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POLITY AND GOVERNANCE

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- **10th CPA India Region Conference Begins in New Delhi**

- **MoS Prof. S. P. Singh Baghel to inaugurate National Conference on the Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA)**

- **100 days of Modi 3.0: Ambitious reforms in Healthcare and Education for a Resilient Future**

DEFENCE AND SPACE

- **Indian Army Launches Project NAMAN to Support Veterans & Families**

- **Relations between India and Pakistan unlikely to become better, finds survey**

- **Cabinet Committee on Security approves proposal for buying 240 aero engines for Su 30 MKI aircraft of Indian Air Force**

- **Centre gives nod to defence proposals worth 1.44 lakh cr.**

- **ICG Participates in the 20th Heads of Asian Coast Guard Agencies Meeting**

- **INDIA - FRANCE BILATERAL NAVAL EXERCISE VARUNA**

- **Successful launch of Intermediate Range Ballistic Missile, Agni-4 conducted in Odisha**

- **INDIA- USA JOINT MILITARY EXERCISE YUDH ABHYAS -2024 COMMENCES IN RAJASTHAN**

- **Two anti-submarine warfare vessels for the Indian Navy launched at Cochin Shipyard**

- **IAF Aircraft set course for Exercise Eastern Bridge VII at Oman**

- **DRDO & Indian Navy successfully flight tests Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)**

- **20th Maritime State Development Council Meeting to Drive Strategic Maritime Development and Sustainability**

- **DRDO successfully conducts first phase of Developmental Field Firing Trials of Indian Light Tank 'Zorawar'**

- **Third edition of INDUS-X Summit concludes in California**

- **India goes to Moon again: This time to come back to Earth after landing on the Moon**

- **INDIAN AIR FORCE AIR SHOW SET TO DAZZLE CHENNAI AHEAD OF 92ND IAF ANNIVERSARY**

- **Goa Maritime Symposium 2024**

- **Curtain Raiser NAVIKA SAGAR PARIKRAMA II**

- **Raksha Mantri Shri Rajnath Singh inaugurates 41st Indian Coast Guard Commanders' Conference in New Delhi**

- **Expanding Horizons in Space Sector: From Lunar Exploration to a National Space Station**

- **Directorate General of Quality Assurance celebrates its 68th Raising Day**

- **Defence Accounts Department to celebrate 277th Annual Day**

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- **5th India-Philippines Joint Defence Cooperation Committee meeting held in Manila**

- **US to sell High Altitude Anti-Submarine Warfare sonobuoys to India**

- **India launches Operation Sadbhav to provide humanitarian assistance to Typhoon Yagi affected countries**

- **U.S.-India Strategic Clean Energy Partnership Ministerial Joint Statement**

- **Indus waters: India to freeze talks with Pak**

- **ASOSAI (Asian Organization of Supreme Audit Institutions)**
- **4th Quad Leaders Summit**

- **India becomes 3rd Most Powerful Nation in Asia, Surpasses Japan in Asia Power Index**

ECONOMICS

- **India signs first-of-its-kind agreements focused on Clean Economy, Fair Economy, and the IPEF Overarching arrangement under IPEF**

- **India Post Payments Bank celebrates 7th Foundation Day: Reinforcing commitment to financial inclusion**

- **Cabinet approves seven major schemes for improving farmers' lives and livelihoods with total outlay of Rs 14,235.30 Crore**

- **India's textile industry expected to grow to US$350 bn by 2030 and add 3.5 crore jobs: Shri Giriraj Singh**

- **A webinar organised for convergence of schemes of Department of Animal Husbandry with SHG members in NRLMn**

- **78th Meeting of Network Planning Group under PM GatiShakti evaluates 18 road projects**

- **Over 17 Lakh Saplings Planted benefiting 10,000 Farmers under National Mission on Edible Oils-Oil Palm**

- **IEPFA celebrates 8th Foundation Day in New Delhi**

- **Five Successful Years of Pradhan Mantri Kisan Maan dhan Yojana (PM-KMY)**

- **Union Minister to launch PM - MKSSY and release SoP on Production & Processing Clusters in Fisheries Sector**

- **Ministry of Electronics and Information Technology launches Phase III of capacity-building initiatives under Digital India vision**

- **Trade Connect e-Platform for exports is single window, fast, accessible and transformational: Shri Piyush Goyal**

- **DPIIT to launch BHASKAR: A Revolutionary Platform for India"s Startup Ecosystem**

- **FM Nirmala Sitharaman to Launch NPS-Vatsalya Scheme**

- **Prime Minister Shri Narendra Modi launches 'SUBHADRA' - the largest women-centric scheme in Bhubaneswar, Odisha**

- **Over ₹ 3,148 Crore Loans Disbursed Under PMEGP in First 100 Days of Modi Govt's 3rd Term**

- **Cabinet approves continuation of schemes of Pradhan Mantri Annadata Aay SanraksHan Abhiyan (PM-AASHA)**

- **White Revolution 2.0 to empower women, fight malnutrition: Amit Shah**

- **Four-day mega event, World Food India begins in Delhi**

- **Prime Minister Shri Narendra Modi addresses National PM Vishwakarma Program in Wardha, Maharashtra**

- **CBDT notifies Rules and Forms for Direct Tax Vivad Se Vishwas (DTVSV) Scheme, 2024**

- **GeM celebrates 100 days of governance; announces drastic reduction in its transaction charges**

- **Value Addition in the GDP revision**

- **How to enable transit-oriented development?**

- **CPENGRAMS brings Financial Empowerment for Family Pensioners and Super-Senior Pensioners**

- **Make in India Celebrates 10 Years: A Decade of Transformational Growth**

- **Union Textiles Minister Shri Giriraj Singh says roadmap set for textiles industry to grow to US$350 bn by 2030**

- **MoS Prof. S. P. Singh Baghel to inaugurate National Workshop on People's Plan Campaign 2024 – Sabki Yojana Sabka Vikas Abhiyan**

- **Union Cabinet Approves National Centre of Excellence for AVGC**

ENVIRONMENT

- **Union Environment Minister Bhupender Yadav extends deadline for idea submission in Ideas 4 LiFE till 15 October 2024**

- **India to hold 2nd edition of International Conference on Green Hydrogen from Sept 11-13**

- **PM Narendra Modi virtually addresses first International Solar Festival being held in Delhi**

- **Union Environment Minister Sh. Bhupender Yadav reviews clean air action plans under National Clean Air Programme**

- **President of India to inaugurate the 8th India Water Week (IWW) at Bharat Mandapam, New Delhi**

- **Prime Minister Shri Narendra Modi inaugurates 4th Global Renewable Energy Investor's Meet and Expo (RE-INVEST) in Gandhinagar, Gujarat**

- **What is the current status of the introduction of African cheetahs?**

- **ICG inks MoU with key environmental foundations to Combat Marine Pollution & Protect Biodiversity**

- **Blockchain, smart materials, among innovative projects mooted in PM solar scheme**

- **Azerbaijan's New Climate Fund**

- **Ministry achieves 100-Day Target of 100 Nagar Vans with objective to Enhance Urban Greenery**

- **World Rhino Day**

- **Swachh Vayu Diwas: India's Commitment to Clean Air**

- **Union Minister for Road Transport and Highways Sh. Nitin Gadkari to inaugurate Oxygen Bird Park (Amrit Mahotsav Park)**

- **India signs agreement to protect marine life in the high seas**

GEOGRAPHY

- **Government has decided to rename the capital of Andaman & Nicobar Islands Port Blair as "Sri Vijaya Puram"**

- **Central Water Commission (CWC)**

- **Rains may cool surge in coal shipments to India**

SCIENCE AND TECHNOLOGY

- **NCA-F, IISC AND ITU collaborate to host workshop on Bharat 6G Vision: TRANSLATING RESEARCH TO STANDARDS**

- **Cabinet approves one more semiconductor unit in Sanand, Gujarat under India Semiconductor Mission (ISM)**

- **Union Health Ministry approves introduction of new shorter and more efficacious treatment regimen for drug-resistant TB in India**

- **Health Ministry Reports Suspected Mpox Case in Recent Traveler; Patient Stable and Isolated**

- **Understanding ovarian cancer: its causes, symptoms, and screening methods**

- **Panic in the time of cholera: issues critical to managing a resurgence**

- **Nipah death confirmed in Malappuram; 150 contacts asked to isolate themselves**

- **What is a Telescope? How good are modern telescope?**

- **Cabinet approves 'Bio-RIDE' scheme to support cutting edge research and development in Biotechnology**

- **Are antibiotics responsible for bowel diseases?**

- **India's First Comprehensive Cancer Multi-omics Data Portal**

- **Vancomycin**

- **India Committed to Achieving UN's 2030 Goal of Ending HIV/AIDS: MoS Anupriya Patel**

- **Prime Minister Shri Narendra Modi dedicates to nation three PARAM Rudra Supercomputers via video conferencing**

- **Alexander Dunn to get 2024 SASTRA Ramanujan Prize**

- **Union Health Ministry Releases Revised Operational Guidelines and Training Manual of Non-Alcoholic Fatty Liver Disease**

- **World Rabies Day**

- **Milestone Achieved Rajasthan Atomic Power Project- Unit-7 Reaches Criticality**

- **Can Kerala's policy to limit antibiotics misuse reduce AMR?**

SOCIETY

- **Union Minister Smt Annpurna Devi launches 7th Rashtriya Poshan Maah 2024**

- **eShram achieved over 30 crore registrations in the span of just 3 years**

- **Cabinet approves the Digital Agriculture Mission with an outlay of Rs. 2817 Crore, including the central share of Rs. 1940 Crore**

- **Anemia: A key focus area during Rashtriya Poshan Maah 2024**

- Ministry of Labour and Employment Pushes for Inclusion of Marginalised Workers Under Housing Scheme

- "VISHANU YUDDH ABHYAS": A Mock Drill on Pandemic Preparedness conducted under National One Health Mission

- President of India addresses a gathering of beneficiaries of 'Shasan Aplya Dari' and 'Mukhyamantri Majhi Ladki Bahin Yojna' of Government of Maharashtra

- '90% projects under Smart Cities Mission completed'

- Prime Minister Shri Narendra Modi shares scientific report highlighting impact of Swachh Bharat Mission in reducing infant and child mortality

- PM to address the programme marking the launch of 'Jal Sanchay Jan Bhagidari initiative' on 6th September

- Union Minister Shri Ram Mohan Naidu Inaugurates Digi Yatra Facility at 9 More Airports

- Shri Sanjay Kumar chairs International Conference on 'Spectrum of Literacy' on the eve of International Literacy Day 2024

- Samagra Shiksha fund delay punishes role-model States

- Over 70% child deaths in India are linked to malnutrition

- PM chairs First meeting of Governing Body of Anusandhan National Research Foundation

- **Union Minister of Youth Affairs & Sports and Labour & Employment Calls on Retired Sportspersons to Apply for RESET programme**

- **Govt to Issue New AB PMJAY Cards for All Senior Citizens Aged 70+**

- **50 Jan Aushadhi Kendras inaugurated in Madhya Pradesh today**

- **Cabinet approves Pradhan Mantri Janjatiya Unnat Gram Abhiyan**

- **1000 Tribal Home Stays to be promoted under Swadesh Darsan to Boost Local Tourism and Livelihood in Tribal Areas**

- **Transforming Healthcare: Six Years of Ayushman Bharat PM-JAY**

- **Union MoS for Health and Family Welfare, Shri Prataprao Jadhav Launches Tobacco Free Youth Campaign 2.0**

- **Ministry of Tourism to celebrate World Tourism Day with the theme 'Tourism and Peace'**

- **Empowering Futures: Celebrating International Daughter"s Day with the Sukanya Samriddhi Yojana**

- **7th Rashtriya Poshan Maah**

- **Ayushman Bharat Digital Mission marks a Transformative Three-Year Journey towards enabling Digital Health**

ART AND CULTURE

- **Prime Minister Shri Narendra Modi extends warm wishes on Nuakhai**

- **Keralites shrug of Wayanad gloom, celebrate Onam with food, fun and frolic**

- **Harappan civilisation: enigma remains even after 100 years of exploration**

- **Kalari practitioners held a protest by performing 'Kalaripayattu,' a martial art of Kerala, on the streets.**

- **Ministry of Tourism Launches Paryatan Mitra and Paryatan Didi – A National Responsible Tourism Initiative**

FACTS FOR PRELIMS

- **President Droupadi Murmu to confer National Teachers Award 2024 to 82 teachers in New Delhi**

- **Last date of submission of nomination for the Pradhan Mantri Rashtriya Bal Puraskar is 15th September, 2024**

- **President of India presents National Florence Nightingale Awards 2024**

- **Prime Minister Shri Narendra Modi remembers Swami Vivekanand on 132nd anniversary of Chicago speech**

- ➢ **Union Home Minister Amit Shah greets all technocrats on Engineers' Day**
- ➢ **India Achieves Tier 1 Status in Global Cybersecurity Index 2024**
- ➢ **45th Chess Olympiad**
- ➢ **Sign Language Day celebrations in New Delhi**
- ➢ **Haifa Day celebrated in the national capital**

- ➢ **Prime Minister pays tributes to Pandit Deendayal Upadhyaya on his birth anniversary**

- ➢ **Prime Minister Shri Narendra Modi remembers Shaheed Bhagat Singh on his birth anniversary**

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POLITY AND GOVERNANCE

Prime Minister Shri Narendra Modi releases commemorative postage stamp on 75 Years of Supreme Court

- The commemorative stamp symbolizes the Supreme Court's invaluable contribution to India's judicial system and its pivotal role in shaping the legal landscape of the Nation.
- The Supreme Court, established on January 28, 1950, has been at the forefront of upholding the rule of law, safeguarding the rights of citizens, and ensuring the administration of justice across the country.

