labor Productivity:**
 - Regionally, labor productivity loss could result in a **4.9% GDP reduction**, with India facing an **11.6% loss** due to cooling needs.
- **Temperature-Related Economic Decline:**
 - Regional GDP could decrease by **3.3%**; India's decline may be sharper at **5.1%**.

Flooding and Environmental Degradation

- **River Flooding Damages:**
 - By **2070**, annual river flooding in APAC could cause damages worth **USD 1.3 trillion**, affecting over **110 million people**.
 - **India-specific losses: Residential damages** could exceed **USD 400 billion**, while **commercial damages** could surpass **USD 700 billion**.
- **Increased Weather Intensity:**
 - Higher frequency of **tropical storms and intense rainfall** could lead to severe **floods and landslides**, especially in areas along the **India-China border**.
- **Forest Productivity Loss:**
 - APAC may see a **10-30% decline** in forest productivity by **2070**; India and Vietnam may experience losses over **25%**.

Policy and Climate Goals

- **Net-Zero Emission Targets:**
 - **36 out of 44 Asian economies** have set net-zero targets, but only **four have legal backing**.
 - **India and China** aim for net-zero by **2070** and **2060** respectively, lagging behind **OECD** economies targeting **2050**.

Financial Strategies for Climate Adaptation

- **Increased Funding Requirements:**
 - APAC needs an annual investment of **USD 102–431 billion** for climate adaptation, compared to **USD 34 billion in 2021-2022**.
- **Private Investment and Policy Enhancements:**
 - Urgent need for greater **private investment** and **stronger policies** to attract private climate finance.
- **Renewable Energy and Carbon Markets:**
 - Report emphasizes **renewable energy** and **carbon markets** as key strategies for cost-effective climate action.

About Asian Development Bank (ADB)

Foundation: The Asian Development Bank (ADB) was established on **19 December 1966** to promote **social and economic development in Asia**.

Headquarters: Located in **Mandaluyong, Metro Manila, Philippines**.

Membership: **68 members** (49 from the Asia-Pacific region and 19 from outside), including **UN Economic and Social Commission for Asia and the Pacific (UNESCAP)** countries and **non-regional developed countries**.

- **Annual Meetings:** Holds **annual meetings** where stakeholders discuss development issues, policies, and new financing solutions.
- **Role as UN Observer:** Recognized as an **official observer** within the **United Nations system**, aligning its initiatives with global development goals.
- **Ownership and Voting Structure:**
 - **Largest Shareholders:** **Japan** holds the largest share, followed by the **United States**.
 - **Voting System:** Operates on a **weighted voting system** where votes are proportional to members' capital subscriptions.

Climate and Environment Initiatives:

- Committed to supporting **Paris Agreement goals** and **UN Sustainable Development Goals (SDGs)**.
- Launched the **Climate Change Operational Framework 2017–2030** to guide climate actions.
- **Climate Financing Target:** Pledged to deliver **\$100 billion in climate finance from 2019-2030**.

COVID-19 Response:

- **\$20 billion assistance package** in 2020 to support economic recovery and health response to the pandemic.
- Additional funds and technical support for vaccine procurement and delivery.

Notable Programs and Partnerships:

- **Asian Development Fund (ADF):** Provides concessional loans and grants to the **region's poorest countries**.
- **Strategy 2030:** ADB's long-term strategy focusing on **reducing poverty, climate resilience, gender equality, and regional integration**.
- **Partnerships with International Organizations:** Collaborates with the **World Bank, UN agencies, and regional organizations** to co-finance and implement development projects.

INDIA-CHINA AGREEMENT ON LAC PATROLLING

Indian and Chinese negotiators reached a **patrolling arrangement agreement** along the **Line of Actual Control (LAC)**, leading to disengagement and a resolution of 2020 tensions.

- Announced following a **meeting between PM Narendra Modi and President Xi Jinping** at the **BRICS Summit in Kazan, Russia**.

Background: Steps Leading to Agreement

- **PM Modi's Call for Improved Ties:** In **April 2024**, PM Modi highlighted the importance of resolving the **border situation** for normalized relations with China.
- **China's Positive Response:** China responded positively, emphasizing that **India-China relations extend beyond the border dispute**.
- **Indian Foreign Minister's Remarks on Patrolling (May 2024):** EAM S. Jaishankar noted optimism in settling remaining **Ladakh border issues**, particularly on **patrolling rights**.