Supreme Court

- On the **28th January 1950**, two days after India became a **Sovereign Democratic Republic**, the Supreme Court came into being.
- **Constitutional Provisions:** The Supreme Court''s powers and jurisdiction are outlined in **Articles 124 to 147** of the Indian Constitution.

History of the Supreme Court of India:

- **Regulating Act 1773**– Supreme Court was established at Calcutta (**1774**) comprising one chief justice and three other judges.
- **1800:** Supreme Courts established **in Madras and Bombay** by the British East India Company.
- **Act of 1823**– The newly established Supreme Courts at Madras and Bombay would have the power to administer, carry out duties, and hold powers of the same magnitude as the Supreme Court at Fort William in Calcutta.
- **1861: India High Courts Act** creates High Courts in major provinces, replacing the Supreme Courts.

- **1935: Government of India Act** establishes the Federal Court to settle disputes between provinces and hear appeals from High Courts.
- **January 28, 1950**: Inauguration of the Court with **eight judges,** led by Chief **Justice H.J. Kania.**
- **Initial Seat:** Chamber of Princes in the Parliament building, later moved to the present building in 1958.

Key Features of the Supreme Court of India

- **Highest Court of Appeal:** The Supreme Court is the highest appeal court is also known as the apex court of India and even the last resort, where the citizens of India can seek justice if they are not satisfied with the judgment of the High Court.
- **Advisory Jurisdiction:** As per **Article 143** of the Constitution, the SC can advise the President of India that is related to the question of law, and the nature of the matter is associated with public importance.
- **Adjudicate Federal Disputes:** The Court resolves disputes between the Union and the states and between different states **(Article 131).**
- **Judicial Review:** The Supreme Court reviews laws and actions of the executive to ensure they comply with the Constitution.
- **Protection of Fundamental Rights**: The Court protects the fundamental rights of citizens by issuing writs and orders (**Article 32**).
- **Public Interest Litigation (PIL):** The Court can take up cases on its own or on behalf of the public interest. In some matters, the Supreme Court also acts on its own and can pass suo moto.

Major Issues Related to the Supreme Court

- **Judicial Activism vs. Judicial Restraint:** There''s an ongoing debate surrounding the appropriate role of the judiciary, with discussions on whether the Supreme Court should be more proactive in addressing social and political issues or exercise restraint and limit intervention.

- **Concerns of Appointment of Judges:** The process of judicial appointments, particularly the role of the Collegium system, has been a topic of contention. There have been discussions on reforms like the **National Judicial Appointment Commission** to make the appointment process more transparent and accountable.

- **Technology and Access to Justice:** While initiatives like **e-filing** and virtual hearings have been implemented to improve access to justice, challenges remain in ensuring equitable access, particularly for marginalised communities with limited access to technology.

- **Inadequate Women Representation in SC:** At the moment, only *three of the Supreme Court''s total judges are women*. This reflects the skewed representation of women in the legal system

Way Forward

Splitting the Supreme Court:

- The **Tenth Law Commission of India** recommended dividing the Supreme Court into two divisions: the **Constitutional Division** and the **Legal Division**.

- According to the proposal, only matters related to constitutional law would be heard by the Constitutional Division.

- Similarly, the Eleventh Law Commission reiterated in 1988 that splitting the Supreme Court into divisions would enhance access to justice and reduce litigants'' fees.

- Also, **229th Law Commission Report, 2009** recommended four regional

benches to be located in Delhi, Chennai or Hyderabad, Kolkata, and Mumbai to hear non-constitutional issues.

- **Enhanced Judicial Sitting:** The Malimath Committee proposed an increase in the Supreme Court''s working days to 206 days, advocating a reduction of vacation time by 21 days to address the backlog of pending cases.
- **Enhancing Gender Diversity in the Judiciary:** Implementing a fixed percentage of female judges would foster the development of a gender-inclusive judicial system in India.
- **Enhancing Transparency and Accountability:** Transparency in the appointment of judges and making judgments more accessible to the public can help improve public trust in the judiciary.

Government issues notification for 1st set of rules under Telecom Act 2023, known as 'Digital Bharat Nidhi'

- Digital Bharat Nidhi will fund schemes and projects aimed at providing targeted access to telecommunication services for underserved groups in society.
- These groups include women, persons with disabilities, and economically and socially weaker sections.

Digital Bharat Nidhi:

- It would replace the erstwhile **Universal Service Obligation Fund (USOF)**, which is a pool of funds generated by a 5 per cent **Universal Service Levy** charged upon all the telecom fund operators on their **Adjusted Gross Revenue (AGR).**
- This money would be used to fund the expansion of telecom networks in remote and rural areas.

Aim:

- Improve internet connectivity, particularly in rural, remote, and economically

disadvantaged areas.

- Foster technology innovation, create regulatory sandboxes, and enhance the global presence of India's telecom sector.

- Promote innovation, indigenous technology development, and standardisation.

- Support startups in the telecom sector and the manufacturing of telecom equipment.

- It replaces the Universal Service Obligation Fund (USOF) to ensure better allocation of resources.

Working of the Digital Bharat Nidhi

- As per the Telecom Act, contributions made by telecom companies towards the Digital Bharat Nidhi will first be credited to the **Consolidated Fund of India(CFI).**

- All revenues that the government receives, including loans raised and all money received in repayment of loans, are credited to the CFI. The government also incurs its expenditures from this fund.

- The Central government will deposit the collected funds to the DBN from time to time.

The funds under DBN is used for

- Funds collected under the DBN will be used to support universal service through promoting access to and delivery of telecommunication services in underserved rural, remote and urban areas; fund research and development of telecommunication services, technologies, and products; support pilot projects, consultancy assistance and advisory support for improving connectivity; and for the introduction of telecommunication services, technologies, and products.

- The DBN shall fund schemes and projects for providing targeted access to telecommunication services for underserved groups of society such as women,

persons with disabilities and economically and socially weaker sections, as per the draft rules.

Administration:

The Centre will appoint an "administrator" who will select "DBN implementers" through "bidding" or invitation of applications from eligible persons.

Need for the DBN (Issues in USOF):

- **Underutilization of Funds:** USOF has been criticised for significant underutilization of funds allocated to it. Example: Between 2017 and 2022, despite collecting Rs 41,740 crore from telecom operators, only Rs 30,213 crore (72%) was utilised. In some years, utilisation was even lower, indicating inefficiencies in fund deployment.

- **Bureaucratic Delays and Red Tape:** Projects funded by USOF often face delays due to bureaucratic processes and approvals. This **bureaucratic inertia** hampers timely deployment of telecom infrastructure in rural and remote areas, defeating the fund"s purpose.

- **Lack of Transparency and Accountability:** There have been concerns about transparency in how funds are allocated and disbursed. Limited accountability mechanisms make it challenging to track the effectiveness of USOF investments and ensure funds reach intended beneficiaries.

- **Complexity in Project Implementation:** USOF projects often require extensive planning and coordination with multiple stakeholders, leading to implementation complexities. Deploying telecom infrastructure in remote areas involves technical challenges such as terrain, connectivity issues, and infrastructure maintenance.

- **Inadequate Focus on Last-Mile Connectivity:** Despite its mandate to enhance connectivity in underserved areas, USOF initiatives sometimes fail to address last-mile connectivity issues effectively.

Centre notifies constitution of 23rd Law Commission

- The term of the Commission will be for period of three years till 31st August 2027.
- The Commission will have a full-time chairperson and four full-time members including a member-secretary.

Law Commission of India

- The Law Commission of India is a **non-statutory body** constituted by the Government of India from time to time.
- The first Law Commission of independent India was established in **1955** for a three-year term.
- The first Law Commissionwas established during the British Raj era in 1834 by the **Charter Act of 1833** and was chaired by Lord Macaulay.

Objectives:

- It works as an advisory body to the Ministry of Law and Justice.
- The Law Commission undertakes research in law and review of existing laws in India for making reforms therein and enacting new legislations on a reference made to it by the Central Government or suo-motu.

Composition:

- Apart from having a full-time chairperson, the commission will have four full-time members, including a member-secretary.
- Law and Legislative Secretaries in the Law Ministry will be the ex-officio members of the commission.
- It will also have not more than five part-time members.
- A retired Supreme Court judge or Chief Justice of a High Court will head the Commission.

Important Recommendations of the Commission

- The Law Commission has taken up various subjects on references made by Department of Legal Affairs, Supreme Court and High Courts and **submitted 277 reports**.

- The Commission provides thought provoking and vital review of the laws in India.

Important Recommendations include –

- The 170th report of the Law commission on Electoral reforms, 1999 had suggested simultaneous Lok Sabha and State Assembly Elections. It recommended that this is for the improvement of governance and stability of the states.

- The Law Commission in its **262nd report** recommended the abolition of death penalty for all crimes except terror-related offences and waging war against the state.

Union Home Minister and Minister of Cooperation to address First foundation day celebration of I4C and launch key initiatives for prevention of cybercrime in New Delhi

Key Initiatives and Programs:

Cyber Fraud Mitigation Centre (CFMC):

- **Purpose**: To address online financial crimes through immediate action and seamless cooperation.
- **Establishment**: Located at the Indian Cybercrime Coordination Centre (I4C), New Delhi.
- **Participants**: Includes major banks, financial intermediaries, payment aggregators, telecom service providers, IT intermediaries, and state/UT law enforcement agencies.
- **Significance**: Demonstrates "Cooperative Federalism" in law enforcement.

Samanvaya Platform:

- **Function**: A web-based module serving as a One Stop Portal for cybercrime data repository, data sharing, crime mapping, data analytics, and coordination.
- **Objective**: Facilitate cooperation and coordination among law enforcement agencies across India.

Cyber Commandos Program:

- **Objective**: Establish a special wing of trained "Cyber Commandos" in States/UTs and Central Police Organizations (CPOs).
- **Role**: Assist in securing the digital space and counter cyber threats.

Suspect Registry:

- **Purpose**: Create a registry of suspects based on the National Cybercrime Reporting Portal (NCRP).
- **Collaboration**: Involves banks and financial intermediaries.

- **Goal**: Enhance fraud risk management capabilities in the financial ecosystem.

Indian Cyber Crime Coordination Centre (I4C):

- I4C has been established under the Ministry of Home Affairs (MHA) to deal with cybercrime in the country in a coordinated and comprehensive manner.
- The I4C focuses on tackling issues related to cybercrime for citizens, including improving coordination between various Law Enforcement Agencies (LEAs) and stakeholders.
- The centre is located in New Delhi.

Components of I4C:

- **National Cybercrime Threat Analytics Unit (TAU):** For reporting threats pertaining to cybercrimes at regular intervals.
- **National Cybercrime Reporting Portal (NCRP):** To report various cybercrime complaints by citizens at all India level on a common platform on a 24x7 basis from "anywhere, anytime".
- **National Cybercrime Training Centre (NCTC):** To impart training to government officials, especially state law enforcement agencies.
- **National Cybercrime Research and Innovation Centre:** To carry out research for the development of indigenous tools for the prevention of cybercrimes.
- **Platform for Joint Cyber Crime Coordination Team:** For coordination, sharing of modus operandi of cybercrimes, data/information among states/UTs LEAs.
- **Cybercrime Ecosystem Management Unit:** For creating mass awareness in cyber hygiene for prevention of cybercrimes.
- **National Cybercrime Forensic Laboratory (Investigation) Ecosystem:** For helping LEAs in cyber forensics investigation.

Objectives:

- To act as a nodal point in the fight against cybercrime

- Identify the research problems/needs of LEAs and take up R&D activities in developing new technologies and forensic tools in collaboration with academia / research institutes within India and abroad
- To prevent misuse of cyber space for furthering the cause of extremist and terrorist groups
- Suggest amendments, if required, in cyber laws to keep pace with fast changing technologies and International cooperation
- To coordinate all activities related to implementation of **Mutual Legal Assistance Treaties (MLAT)** with other countries related to cybercrimes in consultation with the concerned nodal authority in MHA.

Union Minister for Parliamentary Affairs, Shri Kiren Rijiju to inaugurate six initiatives/portals as part of 100 Days Achievements

Union Minister of Parliamentary Affairs, Shri Kiren Rijiju, will inaugurate following Six Initiatives/Portals:

1. National e-Vidhan Application- **NeVA 2.0**
2. NeVA Mobile App version 2.0
3. Subordinate Legislation Management System (SLMS)
4. Consultative Committee Management System (CCMS)
5. NYPS Portal 2.0
6. Eklavya Model Residential Schools (EMRSs)

Integrated Portal for Subordinate Legislation:

- **Purpose**: Create a single-window interface to streamline the process of framing subordinate legislation.
- **Stakeholders**:
  o All Ministries/Departments under the Government of India
  o Cabinet Secretariat
  o Legislative Department
  o Ministry of Parliamentary Affairs
- **Objective**: Enhance decision-making and expedite the framing of subordinate legislation by integrating these key entities on one platform.

Consultative Committee Management System (CCMS):

- **Purpose**: Facilitate better management and communication for Consultative Committees.
- **Stakeholders**:
  o Hon'ble Members of Parliament

- o   Ministries of the Government of India
- o   Ministry of Parliamentary Affairs

- **Features**:
  - o   Real-time access to all information/documents related to Committees.
  - o   Digital interaction among members and ministries to ensure effective communication and informed decision-making.

NYPS Portal 2.0:

- **Purpose**: Increase participation in the National Youth Parliament Scheme.
- **Scope**: Open to all citizens, including students from recognized educational institutions.
- **Participation Modes**:
  - o   Institution Participation
  - o   Group Participation
  - o   Individual Participation
- **Objective**: Promote democratic values and engage a broader audience, including youth, in democratic processes.

National Youth Parliament Competition for EMRSs:

- **Purpose**: Strengthen democratic values and parliamentary understanding among tribal students.
- **Target Group**: Students of Eklavya Model Residential Schools (EMRSs).
- **Aims**:
  - o   Foster democratic roots and tolerance for diverse views.
  - o   Encourage discipline and familiarity with parliamentary functioning.
  - o   Conduct annual National Youth Parliament Competitions to achieve these objectives.

National e-Vidhan Application

- Under the Digital India initiative, the Government of India has launched the centrally sponsored "National e-Vidhan Application" scheme to transition *all Legislative Assemblies of the country to a paperless format* and unify them on a single platform.
- The scheme implementation costs will be shared with 60% funded by the Government of India and 40% by the state governments.

Ekalavya Model Residential Schools (EMRS)

- EMRS started in the year 1997-98 to impart quality education to ST children in remote areas to enable them to access the best opportunities in education and to bring them at par with the general population.
- EMRS are established in the States/UTs from the grants received under **Article 275(1)** of the Constitution of India.

Features:

- EMRS are co-educational residential schools from Class VI to XII.
- Eklavya schools will be on par with Navodaya Vidyalayas and will have special facilities for preserving local art and culture besides providing training in sports and skill development.
- Each school has a capacity of 480 students with equal number of seats for boys and girls.
- **Non-ST students** can be admitted in these schools on seats up to **10% of the total seats.**
- CBSE curriculum is followed in these schools, and education is completely free.

'One nation, one election will be implemented in the current term of Modi govt.'

- The Census exercise not undertaken since 2011, will also begin soon, say senior government sources

One Nation One Election

- The concept of "**One Nation, One Election**" envisions a system in which all state and Lok Sabha elections must be held simultaneously.
- This will entail restructuring the Indian election cycle so that elections to the states and the centre coincide.
- This would imply that **voters will vote for members of the LS and state assemblies on the same day and at the same time**(or in a phased manner as the case may be).

History of Elections in India

Era of simultaneous elections

- The first general elections of free India held simultaneously to the Lok Sabha and the Legislative Assemblies of the States in 1951.
- The next three cycles of elections also witnessed concurrent Lok Sabha and Legislative Assembly elections barring a few stray cases like:
1. Kerala where a mid-term election was held in 1960 on the pre-mature dissolution of the Assembly, and
2. In Nagaland and Pondicherry where the Assembly was created only after the 1962 general elections.
- The last occasion when we had near-simultaneous elections was in 1967.

Beginning of the end of simultaneous elections

- The fourth Lok Sabha constituted in 1967 was dissolved prematurely in 1971. This was the beginning of the end of simultaneous elections.
- Extension of the term of Lok Sabha during the National Emergency declared in 1975 and the dissolution of Assemblies of some States after the 1977 Lok Sabha election further disturbed the cycle of concurrent elections.

Benefits

- **Reducing Governance Distractions:**
- Holding frequent elections diverts the entire country"s attention, from top leaders to local representatives, causing a virtual paralysis of administration at various levels.
- This preoccupation negatively impacts India"s growth prospects and hinders effective governance.
- **Model Code of Conduct"s Impact:**
- The Model Code of Conduct (MCC)imposed during elections delays key policy decisions both at the national and local levels.
- Even ongoing projects face setbacks as election duties take precedence, leading to a slowdown in routine administration.
- **Addressing Political Corruption:**
- Frequent elections contribute to political corruption as significant funds need to be raised for each election.
- Simultaneous elections can substantially reduce election expenses for political parties, eliminating the need for repetitive fundraising.
- It also lessens the pressure on the public and business community for multiple election donations.
- **Cost Savings and Electoral Infrastructure:**

- When the first elections to the Lok Sabha took place in 1951-52, 53 parties contested the elections, around 1874 candidates participated and poll expenses were Rs. 11 crore.

- In the 2019 elections, there were 610 political parties and around 9,000 candidates; poll expenses of around Rs. 60,000 crores, as per Association of Democratic Reforms (ADR), are yet to be declared by the political parties.

- While initial infrastructure investments are required, using the same electoral rolls for all elections can save considerable time and money in updating and maintaining voter lists.

- **Citizen Convenience:**

- Simultaneous elections alleviate concerns for citizens regarding missing names from electoral rolls.

- Using consistent electoral rolls for all elections streamlines the process, providing citizens with a more straightforward and reliable voting experience.

Disadvantages of One Nation One Election

- **Synchronization Challenges:** Synchronizing elections in a diverse democracy like India can be difficult, particularly if governments lose confidence in their assemblies.

- **Constitutional and Federalism Issues:** Its implementation may require constitutional changes and could potentially challenge the federal nature of the Indian political system.

- **Impact on Voter Behavior:** Voters may confuse national and state issues in simultaneous elections, blurring the distinctiveness of state-level politics.

- **Impact on Regional Parties:** It may favor larger national parties, potentially disadvantaging regional parties.

- **Accountability Concerns:** Fixed terms without the threat of recall could

reduce government accountability and encourage autocratic tendencies.

Way Forward:

- **Building Consensus:** Building consensus among political parties and states is crucial for the feasibility of simultaneous elections. This necessitates open dialogues, consultations, and deliberations among diverse stakeholders to address concerns and garner support.

- **Constitutional Amendments:** To enable simultaneous elections, amendments to the Constitution, the Representation of the People Act 1951, and the Rules of Procedure of Lok Sabha and State Assemblies are imperative. This legal framework should accommodate the unique requirements of synchronized polls.

- **Aligning Assembly Terms with Lok Sabha:** A constitutional amendment could involve aligning assembly terms with Lok Sabha elections. As a proposal, any assembly whose term ends within six months before or after Lok Sabha elections could coincide their elections, streamlining the electoral process.

- **Investment in Infrastructure:** The successful implementation of simultaneous elections requires substantial investment in electoral infrastructure and technology. This includes ensuring an adequate supply of EVMs, VVPAT machines, polling booths, and trained security personnel.

- **Awareness and Voter Education:** Creating awareness among voters about the advantages and challenges of simultaneous elections is crucial. Voter education programs must ensure that citizens understand the process, enabling them to exercise their franchise without confusion or inconvenience.

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Bombay HC strikes down Centre's amended IT rules

- Justice Chandurkar said the Information Technology Amendment Rules, 2023, violated **Article 14 (right to equality),** 19 (freedom of speech and expression) and **19(1)(g) (freedom and right to profession)** of the Constitution".

Information Technology Amendment Rules, 2023

- The Ministry of Electronics and Information Technology (MeitY) notified the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2023, which are an amendment to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.

Fact Checking Unit and Amended IT Rules 2023

- **Fact Checking Unit:** The Ministry of Electronics and Information Technology, designated the **FCU as a statutory body** under the **Press Information Bureau (PIB)** as per the amendment made to Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 in 2023.
- FCU has been tasked with flagging content deemed to be false information related to the central government and its agencies on social media platforms.

Key Provisions of IT Rules, 2023 Regarding Fake News:

- Online intermediaries, such as social media platforms like Facebook, YouTube, and Twitter**,**along with internet service providers like Airtel, Jio, and Vodafone Idea, are required to ensure they do not disseminate inaccurate information about the Government of India**.**
- Additionally, these platforms must make reasonable attempts to avoid hosting content related to the Central Government that has been flagged as false or misleading by a fact-checking unit.
- If the fact-checking unit identifies any information as false,online

intermediaries will be obligated to remove it.

- Failing to do so could result in the loss of their safe harbour protection, which shields them from legal action regarding **third-party content.**

FCU & the Freedom of Speech Debate

- The proposed introduction of the FCU has raised concerns among internet freedom activists.
- The amendment, however, **does not define** the term 'any business of the Central government.'
- Experts have warned that intermediaries are likely to protect their own commercial interests rather than risk losing safe-harbour protection for non-compliance with the directions of the FCU, even at the cost of curbing their users' right to freedom of speech and expression.
- Under IT Act, **safe harbor safeguard** essentially exempts intermediaries from liability for any third-party information made available or hosted by them, provided they observed "due diligence" while performing their obligations under the IT Act.

Concerns

No clarity for Fake News:

- The IT Rules, 2023 don't specify what qualifies as false or misleading information or the qualifications and procedures for the fact-check unit.
- This has raised concerns about the government's arbitrary power to determine what qualifies as fake news, as the rules do not provide a clear definition of the term.

Removable of Information:

Intermediaries will remove information deemed false by the Fact Check Unit, leaving only the state to determine what is true**.**

- The new regulation gives the government the power to decide what information is bogus and exercise censorship by compelling intermediaries to take down posts deemed fake or false.

Violates the Supreme Court"s Judgment:

- **Shreya Singhal vs Union of India (2015), Supreme Court** held that a law that limits speech can neither be vague nor over-broad.

Way Forward

- To combat misinformation and fake news, the government and intermediaries can use technology solutions like algorithms and fact-checking websites.
- Intermediaries can also implement self-regulatory measures such as monitoring content and working with fact-checking websites.
- Additionally, raising public awareness about the dangers of censorship and promoting free speech can be achieved through social media campaigns, workshops, and discussions in public forums.

U.P. Rajasthan, M.P. top in cases of atrocities on Dalits

Recent reports have highlighted cases of atrocities against SCs and STs.