Patrolling Agreement - Key Element

- **Significance:** The agreement is critical for **border stability** along disputed **LAC areas**.
- **Patrolling Dynamics:**
 - With no clear physical demarcation, patrolling is essential for **border management**.
 - **Indian troops patrol up to the Indian-perceived border** and return to base, leaving signs of their presence.

Article 4 of the 2005 Border Pact

- Provides guidelines for **troop conduct** during **face-offs**:
 - **Self-restraint** and prevention of escalation during face-to-face encounters.
 - **Prohibition on use or threat of force**.
 - **Courteous conduct** with no provocative actions.
 - **No markings allowed** at confrontation points.

Key Highlights of the Agreement

- **Restoration of Patrolling Rights in Depsang Plains and Demchok:**
 - India and China agreed to **mutual patrolling** in **Depsang Plains** and **Demchok**.
 - Indian troops can now access **Patrolling Points (PP) 10-13** in Depsang Plains and **Charding Nullah** in Demchok.
 - Areas like **Galwan Valley, Pangong Tso, and Gogra-Hot Springs** are excluded from renegotiation.
- **Process of Disengagement, De-escalation, and Demilitarization:**
 - Phased approach: **disengagement, de-escalation, and eventual de-induction** of forces.
 - Aims to reduce the current deployment of **50,000-60,000 troops** on each side.
- **Focus on Preventing Future Clashes:**

- Seeks to avoid incidents like the **2020 Galwan clashes**, which resulted in **20 Indian** and **4 Chinese** fatalities.

Future Path

- **Commitment from Leaders:**
 - PM **Modi** and President **Xi** endorsed the agreement, promoting tension reduction along the LAC and moving towards normalized relations.
- **Differing Interpretations of the Agreement:**
 - **India's Statement:** Emphasized a **complete disengagement** and resolution of issues arising from 2020.
 - **China's Statement:** Highlighted "**important progress**", adopting a more cautious tone.
- **Contrasting Views on Border Impact:**
 - **India:** Insists on resolving the **border standoff** before normalizing relations.
 - **China:** Believes the border issue should not hinder broader relations and prefers a **compartmentalized approach**.
- **Planned Steps for Resolution:**
 - **India:** Special Representatives to discuss a **fair, reasonable, and mutually acceptable solution**.
 - **China:** Advocates for future **multi-level diplomatic talks** to restore stable relations.

MARITAL RAPE IN INDIA

The **government opposed criminalisation of marital rape** in the Supreme Court, stating that the issue needs a **comprehensive socio-legal approach** rather than a strictly legal one.

Section 375 of the IPC and its Evolution

- **Definition:** Section 375 of the Indian Penal Code (IPC) outlines acts that constitute **rape by a man**.
- **Exceptions:**
 - **Exception 1:** Marital rape is decriminalised.
 - **Exception 2:** Medical procedures or interventions do not constitute rape.
- **Historical Context:**
 - Introduced during **British rule in 1860**, with the marital rape exception initially applicable to **women over 10 years of age**.
 - **1940:** Age raised to **15 years**.
 - **2017:** Supreme Court ruled that **sexual intercourse with a wife under 18 years of age** is considered rape.

History of Marital Rape Law in India

- **Domestic Violence Act, 2005:** Recognises **sexual abuse** within marriages or live-in relationships but provides **civil remedies only**.
- **Law Commission's 172nd Report (2000):** Rejected the proposal to remove the **marital rape exception** while recommending other reforms for sexual violence laws.

Issues with Marital Rape Exception

- **Legal Fiction:** Creates a legal construct where rape is not recognised within marriage, even if all elements of rape are met.
- **Discrimination:** Denies **married women** the legal protections available to all other women.
- **Inconsistency:** **Sexual assault** in live-in or non-marital relationships is deemed rape, but this exception applies only within marriage.

Arguments Against Criminalising Marital Rape

- **Misuse of Law:**
 - Concerns over potential misuse, similar to issues raised with **Section 498A** (dowry-related cases).
 - **2020 Data:** **1,11,549 cases registered** under 498A; **5,520 dismissed as false**, and **16,151 cases closed** for reasons such as mistaken facts or legal errors.
 - Out of **18,967 cases tried**, **14,340 acquittals** and **3,425 convictions**; **498A cases pending trial: 651,404** with a **96.2% pendency rate**.
- **Burden of Proof:**

- Complexities in **burden of proof** since marital intercourse is generally part of marriage, raising questions on proving non-consensual acts.
- **Gender Neutrality:**
 - Calls for **gender-neutral rape laws** have been made, and this applies to the debate on marital rape, as existing laws do not allow husbands to seek redress under IPC Section 375.