Key Findings on Atrocities Against SCs and STs (2022)

- 97.7% of atrocities against SCs were reported from 13 states, with Uttar Pradesh, Rajasthan, and Madhya Pradesh leading in the number of cases.
  - **Uttar Pradesh:** Reported the highest number of atrocities against SCs, with 12,287 cases (23.78%).
- Rajasthan and Odisha: Both states featured significantly in both SC and ST-related crimes.
- 98.91% of atrocities against STs were also concentrated in 13 states, with Madhya Pradesh and Rajasthan reporting the highest cases.
  - **Madhya Pradesh:** Led in ST cases, with 2,979 cases (30.61%)

- Conviction rates under the Act have declined, dropping to 32.4% in 2022 from 39.2% in 2020.
- Many states still lack the necessary special courts to handle these cases efficiently.

Who are Dalit?

- Dalits, also known as Scheduled Castes (SCs), are a socially disadvantaged group in India. Historically, they were considered "untouchable" and faced severe discrimination and exclusion from mainstream society

Constitutional provisions to protect Rights of Dalits/SC

- **Article 15(1):** Prohibits discrimination on grounds of religion, race, caste, sex, or place of birth.
- **Article 17:** Abolishes untouchability.
- **Article 23:** Prohibits forced labour or begar.
- **Article 46:** Directs the state to promote the welfare of SCs and STs.
- **Articles 16(4) & 16(5):** Provide for reservations in services and posts for SCs and STs.
- **Article 21:** Guarantees the right to life and liberty, which includes the right to be free from discrimination.
- **Article 335:** Directs the state to ensure adequate representation of SCs and STs in services and posts under the state.
- **Scheduled Cases and Scheduled Tribes (Prevention of Atrocities) Act**

Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act

- Enacted to prevent atrocities against SCs and STs, ensuring stronger legal recourse.
- Offences under this Act are tried in **special courts** for speedy trial.
- Focuses on providing protection and justice to vulnerable communities

facing caste-based violence and abuse.

Recent Amendments:

- **2015 Amendment:** This amendment introduced provisions for the protection of SC/ST women from sexual harassment.

- **2019 Amendment:** This amendment was passed in response to the Supreme Court's 2018 judgement that introduced certain procedural safeguards for arrests under the SC/ST Act.

- The 2019 amendment restored the original provisions of the Act, overriding the Supreme Court's decision

Persisting Challenges in Implementation

- **Declining conviction rates** and delayed investigations pose major hurdles in securing justice.

- **Inadequate special courts:** Out of 498 districts across 14 states, only 194 have set up special courts.

- Some states, like Uttar Pradesh, report no atrocity-prone areas despite high numbers of cases.

- SC/ST protection cells exist, but their efficacy remains uneven across states.

Way Forward

- **Strengthen special courts:** Ensure the establishment of more special courts for faster trials.

- **Improve conviction rates:** Focus on improving investigation processes and addressing legal gaps.

- **Identify atrocity-prone areas:** States should recognize and address high-risk regions for targeted interventions.

- **Awareness and sensitization:** Conduct awareness campaigns to prevent atrocities and ensure better enforcement of the SC/ST Act.

10th CPA India Region Conference Begins in New Delhi

- The theme of the conference is **"The Role of Legislative Bodies in the Attainment of Sustainable and Inclusive Development.**

- Lok Sabha Speaker Om Birla stressed the need to further strengthen the Legislative bodies of the country to meet the expectations and aspirations of the people in view of the changing scenario, when the technologies and medium of communication have become part of people's life.

Commonwealth Parliamentary Association (CPA):

- **Founded**: 1911.

- **Headquarters**: London, UK.

- The CPA was founded in 1911 as the **Empire Parliamentary Association (EPA).**

- It was registered as a charity on 22 October 1971 under the laws of the United Kingdom.

- It is an association to serve the Parliamentarians of the Commonwealth Countries.

- **Objective:** To promote closer understanding and cooperation for common purposes between those engaged in the Parliamentary form of Countries of the Commonwealth.

- **Mission:** To promote knowledge of the constitutional, legislative, economic, social, and cultural aspects of parliamentary democracy, with particular reference to the countries of the Commonwealth.

- It provides the machinery for regular consultation and exchange of ideas and information among members of Commonwealth Parliaments.

CPA India Region

- The CPA India Region was created in 2004 from the erstwhile CPA Asia Region as one of the nine Regions of the CPA.
- Currently, it has 31 Member Branches, including the Parliament of India and 30 State and Union Territories Legislatures.
- This is the second occasion the CPA India Region Conference is being held in New Delhi.

MoS Prof. S. P. Singh Baghel to inaugurate National Conference on the Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA)

Goals and Objectives

- **Focus on Tribal Upliftment:** The conference aims to address the development needs of tribal communities by enhancing local governance and ensuring accessibility to government schemes.
- **Launch of New Initiatives:** Introduction of the PESA – GPDP Portal and Seven Specialized Training Modules to improve Gram Panchayat Development Plans (GPDPs).

Training and Accessibility

- **Comprehensive Training Modules:** Developed to educate about the provisions of the PESA Act, these modules will be translated into local languages to ensure accessibility in Scheduled Areas.
- **Target Audience:** More than **500 participants** from across the ten PESA states are expected to attend, including Panchayat representatives and functionaries.

Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA)

- The Panchayats Extension to Scheduled Areas (PESA) Act, 1996 was brought in as a response to the long-standing demands of the tribal communities in India for greater autonomyand control over their own affairs.

- PESA Act was enacted on **24 December 1996** to enable tribal self-rule in **fifth schedule areas.** The Act extended the provisions of Panchayats to the tribal areas of Fifth Schedule states.

- Historically, the tribal communities in India have been marginalized and excluded from the mainstream political and economic systems and have faced numerous challenges such as displacement, loss of land and resources, and cultural erosion.

- The PESA act drew inspiration from the provisions of the **73rd and 74th amendments** of the Indian constitution. It aimed to provide greater autonomy to the Scheduled areas, which are predominantly tribal in nature, and protect their rights over land and forest.

- The PESA Act gives special powers to the **Gram Sabhasin Scheduled Areas**, especially for managing natural resources. The main rationale behind the Act is to preserve the tribal population from exploitation with the active involvement of the Gram Sabha.

Objectives:

- To ensure self-governance through Gram Sabhas (village assemblies) for people living in the Scheduled Areas.

- It recognises the right of tribal communities, who are residents of the Scheduled Areas, to govern themselves through their own systems of self-government, and also acknowledges their traditional rights over natural resources.

- Empowers Gram Sabhas to play a key role in approving development plans and

controlling all social sectors.

Significance of Implementing the Act

- **Democratic Decentralisation:** PESA empowers gram sabhas to play a key role in approving development plans and controlling all social sectors. This includes management of:
- Resources over jal, jangal, zameen (water, forest and land)
- Minor forest produces
- Human resources: Processes and personnel who implement policies
- Managing local markets
- Preventing land alienation
- Regulating intoxicants among other things
- **Preserving Identity:** The powers of gram sabhas include maintenance of cultural identity and tradition, control over schemes affecting the tribals, and control over natural resources within the area of a village.
- **Conflict Resolution:** The PESA Act thus enables gram sabhas to maintain a safety net over their rights and surroundings against external or internal conflicts.
- **Public Watchdog:** The gram sabha would have the powers to monitor and prohibit the manufacturing, transport, sale and consumption of intoxicants within their village limits.

Issues with PESA Act, 1996

- **Conflicting Laws**: PESA can sometimes conflict with other laws like the Forest Rights Act or the Wildlife Protection Act, creating confusion and hindering its implementation.
- **Overlapping Jurisdiction**: Two different ministries, the Ministry of Panchayati

Raj and the Ministry of Tribal Affairs, have overlapping roles in the implementation of PESA. This results in confusion.

- **Ambiguous and Unclear Definition**: Terms like minor water bodies, minor minerals, manual scavenging, etc. have either not been defined in the Act or are defined ambiguously. This leads to varied interpretations, resulting in loopholes to be exploited.

- **Ineffective Punishments**: The penalties prescribed for violations of the Act are often seen as insufficient to deter offenders. The low conviction rates for those violating the Act highlights this weakness.

- **Limited Coverage**: The Act only applies to Scheduled Areas, which are regions with significant tribal populations. Tribal communities outside these areas don't get the benefits of PESA.

Case Studies of successful implementation of PESA Act

Chhattisgarh:

- The state government has implemented the Act in several tribal-dominated districts and has seen positive results regarding community empowerment and sustainable development.

- For example, in the district of Sarguja, gram sabhas (village councils) have been given the power to manage and conserve forest resources. They have been able to implement afforestation and eco-restoration projects successfully.

- Implementation of PESA has led to increased forest cover and the regeneration of traditional forests, as well as improved livelihoods for the local communities.

Andhra Pradesh: The state government has set up a PESA Cell to monitor the implementation of the Act and to provide technical and financial support to the Gram Sabhas.

100 days of Modi 3.0: Ambitious reforms in Healthcare and Education for a Resilient Future

Key Highlights

1. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY)

- **Expanded Coverage**: As of September 11, 2024, the government has extended health coverage to all senior citizens aged 70 and above, regardless of income.

- **Beneficiary Impact**: This initiative aims to benefit approximately **5 crore families**, covering around **six crore senior citizens**.

- **Insurance Benefits**: Each eligible family receives an annual health insurance coverage of **5 lakhs** for secondary and tertiary hospitalization.

- **Significance**: AB PM-JAY is the **world's largest publicly funded health assurance scheme**, aimed at reducing out-of-pocket healthcare expenses for vulnerable populations.

2. U-WIN Portal

- **Digitized Vaccination Services**: The U-WIN Portal is designed for maintaining vaccination **records for pregnant women and children from birth to 17 years** under the **Universal Immunization Programme.**

- **Key Features**:
    - **Self-Registration**: Citizens can register through the U-WIN web portal or mobile app.
    - **Automated Alerts**: SMS alerts for vaccination schedules.
    - **E-Certificates**: QR-based eVaccination Certificates for easy access.
    - **Multilingual Support**: Available in 11 regional languages, including Hindi.

- **Current Statistics**: As of mid-September 2024, over **46 crore beneficiaries** have registered, with **23.06 crore vaccine doses administered**.

3. **National Medical Register (NMR) Portal**

- **Purpose**: Facilitates the registration of MBBS doctors eligible for practice in India, maintaining a comprehensive electronic database.

- **Integration with Aadhaar**: Ensures authenticity and easy verification linked with the Aadhaar ID of practitioners.

- **Stakeholder Access**: State Medical Councils and educational institutions can verify applications and access doctor details through a unified platform.

- **Functionalities**: Enables addition of qualifications, application tracking, license suspension, and issuing of NMR ID cards and digital certificates.

4. **Customs Duty Exemption on Cancer Drugs**

- **Medicines Exempted**: The government exempted three crucial cancer drugs from customs duties:
    - **Trastuzumab Deruxtecan** (Breast Cancer)
    - **Osimertinib** (Lung Cancer)
    - **Durvalumab** (Lung Cancer and Biliary Tract Cancer)

- **Beneficiary Impact**: This change aims to support approximately 27 lakh cancer patients, making treatment more affordable.

- **Broader Implications**: Revised customs duty on X-ray tubes and flat panel detectors is expected to lower healthcare costs and improve access to advanced medical imaging.

5. **Increase in National Health Mission (NHM) Budget**

- **Financial Increase**: The NHM budget for FY 2024-25 has been raised by approximately **4000 crores, from Rs. 31,550 crores to Rs. 36,000 crores**.

- **Focus Areas**: Enhanced funding aims to improve primary and secondary healthcare services, emphasizing preventive and curative care to reduce public

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out-of-pocket expenditure.

6. Creation of 75,000 New Medical Seats

- **Objective**: Over the next five years, the government plans to add 75,000 new medical seats to enhance the country''s medical education capacity.

- **Current Achievements**: The National Medical Commission (NMC) added 25,000 UG and PG seats in the last four years and achieved the target of 1,00,000 MBBS seats ahead of schedule.

- **Rationale**: This initiative addresses the increasing demand for healthcare professionals and improves the healthcare infrastructure.

7. Nalanda University's New Campus

- **Inauguration**: Prime Minister Modi inaugurated a new campus at Rajgir, Bihar, designed for **collaboration with East Asia Summit (EAS) countries**.

- **Campus Features**: Includes two academic blocks, 40 classrooms, auditoriums, hostels, an International Centre, an Amphitheater, and a sports complex.

- **Sustainability**: The campus is designed as a **'Net Zero'** green facility, incorporating renewable energy and water recycling systems.

8. Anusandhan National Research Foundation (ANRF)

- **Establishment**: The ANRF was set up under the Anusandhan National Research Foundation Act, 2023, to promote research and development across Indian universities and institutions.

- **Strategic Goals**: Aims to foster a culture of research, encourage collaborations among industry, academia, and government, and support both basic research and prototype development.

- **Financial Commitment**: An estimated investment of Rs. 50,000 crores is

planned for the period 2023-2028 to bolster R&D initiatives.

9. **Vigyan Dhara Scheme**

- **Purpose**: A comprehensive scheme to enhance **India's Science, Technology, and Innovation (STI) ecosystem.**

- **Components**: Focuses on capacity building, research and development, and technology deployment.

- **Funding**: The proposed outlay for implementation from 2021-2026 is Rs. 10,579.84 crore, aimed at improving R&D infrastructure in academic institutions.

10. **BioE3 Policy**

- **Key Features**: Supports innovation-driven R&D and entrepreneurship in biotechnology, promoting sustainable development.

- **Strategic Goals**: Establishes Biomanufacturing and Bio-AI hubs, enhances job creation, and contributes to green economic growth.

- **Environmental Commitment**: Aligns with government initiatives on a 'Net Zero' carbon economy and promotes a circular bioeconomy.

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DEFENCE AND SPACE

Indian Army Launches Project NAMAN to Support Veterans & Families

- In the first phase of Project NAMAN, 14 Common Services Centres have been established at key locations across India, including New Delhi, Jalandhar, Leh, Dehradun, Lucknow, Jodhpur, Bengdubi, Gorakhpur, Jhansi, Secunderabad, Saugor, Guntur, Ahmedabad, and Bangalore.
- The project is set to expand significantly and aims to establish approximately 200 centres nationwide over the next 2 to 3 years.

Project NAMAN:

- It is designed to provide dedicated support and services to Defence Pensioners, Veterans and their families.
- It involves the establishment of reception and facilitation centres, enabled through a tripartite Memorandum of Understanding (MoU) between the Indian Army's Directorate of Indian Army Veterans Common Service Centre (CSC) e-Governance India Limited, and HDFC Bank Limited signed last year in September 2023.

Features

1. Project NAMAN is focused on implementing **SPARSH (System for Pension Administration Raksha)** which is a digital pension system designed to simplify and automate pension-related processes for Defence Pensioners.
2. The project aims to create accessible facilitation points for Veterans and **Next of Kin (NOK)** across India.
3. Through a tripartite agreement, reception and facilitation centers have been established for Army Veterans, Pensioners, War Widows, and NOKs.

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4. Each CSC is managed by a **Village Level Entrepreneur (VLE)**, selected from veterans or NOKs by Local Military Authorities (LMAs). These VLEs are trained by CSC e-Governance India Limited and receive a monthly grant of ₹20,000 from HDFC Bank for the first year to support and sustain the centers.

5. These **Common Service Centres (CSCs)** provide SPARSH-enabled pension services, along with government-to-citizen (G2C) and business-to-customer (B2C) services, all in one location.

Significance of Project Naman

- **Veteran Community Engagement:** Project NAMAN reflects the Indian Army's commitment to the welfare of its veterans and their families,extending services to the entire resident population of military stations and surrounding localities.

- **Entrepreneurial Opportunities:** The project also creates entrepreneurial opportunities for Veterans and NOKs,empowering them to contribute to their communities.

Relations between India and Pakistan unlikely to become better, finds survey

Key highlights from the survey by the Centre for Policy Research (CPR)-C Voter

Indo-Pak Relations:

- 60%+ of Indians and 50%+ of Pakistan is believe that the two countries cannot have friendly relations in this decade.
- 48% of Indians, 31% of Pakistanis, and 32% of Bangladesh is favor a reversal of conditions created by Partition.

Comparison to Previous Surveys:

- In 2011, two-thirds of Indians and Pakistanis believed peace was attainable in their lifetime, showing a significant decline in optimism by 2022.

Views on Global Influence:

- Indians believe India has the highest influence in South Asia.
- Pakistanis and Bangladeshis believe China has the most influence, followed by the U.S.
- High concern over Chinese interference is shown by two-thirds of Pakistanis and Bangladeshis.

Relations between India and Pakistan

Historical Background

Colonial Era and Partition (Pre-1947)

- **British Rule:** India and Pakistan were part of British India until 1947. The British ruled India for nearly two centuries, fostering communal divisions through policies that emphasized religious differences.
- **Partition of 1947:** The subcontinent was partitioned into two independent dominions—India and Pakistan—based on religious lines. This partition led to

one of the largest mass migrations in history, with widespread violence, resulting in the death and displacement of millions. Pakistan was created as a homeland for Muslims, while India remained a secular state with a Hindu majority.

Post-Independence Conflicts

- **Kashmir Issue (1947–48):** The princely state of Jammu and Kashmir became the first major flashpoint. **The Maharaja of Kashmir, Hari Singh**, chose to accede to India under certain conditions, leading to the first Indo-Pak war. The conflict ended with a UN-mediated ceasefire in 1949, establishing a Line of Control (LoC) but leaving the region divided.

Subsequent Wars:

- **1965 War:** Triggered by Pakistan"s **Operation Gibraltar**, aiming to incite insurgency in Kashmir. It ended in a stalemate, with the **Tashkent Agreement** of 1966 restoring the pre-war territorial status quo.
- **1971 War and Bangladesh Liberation:** India supported the independence movement in East Pakistan, leading to the creation of Bangladesh and the defeat of Pakistan. The Shimla Agreement of 1972 followed, reinforcing the LoC as a de facto border.
- **1999 Kargil Conflict:** Pakistani forces infiltrated the Indian side of the LoC, leading to a limited war in Kargil. India regained control of its territories, and Pakistan faced international condemnation.

Major Issues

1. **Kashmir Conflict**

- **Core Dispute:** Kashmir remains the central issue. Both nations claim the

region in full but control only parts. Frequent skirmishes along the LoC, insurgency in Indian-administered Kashmir, and human rights concerns are ongoing issues.

2. **Cross-Border Terrorism**

- **Terrorism:** India accuses Pakistan of supporting terrorist groups like Lashkar-e-Taiba and Jaish-e-Mohammed, which have carried out attacks in India (e.g., 2001 Indian Parliament attack, 2008 Mumbai attacks).

3. **Siachen Glacier**

- **Siachen Dispute:** The Siachen Glacier, located in the eastern Karakoram range, is another military flashpoint. Both countries maintain a military presence in this inhospitable terrain.

4. **Water Disputes**

- **Indus Waters Treaty (1960):** The treaty, mediated by the World Bank, allocates the waters of the Indus River system between the two countries. Disputes occasionally arise, particularly over the construction of dams and water usage.

5. **Nuclear Arms Race**

- **Nuclearization:** Both nations conducted nuclear tests in 1998, leading to a precarious balance of power in the region. The presence of nuclear weapons has added a layer of complexity to their rivalry.

6. **Diplomatic Relations**

- **Fluctuating Relations:** Diplomatic relations have oscillated between periods of dialogue and deadlock. Confidence-building measures (CBMs) have been attempted but often derailed by incidents like the 2001 Parliament attack or the 2019 Pulwama attack.

Current Status

- **Revocation of Article 370 (2019):** India revoked the special status of Jammu

and Kashmir, which has been a significant bone of contention. Pakistan condemned the move, leading to a further deterioration in relations.

- **Ceasefire Agreement (2021):** In February 2021, both sides reaffirmed a 2003 ceasefire agreement along the LoC, leading to a reduction in cross-border violence.

Way Forward

Bilateral Dialogue

- **Comprehensive Dialogue:** Resuming a comprehensive dialogue covering all outstanding issues, including Kashmir, terrorism, and trade, is essential.

Confidence-Building Measures (CBMs)

- **Military and Diplomatic CBMs:** Regular meetings between military commanders, exchange of information, and diplomatic engagements can help reduce tensions.

Economic Cooperation

- **Trade and Connectivity:** Enhancing economic ties, including reopening trade routes and promoting people-to-people contact, can create interdependencies that promote peace.

Track-II Diplomacy

- **Civil Society Engagement:** Encouraging dialogue through non-governmental channels can foster understanding and build public support for peace.

International Mediation

- **Mediation Role:** Although both countries prefer bilateral engagement, third-party mediation or facilitation by countries like the US or organizations like the UN could help break deadlocks.

Cabinet Committee on Security approves proposal for buying 240 aero engines for Su 30 MKI aircraft of Indian Air Force

- The engines will have an indigenous content of over 54 percent, enhanced due to indigenisation of some key components or aero-engines.
- These engines will be manufactured at HAL's Koraput division.

Su 30 MKI aircraft

- The Su-30MKI is a multi-role, twin-engine, air superiority fighter developed by the Russian aircraft manufacturer Sukhoi. The "MKI" stands for "**Multirole, Kamov (a Russian name), and Indian**."

Design:

- It was designed by Russia's Sukhoi Corporation beginning in 1995 and built under licence by India's Hindustan Aeronautics Limited (HAL).
- The first squadronwas inducted into the Indian Air Force (IAF) in 2002.

Features:

- **Engines**: The aircraft is powered by two AL-31FP engines, which provide thrust vectoring capability.
- **Avionics**: It is equipped with advanced avionics, including a **Phazotron Zhuk-ME radar**, which enhances its ability to detect and engage multiple targets simultaneously.
- **Weapons**: The Su-30MKI can carry a variety of air-to-air and air-to-ground missiles, including the **BrahMos supersonic cruise missile**, which is a unique feature for the Indian variant.
- **Stealth and Maneuverability**: Although not a stealth aircraft, its design allows for superior maneuverability, and its thrust vectoring capability enhances its combat effectiveness in dogfights.

Role and Capabilities:

- **Air Superiority**: The Su-30MKI is primarily designed for air superiority missions but also has multi-role capabilities, including ground attack and maritime strike.
- **Range**: It has a considerable operational range, allowing it to conduct long-range missions without the need for frequent refueling.

Centre gives nod to defence proposals worth 1.44 lakh cr.

Highlights regarding the Defence Acquisition Council (DAC) meeting chaired by Defence Minister Rajnath Singh:

Approval of Acceptance of Necessity (AoN):

- The DAC approved AoN for 10 capital acquisition proposals amounting to ₹1,44,716 crore. This is a significant step in the procurement process for defense acquisitions.

Key Proposals:

- **Stealth Frigates (Project-17B):** Procurement of seven advanced stealth frigates.
- **Future-Ready Combat Vehicles (FRCV):** Development of next-generation Main Battle Tanks to replace T-72 and T-90 tanks.
- **Air Defence Fire Control Radars (FCR):** For detecting and tracking aerial targets and providing firing solutions.
- **Dornier-228 Aircraft:** For enhancing surveillance and patrol capabilities.
- **Fast Patrol and Offshore Patrol Vessels:** Advanced vessels for the Indian Coast Guard with high operational capabilities.

Indigenous Content:

- 99% of the cost is allocated to indigenous sources under the **"Buy (Indian)" and "Buy (Indian-Indigenously Designed Developed and Manufactured)"** categories, reflecting a strong emphasis on self-reliance.

Significance of FRCV:

- The FRCV is expected to be a futuristic Main Battle Tank with superior mobility, all-terrain capability, multilayered protections, precision fires, and real-time situational awareness. This project aims to replace outdated T-72 and T-90 tanks.

Coast Guard Enhancements:

- The proposals include advanced Dornier-228 aircraft, next-generation fast patrol vessels with enhanced capabilities for rough weather, and offshore patrol vessels for extended long-range operations.

Defence Acquisition Council (DAC)-

Establishment: The Defense Acquisition Council (DAC) of India was established in 2001 under the Ministry of Defence to oversee the procurement of defense equipment and weapons for the Indian Armed Forces.

Primary Function

- The DAC serves as the highest decision-making bodywithin the Ministry of Defence on defense procurement matters. It formulates policies and guidelines to streamline the acquisition process and ensure transparency, efficiency, and accountability.

- Give in principle approval of a 15 years Long Term Integrated Perspective Plan (LTIPP) for defence forces.