Global Perspective on Marital Rape

- **Criminalisation Status:**
 - **77 out of 185 countries (42%)** criminalise marital rape.
 - Countries with laws criminalising marital rape include **Australia (1981), Canada (1983), South Africa (1993), and the USA (1993)**.
 - In some countries, marital rape is either **not mentioned** or **explicitly excluded** from rape laws.
- **UN Stance:**
 - The **United Nations** has urged countries to eliminate marital rape exceptions, stating that “the home is one of the most dangerous places for women.”

Government's Key Arguments in Supreme Court

- **Far-Reaching Implications:** Criminalising sexual acts within marriage as "**rape**" could disrupt **conjugal relationships** and impact the institution of marriage.
- **Parliamentary Decision: Exception 2 to Section 375** was retained by Parliament after thorough deliberation during the **2013 amendments** to IPC.
- **Separate Provisions for Consent within Marriage:** While acknowledging violations of consent are unacceptable, the government argued that **penalties within marriage** should differ from those outside of it.
 - Existing **criminal laws address non-consensual acts within marriage**.
- **Concerns over Judicial Interference:** The Centre advised the Supreme Court to refrain from intervening in **Parliament's decision** to maintain the marital rape exception, given India's **socio-legal context of marriage**.
- **Disproportionate Punishment:** Labelling marital sexual acts as "**rape**" could be excessively severe and **disproportionate** within the context of marriage.

Supreme Court's Previous Ruling on Marital Rape

- **2022 Ruling:** Recognised marital rape for purposes of the **Medical Termination of Pregnancy (MTP) Act**, allowing women to seek abortions for pregnancies resulting from marital rape.
- **Current Stance:** The Centre's affidavit distinguishes this ruling from the broader criminalisation of marital rape.

ILO REPORT ON FEMALE LABOUR FORCE PARTICIPATION AND CARE RESPONSIBILITIES

53% of women in India remain outside the labour force primarily due to **care responsibilities**, according to the **International Labour Organization (ILO)** report titled "*The Impact of Care Responsibilities on Women's Labour Participation*".

- Report recommends **increased investment in the care economy**, especially in **Early Childhood Care and Education (ECCE)**, to support **unpaid carers** and **promote gender equality** in the workforce.
- **Gender Disparity in Care Responsibilities:**
 - In India, only **1.1% of men** are outside the labour force due to care duties, compared to **53% of women**.
 - **97.8% of women** and **91.4% of men** cited personal or family reasons for being outside the labour force.
- **Comparative Global Insights:**
 - **Countries like Iran, Egypt, Jordan, Mali, and India** have **over 50% of women** outside the labour force due to caregiving needs.
 - By contrast, **Belarus, Bulgaria, Latvia, and Sweden** report **less than 10%** of women outside the labour force for caregiving, investing **around 1% of GDP in ECCE**.
- **Periodic Labour Force Survey (PLFS) 2023-24:**
 - **36.7% of women** and **19.4% of total workforce** in India are engaged in **unpaid work** in household enterprises.

- In **2022-23**, the figures were **37.5% for women** and **18.3% for total workforce**.
- **Time Use Survey (2019) - National Statistical Office (NSO):**
 - **81% of women** aged **6 years and above** spent over **five hours daily** on **unpaid domestic work**.
 - Higher percentages observed in younger age groups: **85.1%** (15-29 years) and **92%** (15-59 years).
 - Women aged **60+** showed **78%** engagement in unpaid domestic work.
 - Men spend over an hour daily on unpaid domestic services with **24.5% of men aged 6+**, **22.5% (15-29 years)**, and **27% (15-59 years)** participating.
- **Caregiving Duties:**
 - **26.2% of females** aged **6+ years** spend over **two hours daily** on **unpaid caregiving**, compared to **12.4% of males**.
 - Higher shares for **15-29 age group females** at **38.4%** and **31.2% for 15-59 age group**, while corresponding rates for males are **10.2% and 14.3%**.
- **Global Estimates on Care Responsibilities (ILO, 2023):**
 - **708 million women** are outside the global labour force due to unpaid care duties.
 - **748 million people (aged 15+)** globally do not participate in the workforce because of caregiving, with **708 million women** and **40 million men**.
 - Compared to 2018, the previous ILO estimate was **606 million women** and **41 million men**; methodology updates mean these numbers are not directly comparable but highlight **care responsibilities as a primary barrier** for women's employment.
- **Regional Analysis:**
 - **Northern Africa** has the highest percentage of women outside the labour force for caregiving at **63%**.
 - **Arab states** follow at **59%**, **Asia and the Pacific** at **52%**.
 - In the **Americas**, **47% of women in Latin America and the Caribbean** are outside the workforce due to care, compared to **19% in Northern America**.
 - In **Europe and Central Asia**, **21% of women** cite caregiving as the main barrier to workforce participation.
- **Factors Affecting Women's Labour Market Inclusion:**
 - **Low education levels, limited job opportunities, inadequate infrastructure, and care systems** contribute to restricted workforce access for women.
 - **Social norms and expectations** around caregiving further reduce women's labour market participation, reinforcing **gender inequality**.