- Accord of acceptance of necessity to acquisition proposals.

- Categorisation of the acquisition proposals relating to 'Buy', 'Buy & Make' and

'Make'.

- Look into issues relating to single vendor clearance.
- Take decisions regarding Transfer of Technology under the 'Buy & Make' category of acquisition proposals.
- Field trial evaluation.

Composition

- Chaired by the Defence Minister of India,the DAC includes members from the armed forces, Ministry of Defence, and other relevant departments. The Chief of Defence Staff and the three Service Chiefs are also part of the council.

Challenges and Future Directions

- Despite its efforts, the DAC faces challenges such as bureaucratic delays, budgetary constraints, and complex procurement procedures. Going forward, the council aims to streamline decision-making processes, promote indigenous defense manufacturing, and leverage emerging technologies to bolster India''s defense preparedness in an evolving security environment.

ICG Participates in the 20th Heads of Asian Coast Guard Agencies Meeting

Key highlights

Key Issues Discussed:

- **Maritime Law Enforcement:** Strategies for better enforcement of maritime laws.
- **Safety and Security of Life at Sea:** Measures to enhance safety and security in maritime domains.
- **Marine Environment Protection:** Efforts and initiatives to protect the marine environment.
- **Illicit Trafficking:** Addressing the trafficking of drugs, weapons, and humans.
- **Future Cooperation:** Strengthening future collaborations among member agencies.

Heads of Asian Coast Guard Agencies Meeting (HACGAM):

- The HACGAM is an annual event hosted by one of its member nations on a rotational basis.
- It was initiated by Japan to promote cooperation among regional coastguards.
- The forum has 23-member Coast Guard agencies and two associate members – the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (**ReCAAP**) and the **United Nations Office on Drugs and Crime (UNODC).**
- It was launched after the capture of the pirated vessel MV Alondra Rainbow by the Indian Coast Guard in November 1999.

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Objectives:

- The primary focus of the HACGAM is to foster cooperation between the coast guards of the member Asian states to ensure and promote safe, secure and clean seas in the region.

- To achieve this, HACGAM comprised four working groups that enable a focused and goal-oriented approach towards coordinated response and synergy towards common maritime issues.

Member countries:

Australia, Bahrein, Bangladesh, Brunei, Philippines, Cambodia, China, **India,**

Indonesia, Hong Kong, Japan, Republic of Korea, Laos, Maldives, Malaysia, Myanmar, Pakistan, Singapore, Sri Lanka, Thailand, Türkiye and Vietnam.

Indian Coast Guard

1) The Indian Coast Guard is a maritime law enforcement and search and rescue agency of India with jurisdiction over its territorial waters including its contiguous zone and exclusive economic zone.

2) Established in 1977 by the Coast Guard Act, 1978 of the Parliament of India.

3) Parent Agency: Ministry of Defence

4) Headquarters: New Delhi

5) Head: Director General Indian Coast Guard (DGICG)

Missions of Indian Coast Guard

1) Safety and protection of artificial islands, offshore terminals and other installations.

2) Protection and assistance to fishermen and mariners at sea.

3) Preservation and protection of marine ecology and environment including pollution control.

4) Assistance to the Department of Customs and other authorities in anti-smuggling operations.

INDIA - FRANCE BILATERAL NAVAL EXERCISE VARUNA

- Indian Naval Ship **Tabar & LRMR P8I Aircraft** Participate in the 22nd edition of IN - FN Bilateral Exercise VARUNA in the Mediterranean Sea'

Key Activities:

- **Tactical Manoeuvres**: Advanced naval operations integrating air, surface, and sub-surface assets.
- **Anti-Submarine Warfare Exercises**: Enhanced drills targeting submarine threats.
- **FLYEX**: Air exercise involving tactical air operations.
- **Air Defence Exercise**: Simulation and execution of defensive measures against aerial threats.
- **Live Weapon Firings**: Demonstration of real-time weapon capabilities.
- **PHOTO-EX**: Aerial and surface photography exercises.
- **Steam Past**: Naval tradition showcasing ships'' capabilities.

VARUNA Exercise

- The Indian and French Navies have been conducting bilateral maritime exercises since 1993. Since 2001, these exercises have been called 'VARUNA'.

This is an annual event.

- These interactions further underscore the shared values as partner navies, in ensuring freedom of seas and commitment to an open, inclusive Indo-Pacific and a rules-based international order.

Importance of the VARUNA Exercise

- **Strengthening Bilateral Relations**: Enhances strategic ties and deepens diplomatic relations between India and France.

- **Improving Interoperability**: Facilitates joint operations, standardizing procedures and tactics for seamless coordination.

- **Showcasing Capabilities**: Demonstrates advanced naval assets and technological integration, highlighting operational strengths.

- **Enhancing Readiness**: Provides realistic training scenarios, improving the skills and readiness of naval personnel.

- **Promoting Best Practices**: Encourages exchange of best practices and innovative strategies between the navies.

- **Regional and Global Security**: Contributes to maritime security and demonstrates strategic presence in key regions.

- **Building Long-Term Partnerships**: Reinforces strategic alliances and sets the foundation for future collaborations.

- **Operational Flexibility**: Enhances adaptability to various maritime scenarios and challenges.

INS Tabar: A stealth frigate with advanced weaponry and sensors, designed for multi-role naval operations including anti-submarine and anti-aircraft warfare.

LRMR P-8I: A maritime reconnaissance aircraft equipped with advanced sensors and armament for long-range surveillance and anti-submarine warfare.

Successful launch of Intermediate Range Ballistic Missile, Agni-4 conducted in Odisha

- Defence Ministry said, the launch successfully validated all operational and technical parameters.
- He said, the launch was conducted under the aegis of Strategic Forces Command.

The Agni-IV

- It is an Indian solid-fueled intermediate-range ballistic missile (IRBM) with a range of up to 4,000 km.
- The two-stage missile, previously named Agni-II Prime, is a derivative of the Agni-II MRBM with extended range.
- India has flight tested the Agni-IV eight times since its first test in 2010.

Key Features

- **Range**: Approximately 3,500 to 4,000 kilometers, making it capable of reaching targets across most parts of South Asia and beyond.
- **Guidance System**: Equipped with advanced inertial navigation systems and satellite guidance for high accuracy.
- **Warhead**: Can carry a variety of payloads, including conventional and nuclear warheads.
- **Propulsion**: Powered by solid rocket propellants for reliable performance and extended range.

Strategic Significance

- **Deterrence**: Enhances India''s strategic deterrence capability with its long range and precision.
- **Defense**: Provides India with a credible second-strike capability, ensuring a robust response to any potential threat.

Operational Capabilities

- **Accuracy**: High precision due to advanced guidance systems, ensuring effective targeting.
- **Versatility**: Capable of being launched from various platforms, including mobile launchers, which increases its strategic flexibility.

Agni Missile

- The Agni missiles are solid-propelled ballistic missiles, ranging from short-range missiles to intercontinental ballistic missiles, with road and rail mobility providing greater chances of survivability during an enemy attack.
- The development of the Agni missile series was started in early 1980 as part of the Integrated Guided Missile Development Programled by former President APJ Abdul Kalam**.**
- Since then, India has developed many variants of the Agni missile series.
- Over the last two decades, India has worked to improve its strategic deterrent capability by developing a variety of ballistic missiles,precision-guided munitions, and related platforms.

INDIA- USA JOINT MILITARY EXERCISE YUDH ABHYAS -2024 COMMENCES IN RAJASTHAN

- The exercise is scheduled to be conducted from 9th to 22nd September 2024.
- Exercise YUDH ABHYAS has been held annually since 2004, alternating between India and the USA.

Purpose and Objectives:

- **Primary Aim:** To enhance joint military capabilities for counter-terrorism operations in a sub-conventional scenario under Chapter VII of the United Nations Charter.
- **Focus:** Operations in semi-desert environments.

Tactical Drills and Training:

- **Joint Response to Terrorist Actions:** Exercises will simulate real-world scenarios involving terrorist threats, requiring coordinated responses from both Indian and US forces.
- **Joint Planning:** Collaborative planning sessions will be conducted to develop strategies and procedures for counter-terrorism missions.
- **Combined Field Training Exercises (FTX):** These will simulate actual counter-terrorism operations, allowing both contingents to practice and refine their tactics and techniques in a controlled environment.

Expected Outcomes:

- **Enhanced Interoperability:** The exercise aims to improve the ability of both armies to operate seamlessly together, sharing communication systems, operational procedures, and tactical approaches.
- **Best Practices Exchange:** Both forces will benefit from each other's expertise,

adopting effective techniques and procedures for counter-terrorism and joint operations.

- **Strengthened Defense Cooperation:** The exercise serves to reinforce the strategic partnership between India and the USA, enhancing overall defense cooperation and mutual trust.

- **Increased Camaraderie:** Building relationships and understanding between soldiers from both nations, fostering a spirit of cooperation and mutual respect.

Exercise Yudh Abhyas

- It is the largest running joint military training and defence cooperation endeavor between India and the US.

- The exercise was started in 2004 under the US Army Pacific Partnership Program. The exercise is hosted alternately between both countries.

- The exercise **aims at** enhancing understanding, cooperation and interoperability between two Armies.

Two anti-submarine warfare vessels for the Indian Navy launched at Cochin Shipyard

- **Names**: INS Malpe and INS Mulki.

- **Vessel Specifications:**

- **Dimensions**: 78 meters in length, 11.36 meters in width, and a draught of about 2.7 meters.

- **Speed and Endurance**: Capable of a maximum speed of 25 knots and has an endurance of 1,800 nautical miles.

- **Displacement**: Approximately 900 tonnes.

- **Operational Roles:**

- **Primary Functions**: Designed for anti-submarine warfare (ASW) in coastal waters, low-intensity maritime operations, mine-laying, and search and rescue operations.
- **Armament and Equipment**: Equipped with indigenously developed sonar, lightweight torpedoes, ASW rockets, mines, close-in weapon systems, and stabilized remote-control guns.

Anti submarine Warfare ships:

- Anti-submarine warfare ships encompass tactics and strategies involving surface warships, aircraft, submarines, and other platforms to detect, track, and prevent enemy submarines from engaging in hostile activities.

Objectives

- ASW operations are focused on locating, monitoring, deterring, damaging, or eliminating hostile submarines to ensure maritime security and protect vital naval assets.
- They will handle anti-submarine operations, **Low Intensity Maritime Operations (LIMO)**, and **Mine Laying Operations** in coastal waters.

India's ASW Capabilities

- **Kamorta class ships**: They are frontline warships with stealth capabilities with low signature of radiated underwater noise. E.g. INS Kamorta, INS Kadmatt
- **Integrated ASW Defence Suites (IADS)**: for underwater detection and protectionfrom threats in partnership with Mahindra Defence Systems Limited.
- **Maritime patrol and reconnaissance aircraft**: Use of Boeing P-8I **(Poseidon)**
- **ASW helicopters:** Use of MH-60R Seahawk multi-role helicopters.
- **SMART:** Missile-based light-weight torpedo delivery system developed by DRDO.

IAF Aircraft set course for Exercise Eastern Bridge VII at Oman

Participants:

- **Indian Air Force (IAF)**: Deploying MiG-29s, Jaguars, and C-17s.
- **Royal Oman Air Force (ROAF)**: Hosting and participating in the exercise.

Exercise Components:

- **Aerial Maneuvering**: Complex aerial maneuvers to practice and improve air combat skills.
- **Air-to-Air Operations**: Exercises involving aircraft engaging each other in the air.
- **Air-to-Ground Operations**: Simulations and training on attacking ground targets from the air.
- **Logistical Coordination**: Managing and coordinating logistical support and operations.

- **The Eastern Bridge exercise** is a bilateral air exercise between the Indian Air Force (IAF) and the Royal Air Force of Oman.
- The exercise aims to strengthen the bilateral relationship between the two countries, and to improve operational capabilities and interoperability.
- The first Eastern Bridge exercise was held in 2009.

Objectives:

- **Interoperability**: Enhance coordination and operational synergy between the Royal Oman Air Force and the Indian Air Force.
- **Training and Skills Improvement**: Focus on improving tactical and operational skills through joint training missions.

- **Strategic Cooperation**: Strengthen strategic cooperation and mutual understanding between the two air forces.

Significance:

- **Strategic Partnership**: Demonstrates the enduring partnership and strategic collaboration between the Royal Oman Air Force and the Indian Air Force.
- **Regional Security**: Highlights the commitment of both nations to regional security and stability.
- **Shared Expertise**: Provides an opportunity for both air forces to share expertise and operational experiences, contributing to improved operational readiness.

Other bilateral exercises between India and Oman

- Oman is the only country in the Gulf region with which all three services of the Indian armed forces conduct regular bilateral exercises and staff talks, enabling close cooperation and trust at the professional level.
1. **Naseem Al-Bahr** is the naval exercise conducted between both the countries.
2. **AL Nagah** is the joint exercise between the armies of two countries.
3. **Eastern Bridge** is the joint exercise between the air forces of two countries.

Oman's Strategic Significance for India

- Oman is India's closest defence partner in the Gulf region and an important anchor for India's defence and strategic interests.
- Oman is at the **gateway of Strait of Hormuz** through which India imports one-fifth of its oil imports.
- Oman also provides critical operational support to Indian naval deployments in the Arabian sea for anti-piracy missions.
- Oman also actively participates in the Indian Ocean Naval Symposium (IONS).
- India has supplied rifles to Oman. Also, India is considering setting up a defence production unit in Oman.

DRDO & Indian Navy successfully flight tests Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)

- The test was conducted jointly by the Defence Research and Development Organisation (DRDO) and the Indian Navy.

Vertical Launch Short Range Surface to Air Missile

- It is a quick reaction surface-to-air-missile indigenously designed and developed by DRDO for the Indian Navy, is meant for neutralising various aerial threats at close ranges, including sea-skimming targets.
- The missile has an operational range of 50 to km distance and features mid-course inertial guidance through fiber optic gyroscope and active radar homing in terminal phase
- The launch of the system was conducted to validate integrated operation of all weapon system components, including the vertical launcher unit with controller, canisterised flight vehicle and weapon control system.
- The successful testing of these systems is crucial for future launches of the missile from Indian Naval ships.

Features of VL-SRSAM

- The missile has been designed to strike at the high-speed airborne targets at the range of 40 to 50 km and at an altitude of around 15 km.
- Its design is based on Astra missile which is a Beyond Visual Range Air to Air missile.
- Two key features of the VL-SRSAM are cruciform wings and thrust vectoring.
- The cruciform wings are four small wings arranged like a cross on four sides and give the projective a stable aerodynamic posture.

- The thrust vectoring is an ability to change the direction of the thrust from its engine control the angular velocity and the attitude of the missile.

- VL-SRSAM is a **canisterised system**, which means it is stored and operated from specially designed compartments.

- In the canister, the inside environment is controlled, thus making its transport and storage easier and improving the shelf life of weapons

20th Maritime State Development Council Meeting to Drive Strategic Maritime Development and Sustainability

Key Highlights

Sagarmala Programme and Maritime Vision:

- **Investment:** ₹24,000 crore projects under Sagarmala to advance India''s maritime sector.
- **Targets:** Aim to reach 1.5 million cruise tourists by 2030.
- **Visions:** Aligning with **Maritime India Vision 2030** and **Amrit Kaal Vision 2047** for future growth.

Main Discussion Points:

- **Sagarmala Programme Review:** Progress assessment and future plans for port-led development.
- **National Maritime Heritage Complex (NMHC):** Focus on preserving and showcasing maritime history.
- **Inland Waterways:** Proposals for enhancing cargo and passenger transport.
- **Connectivity:** Improvement of road and rail links to ports.

Innovative State-led Initiatives:

- **Kerala:** Monetizing dredging activities.
- **Gujarat:** Urban development projects linked to port activity.
- **Andhra Pradesh:** Comprehensive maritime growth master plan.
- **Environmental Sustainability:** Reducing pollution at **Goa Port** by managing dirty cargo handling.

Maritime State Development Council (MSDC):

Establishment and Purpose:

- **Formation:** The MSDC was established in 1997.
- **Objective:** The Council serves as an apex advisory body for the development of India''s maritime sector. Its main aim is to promote integrated and coordinated growth of **Major and Non-Major ports** across the country.

Functions and Responsibilities:

- **Policy Formulation:** Advises on policies related to the development and management of ports.
- **Coordination:** Facilitates coordination between the Central Government and State Governments for port development.
- **Review and Assessment:** Monitors and reviews the progress of various maritime initiatives, including port development projects.
- **Strategic Planning:** Develops and oversees strategic plans to enhance port infrastructure, connectivity, and efficiency.
- **Implementation Oversight:** Ensures the effective implementation of maritime development projects and programs.

Key Initiatives:

- **Sagarmala Programme:** Focuses on port-led development, improving port infrastructure, and enhancing connectivity between ports and hinterlands.
- **National Maritime Heritage Complex (NMHC):** Aims to preserve and showcase India's maritime history and heritage.
- **Maritime India Vision 2030:** A strategic framework outlining the vision for the maritime sector''s growth and development over the next decade.
- **Amrit Kaal Vision 2047:** Sets long-term goals for the maritime sector as part of India's broader developmental vision.

DRDO successfully conducts first phase of Developmental Field Firing Trials of Indian Light Tank 'Zorawar'

- During the field trials conducted in the desert terrain, the Light Tank demonstrated exceptional performance, efficiently meeting all the intended objectives.
- In the initial phase, the tank's firing performance was rigorously evaluated and it achieved the required accuracy on designated targets.

Indian Light Tank 'Zorawar'

- It is an indigenously designed and developed Light Tank.
- It was jointly developed by the Defence Research and Development Organisation (DRDO) along with Larsen & Toubro (L&T) as the lead integrator.
- It was named after a military general, **Zorawar Singh Kahluria,** who had served under Jammu's **Raja Gulab Singh** in the 19th Century.

Key Features of Zorawar Light Tank

- The most important feature of the Zorawar is its weight. It is designed to be light and air-transportable as it weighs no more than 25 tonnes. It is significantly lighter as compared to traditional main battle tanks.
- Despite its lightweight and compact size, the Zorawar comprises an efficient main gun that has the capability of handling numerous targets. It also has advanced fire control systems for specific targeting.
- The tank is built with a priority on offering protection against a wide range of threats, including anti-tank-guided missiles and advanced explosive devices.
- The Zorawar is equipped with superior mobility, allowing it to handle challenging situations in complex terrain seamlessly. It ensures high operational flexibility due to low ground pressure.

- The tank has modern technology, including advanced sensors, artificial intelligence, communication systems, drone integration and night-fighting capabilities.
- The Zorawar is built to execute various roles and responsibilities, including power, mobility and fire support. This combination is optimised in a manner for weight maintenance.

Operational Capabilities:

- Designed to operate effectively in extreme weather conditionsand at high altitudes (above 15,000 feet) with minimal logistic support.
- Intended for use in challenging terrains where heavier tankslike T-72 and T-90 face limitations.
- Includes thermal sights, night-fighting capabilities, and features to reduce visual, sound, heat, and electromagnetic signatures.

Indigenous Zorawar Light Tank: Why is It Called 'Brave and Strong'?

Developed by L&T in collaboration with DRDO

Field Artillery **FV433, 105mm**	Coaxial machine gun **7.62 mm**
Mass **25 t**	Persons **3**
	Speed **70 km/h**
Horsepower **1000**	Offroad **35/40 km/h**

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Third edition of INDUS-X Summit concludes in California

- A Memorandum of Understanding (MoU) was signed between India's **Innovations for Defence Excellence (iDEX)** and the U.S. Department of Defense's Defence Innovation Unit (DIU).

- The MoU aims to enhance cooperation in defence innovation. It focuses on deepening collaboration among industry, research, and investment stakeholders.

- **New Challenge:** Launch of a new challenge under the INDUS-X initiative.

- **INDUS-X Impact Report:** Release of the report detailing the impact of the initiative.

- **Official Webpage:** Launch of the INDUS-X webpage on the iDEX and DIU websites.

Summit Focus Areas:

- **Technology Showcase:** Presentation of next-generation technologies by start-ups and MSMEs.

- **Advisory Forums:** Discussions through Senior Advisory Group and Senior Leaders Forum.

- **Discussion Topics:** Future technology trends, capacity building for start-ups, funding for defence innovations, and strengthening defence supply chains.

U.S.-India Defense Accelerator Ecosystem (INDUS-X)

- It was launched in June 2023 during the state visit of the Prime Minister of India to the US.

- INDUS X will be a defence innovation bridge, which will inter-alia, include Joint Challenges, **Joint Innovation Fund,** Academia engagement, Industry-startup connect, investment by private entities in defence projects, mentoring by

experts and niche technology projects etc.

- It will focus on advancing high-tech cooperation and fostering joint research, development, and production opportunities in the defence sector.

- The initiative aims to explore possibilities for co-producing jet engines, long-range artillery, and infantry vehicles.

- India's **Innovations for Defense Excellence (iDEX)**and the Office of the Secretary of Defense (OSD), US, are leading INDUS-X activities.

Focus Areas:

- Fostering greater horizontal cooperation between governments, academia, and laboratories, as well as vertical partnershipsbetween established defense primes and startups or Small and Medium Enterprises (SMEs).

- Supporting India's goal of achieving $5 billionin defense exports by 2025.

- Contributing to a more stable and secure Indo-Pacific region.

Innovations for Defence Excellence (iDEX):

- Launched in 2018, iDEX is the flagship scheme of the Ministry of Defence.It is funded and managed by the **Defence Innovation Organization (DIO),** established as a "not-for-profit" company under Section 8 of the Companies Act, 2013.

- iDEX, aims to foster innovation and technology development in the Defence and Aerospace sector.

- It provides grants, funding, and other support to carry out research and development projects with potential for future adoption in Indian defence and aerospace needs.

- It is currently engaged with around 400+ Startups and MSMEs. Recognized as a game-changer in the defence ecosystem, iDEX has received the PM Award for Innovation in the defence sector.

India goes to Moon again: This time to come back to Earth after landing on the Moon

- Cabinet gave approval for **CHANDRAYAAN-4** Mission in the series of Chandrayaan-1,2&3.

- Mission to Moon after the successful Chandrayaan-3 to demonstrate technologies to come back to Earth from Moon and to bring samples.

- The mission is part of India's broader vision for its space program during the **Amrit Kaal**, which includes:

1. Establishing the **Bharatiya Antariksh Station** by 2035
2. Achieving an Indian landing on the Moon by 2040

Chandrayaan-4 Mission

- Following the success of Chandrayaan-3, ISRO is now turning its attention to Chandrayaan-4, a lunar sample-return mission.

- This ambitious project aims to achieve a soft landing on the Moon, collect lunar rock samples, and return them to Earth.

- If successful, India would join the ranks of the United States, Russia, and China in accomplishing this challenging feat.

Key Objectives of the Mission

- Achieving a safe and gentle landing on the lunar surface.
- Collecting and storing lunar samples.
- Lifting off from the Moon''s surface.
- Docking and undocking in lunar orbit.
- Transferring samples between spacecraft modules.
- Returning the collected samples safely to Earth.

Mission Strategy and Components

- Chandrayaan-4's strategy is notably complex, involving five distinct

components of the spacecraft:

- **Propulsion System**: Responsible for transporting the lander and ascender stages to the Moon.

- **Descender & Ascender**: Designed for the lunar landing, carrying equipment for soil sampling & Detaches from the lander after collecting samples, then lifts off from the lunar surface.

- **Transfer Module**: Receives samples from the Ascender and transports them to the Re-entry module.

- **Re-entry Module**: Safely brings the lunar samples back to Earth, designed to withstand the re-entry into Earth''s atmosphere.

Bharatiya Antariksh Station

- The **Bharatiya Antariksh Station (BAS)** is envisioned as India's first operational space station, planned to enhance the country''s capabilities in space research and technology.

- It aims to serve as a hub for scientific experiments and technological developments in microgravity environments.

Benefits of BAS

- **Microgravity Research:** BAS will enable extensive research in microgravity conditions, which is crucial for advancements in medicine, pharmaceuticals, and material sciences.

- **Space Technology Development:** The station will facilitate the development of new space technologies, including robotics and artificial intelligence applications for space exploration.

- **Environmental Studies:** BAS will provide a unique vantage point to study Earth's climate and environmental changes, offering valuable data that can inform global climate initiatives.