International Labour Organization (ILO):

- **Established: 1919**, as part of the Treaty of Versailles following World War I.
- **Headquarters: Geneva, Switzerland.**
- **UN Specialized Agency:** Became the **first specialized agency of the United Nations** in **1946**.
- **Member States: 187** member countries.

Structure:

- **Governing Body:** The **tripartite structure** includes **representatives of governments, employers, and workers**.
- **International Labour Conference:** Annual assembly where labour standards and policies are discussed and adopted.
- **International Labour Office:** Administrative arm that implements policies and oversees daily operations.

Conventions and Recommendations:

- **Conventions:** Legally binding international treaties, with **190 conventions** adopted.
- **Recommendations:** Non-binding guidelines for national policy and practice, with over **200 recommendations** issued.

Nobel Peace Prize:

- Awarded the **Nobel Peace Prize in 1969** for its efforts to improve peace through social justice.

SUPREME COURT VERDICT ON UP MADRASA EDUCATION BOARD ACT, 2004

The Supreme Court partially upheld the **constitutional validity** of the Uttar Pradesh Madrasa Education Board Act, 2004, overturning the **Allahabad High Court's March 2024 decision** that deemed it unconstitutional.

- **Higher Education Provisions Unconstitutional:** Provisions related to **higher education** (Kamil and Fazil) were declared unconstitutional as they conflict with the **University Grants Commission Act, 1956** (under Entry 66 of List 1).

Reasons for Upholding the UP Madrasa Education Board Act, 2004

- **Constitutional Validity:** The Act regulates education standards, aligning with the state's role in ensuring students attain **competency for active societal participation**.
- **Legislative Competence:** The Court confirmed that the **Madrasa Act** falls within the **State Legislature's competence** under **Entry 25 of List 3 (Concurrent List)**.
- **Religious Education vs Religious Instruction:**
 - Citing **Ms. Aruna Roy vs Union of India, 2002**, the Court distinguished **religious education** (promoting harmony) from **religious instruction** (e.g., mandatory worship).
- **Basic Structure Immunity:**
 - Statute validity cannot be challenged on the grounds of **Basic Structure violation**; it must conflict with constitutional provisions on **secularism**.
 - Citing **Indira Nehru Gandhi vs Raj Narain, 1975**, the Court noted that striking down laws based on undefined principles like secularism may lead to **uncertainty** in adjudication.
- **State Regulation:** The Court clarified that the state can enact rules to **integrate secular education** in madrasas, without violating **secular principles**.
- **Minority Rights and Quality Education:**
 - The Act ensures **quality education for madrasa students**, similar to that in other institutions.
 - Reinforces **Article 30** rights for minorities to establish and manage educational institutions.
- **Inclusivity Focus:** Ensures **madrasas' inclusion in the state's educational framework**, promoting access to **quality education** for madrasa students.

Key Case Reference: Indira Nehru Gandhi vs Raj Narain, 1975

- **Basic Structure Doctrine:** The **Raj Narain case** was the first instance where the **Basic Structure doctrine** was applied to strike down a Constitutional Amendment.
- **Statute vs Constitutional Amendments:**
 - Differentiated between ordinary statutes and constitutional amendments; **Basic Structure doctrine applies to amendments**, not statutes.
 - **Chief Justice A.N. Ray** noted that applying the doctrine to statutes would imply "rewriting the Constitution."
 - The Court asserted that **constitutional amendments** and **ordinary laws** operate in different fields and face separate constraints.

UP Madrasa Education Board Act, 2004

- **Purpose:** Establishes a framework to **regulate and formalize madrasa education** in Uttar Pradesh.
- **Educational Standards:** Mandates that madrasas adhere to defined **educational norms and standards**.
- **Integration of Secular Curriculum:** Combines **religious education** with a **secular curriculum** as per **NCERT guidelines**.
- **Board of Madrasa Education:** Created the **Uttar Pradesh Board of Madrasa Education** to oversee madrasa operations.
- **Examinations:** Provides exams from **Maulvi level (Class 10 equivalent)** to **Fazil level**.

Allahabad High Court's Grounds for Declaring Act Unconstitutional

- **Secularism:** The HC ruled that the Act violated **secularism** by mandating Islamic education at all levels, relegating modern subjects to optional status.
- **Fundamental Rights Violation:**
 - **Article 21A (Right to Education):** The Act did not align with the mandate for **free and compulsory education** for children aged 6-14.

- **Article 14 (Equality):** Created inequality between madrasa and mainstream school students.
- **Article 15 (Non-Discrimination):** Established a separate educational system for madrasa students, seen as unequal.
- **Conflict with Central Law:** Found the Act conflicted with the **UGC Act, 1956**, as only universities or institutions recognized under the UGC Act can grant degrees.

SUPREME COURT VERDICT ON AMU'S MINORITY STATUS

- **4-3 Majority Decision:** Supreme Court overturned its **1967 ruling (Azeez Basha case)**, which had declared **Aligarh Muslim University (AMU)** was not a minority institution.
- **Majority Opinion:** Authored by **CJI D.Y. Chandrachud**; Justices **Sanjiv Khanna, J.B. Pardiwala, and Manoj Misra** concurred. Dissent by Justices **Dipankar Dutta, Surya Kant, and Satish Chandra Sharma**.
- **Holistic and Realistic Test:** Court established a **two-fold test** for determining the minority character of educational institutions, focusing on origin and purpose as well as administrative structure.

Background of AMU's Minority Status Controversy

- **Origin of the Issue:** Began in **1967** when the SC ruled that amendments to AMU's founding Act deprived the Muslim community of the right to administer it.
- **1951:** Non-Muslims were allowed in AMU's University Court, and the President of India replaced the **Lord Rector** as the **Visitor**.
- **1965:** Expansion of the Executive Council's powers reduced the University Court's authority.
- **1968 – S. Azeez Basha Case:** The SC held that **AMU was not a minority institution**, as it was established by an Act of Parliament in 1920, not by the Muslim community.
- **1981 Amendment:** The government amended the **AMU Act** to assert that AMU was founded by Muslims for cultural and educational advancement, but the **Allahabad HC** struck down this amendment and the **50% Muslim reservation** in **2006**, reaffirming the Azeez Basha verdict.

New Test for Minority Status

1. **Origin and Purpose:**
 - Examines **who established the institution, the purpose** behind its creation, and whether **minority groups initiated the steps**.
 - Identifies the **“brain behind the establishment”** through historical documents, correspondence, and the intent of the founders.
2. **Administrative Structure:**
 - The **administrative setup** must affirm the institution's **minority character** and be directed toward promoting **minority community interests**.

Key Highlights of Majority Opinion

- **Overruling Azeez Basha:**
 - Majority disagreed with the **Azeez Basha** interpretation that a minority institution must be both **established and administered by a minority**.
 - Emphasized that **establishment** by a minority is more critical than **administration** under **Article 30(1)**.
- **Rejecting Formalistic Interpretation:**
 - The Court dismissed the government's argument that **AMU was a “non-minority national institution”** based on its establishment through an Act of Parliament in **1920**.
 - The majority stated that following a strict, formalistic interpretation would undermine the **fundamental rights** under Article 30.
- **Broader Interpretation of Article 30(1):**
 - **Minority Establishment Sufficient:** Minority educational institutions do not need minority control over administration to qualify under Article 30(1).
 - **Historical Legislation:** Rights under Article 30(1) apply to institutions established both **before and after the Constitution**. Limiting Article 30(1) to post-Constitution institutions would diminish its purpose.

- **Break from Colonial Past:** The Court affirmed that the Constitution marked a shift from colonial governance to a **rule of law** framework, securing rights for minority institutions from the outset.

Impact of the Ruling on AMU

- **Reservation for Muslim Students:** AMU may pursue **50% or more reservations** for Muslim students without the obligation to follow SC/ST quotas.
- **2005 Reservation Attempt:** AMU's earlier bid to reserve **50% seats** for Muslim students in postgraduate courses was stayed by the Allahabad HC, citing the **Azeez Basha ruling**.

Challenges to HC's Decision: In **2006**, the Congress-led government and AMU appealed the HC ruling, but the NDA government later withdrew support for AMU's minority status in **2016**.

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