INDIAN AIR FORCE AIR SHOW SET TO DAZZLE CHENNAI AHEAD OF 92ND IAF ANNIVERSARY

- This year''s event is based on theme **"Bhartiya Vayu Sena - Saksham, Sashakt, Atmanirbhar"** (Potent, Powerful, and Self-Reliant), highlighting the lAF''s unwavering commitment to safeguarding the nation''s airspace.

- The air show will feature performances by the lAF''s elite teams Akash Ganga, renowned for their skydiving prowess, the Suryakiran Aerobatic Team, famed for their close formation aerobatics, and the Sarang Helicopter Display Team, known for their stunning aerial choreography.

Indian Air Force

- President of India is the Supreme Commander of the Armed Forces,
- The fourth-largest air force in the world is the Indian Air Force**.**
- Headquarters: New Delhi
- Motto of India Air Force: Touch the sky with Glory.
- It was taken from the eleventh chapter of the Bhagavad Gita.
- The Chief of Air Staff, an air chief marshal is responsible for the operational command of the air force.

History

- On October 8, 1932, the former British Empire established the IAF.
- It was created to support the British Royal Air Force, particularly against Japan in World War II.
- The IAF was used to attack Japanese bases in Burma in order to stop the Japanese army''s advance toward India.
- **King George VI** gave the IAF''s accomplishments the prefix "Royal" in 1945.

- This honorific title was dropped in 1950, when India became a republic.

Significance of Indian Air Force Day

- **Celebrating Heroes:** It's a platform to celebrate the achievements and contributions of IAF personnel, both past and present. Their courage, skill, and unwavering commitment deserve recognition and appreciation.

- **Inspiring Future Generations:** The Day serves as a source of inspiration for young people, showcasing the IAF as a career path filled with purpose, dedication, and service to the nation. It encourages them to consider joining the force and contributing to its future success.

- **Symbol of National Strength:** The IAF's impressive display of aerial prowess and technological advancement during the Day's celebrations instills a sense of national pride and confidence in the country's ability to defend itself.

- **Unifying Force:** The Day transcends differences and brings people together in a common spirit of patriotism and appreciation for the IAF's vital role in protecting the nation. It fosters a sense of unity and shared purpose.

- **Highlighting Technological Advancements:** The Day serves as a platform to showcase the IAF's commitment to modernization and technological advancement. It highlights the continuous efforts towards developing indigenous aircraft, weapons systems, and other cutting-edge technologies.

Goa Maritime Symposium 2024

- Indian Navy will be hosting the fifth edition of Goa Maritime Symposium (GMS - 24) at **Naval War College, Goa from 23 - 24 Sep 24**.

- The **theme for the event** is "Common Maritime Security Challenges in the Indian Ocean Region - Progressing Lines of Efforts to Mitigate Dynamic Threats such as Illegal, Unreported and Unregulated Fishing and other Illegal Maritime Activities".

- The symposium will see participation of Naval **representatives from 12 Indian Ocean Littoral countries**- Bangladesh, Comoros, Indonesia, Madagascar, Malaysia, Maldives, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka and Thailand. Observers from Kenya and Tanzania will also attend the event.

Goa Maritime Symposium (GMS):

- It was conceptualised and instituted by the **Indian Navy in 2016.**
- It is a forum for fostering collaborative thinking, cooperation and mutual understanding between India and key maritime nations of the Indian Ocean Region (IOR).
- The symposium is conducted biennially by the **Naval War College (NWC), Goa**, and three editions of the event have been organised thus far.

Key Objectives

- **Strengthening Maritime Security**: The GMS focuses on enhancing collaboration among nations to address maritime threats such as piracy, smuggling, and trafficking.
- **Promoting Cooperation**: It serves as a forum for naval officers, policymakers, and maritime experts to share knowledge, best practices, and experiences in maritime operations.
- **Fostering Partnerships**: The symposium aims to strengthen partnerships among nations, enhancing collective capabilities and interoperability among navies.
- **Addressing Emerging Challenges**: Discussions often cover contemporary maritime challenges, including environmental issues, climate change impacts, and the need for sustainable maritime practices.

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Curtain Raiser NAVIKA SAGAR PARIKRAMA II

- **Mission**: Second edition of Navika Sagar Parikrama, a circumnavigation of the globe.
- **Vessel**: Indian Naval Sailing Vessel Tarini.
- **Crew**: Two women officers, Lt Cdr Dilna K and Lt Cdr Roopa A.
- **Mentorship:** Guided by Golden Globe Race hero, Cdr Abhilash Tomy (Retd.).
- **Logo Significance:** The **octagonal shape** in the center depicts the **Indian Navy**, while the **sun** signifies a **celestial body** and the **compass**, guiding the sailors through the challenging seas.
- **Mission Goals: To** promote seamanship, maritime heritage, and gender equality through a challenging circumnavigation of the globe.

Significance of Navika Sagar Parikrama II

- **Empowerment of Women**: Highlights women''s capabilities in challenging roles, promoting Nari Shakti and inspiring future generations.
- **National Pride**: Reinforces India''s maritime heritage and showcases the Navy''s capabilities, enhancing national pride and strategic ambitions.

- **Self-Reliance**: Aligns with the Atmanirbhar Bharat initiative by demonstrating India''s ability to conduct independent maritime operations.
- **Human Endurance**: Challenges the limits of physical and mental resilience, raising awareness about maritime risks and the need for preparation.
- **International Cooperation**: Involves coordination with global maritime agencies, fostering diplomatic relations and enhancing maritime safety.
- **Inspiration for Future Expeditions**: Encourages further exploration and participation in maritime activities among youth.
- **Scientific Awareness**: Offers opportunities for marine research and promotes sustainable practices through reliance on wind power.

Historical Context

- **Inaugural Expedition**: The **first Navika Sagar Parikram**a was completed in 2017 by an all-women crew of six officers.
- **Previous Circumnavigations**: **Capt Dilip Donde (Retd.)** was the first Indian to circumnavigate the globe (2009-10), and Cdr Abhilash Tomy (Retd.) completed the Golden Globe Race in 2022.

Raksha Mantri Shri Rajnath Singh inaugurates 41st Indian Coast Guard Commanders' Conference in New Delhi

Key Highlights

- **Focus**: Strategic, operational, and administrative discussions on maritime security.
- **Role of ICG**: Ensures the security of India's coastline and **Exclusive Economic Zone**; prevents terrorism, arms, and drug trafficking.

- **Technological Shift**: Emphasis on transitioning to a technology-oriented force, incorporating AI, drones, and modern tech.

- **Government Commitment**:

- 31 ships worth over ₹4,000 crore being built by Indian shipyards.

- Procurement of advanced equipment like Multi-Mission Maritime Aircraft and Fast Patrol Vessels.

- **Collaboration**: Interaction with Chief of Defence Staff and Navy Chief to enhance maritime security cooperation.

- **Evaluation**: Commanders to assess operational initiatives and ongoing projects related to "Make in India" and "Aatmanirbhar Bharat".

Indian Coast Guard:

- It is an armed force that protects India''s maritime interests and enforces maritime law, with jurisdiction over the territorial waters of India, including its contiguous zone and exclusive economic zone.

- **History:** it was formally established in 1978 by the **Coast Guard Act, 1978** as an independent Armed force of India.

- **Parent ministry**: It operates under the Ministry of Defence.

- **Administration:** The organization is headed by the Director General Indian Coast Guard (DGICG).

- **HQ**: Coast Guard Headquarters (CGHQ) is located at New Delhi.

Functions:

- **Preventing Smuggling:** One of the primary duties of the ICG is prevention of smuggling through maritime routes.

- **Aid to Civil Authority:** It has also rescued approximately 13,000 personnel till date during various **'Aid to Civil Authority'** operations viz. assistance provided

to civil authorities during floods, cyclones and other natural calamities; most recently during the recent floods in Maharashtra, Karnataka and Goa.

- **Maritime Security:** It is also collaborating with littoral countries to combat transnational maritime crimes and enhance maritime safety in its area of responsibility and in the Indian Ocean Region.

- Under **SAGAR" -** Security and Growth for all in the Region & "Neighbourhood First" policy, the ICG has nurtured professional relationships across oceans and established ties with countries in the Indian Ocean Region for Ocean Peacekeeping.

- **Role in Disaster Management**: The ICG has successfully averted major ecological disasters and emerged as the **'First Responder' in the region.**

Expanding Horizons in Space Sector: From Lunar Exploration to a National Space Station

India's Space Exploration Initiatives

- India is embarking on a significant expansion of its space program, with several visionary missions approved by the Union Cabinet under the leadership of the Indian Space Research Organisation (ISRO).
- These initiatives reflect India''s commitment to becoming a key player in global space exploration, technological innovation, and industry collaboration.

Key Missions and Projects

1. Chandrayaan-4 Mission

- **Objective**: The primary aim of the Chandrayaan-4 mission is to develop and demonstrate the technologies required for safely returning lunar samples to Earth. This mission is a crucial step toward establishing capabilities for future manned missions to the Moon, planned for 2040.
- **Focus Areas**:
- Advanced technologies for docking and undocking.
- Safe landing on the lunar surface.
- Lunar sample collection and analysis back on Earth.
- **Timeline**: The mission is expected to be completed within 36 months following its approval.
- **Budget**: ₹2,104.06 crore, which covers spacecraft development, two launches using the LVM3 vehicle, deep space network support, and special design validation tests.
- **Impact**: This mission is anticipated to boost India's self-reliance in space technologies, create employment opportunities, and foster collaboration with Indian industries and academia through workshops and knowledge-sharing initiatives.

2. **Venus Orbiter Mission (VOM)**

- **Objective**: The VOM aims to place a scientific spacecraft in orbit around Venus to study its surface, atmospheric processes, and the influence of the Sun on its environment. Understanding Venus''s transformation from a potentially habitable planet to its current state will provide insights into planetary evolution.

- **Launch Date**: The mission is scheduled for March 2028.

- **Budget**: ₹1,236 crore, with ₹824 crore allocated for spacecraft development, including its payloads and technology elements.

- **Significance**: This mission will enhance India's capabilities in planetary exploration and involve significant collaboration with Indian industries. It also offers opportunities for academic institutions to train students in relevant areas of space technology.

3. **Bharatiya Antariksh Station (BAS)**

- **Objective**: The establishment of the first module of the BAS represents a major expansion of the Gaganyaan program, focusing on the technologies necessary for building and operating an Indian space station.

- **Timeline**: The operational goal for BAS is set for 2035, with the program including an Indian crewed mission to the Moon by 2040.

- **Funding**: The revised Gaganyaan program now has a total budget of ₹20,193 crore, with an additional ₹11,170 crore approved for new initiatives.

- **Impact**: The program is expected to significantly enhance microgravity research and technology development while creating employment in high-tech sectors. The missions will include four launches by 2026 and four additional missions focused on technology demonstration by 2028.

Union Budget 2024-25

- **Venture Capital Fund**: A ₹1,000 crore fund has been established to support space startups, aimed at catalyzing growth in the space sector and positioning

India as a key player in the global space economy.

Directorate General of Quality Assurance celebrates its 68th Raising Day

- The 68th Raising Day marks a key milestone in DGQA's mission to ensure the quality of defence armaments, stores, and equipment for the Indian Armed Forces.

Key Highlights

- **Quality Standards**: DGQA has played a crucial role in setting and enforcing stringent quality standards for equipment used by the Indian Army.
- **Reorganization for Aatmanirbharta**:
- The DGQA is undergoing a significant restructuring aimed at enhancing the **Ease of Doing Business** and achieving **Aatmanirbharta** (self-reliance) in defence.
- The new structure focuses on expediting quality assurance processes and trials while reducing layers of decision-making.
- **Single Point Technical Support**: The reorganization will enable a streamlined approach, providing single-point technical support for each equipment or weapon platform at all levels.
- **Shift to Prevention-Based QA**:
- Transitioning from a conventional inspection-based system to a prevention-focused quality assurance and risk mitigation framework.
- Emphasizing proactive measures to improve overall product quality.
- **Adoption of Innovative Technologies**: DGQA has implemented new QA methodologies and technologies to address emerging challenges in the defence

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sector.

- **New Directorate for Testing and Evaluation**:
- Establishment of a **Directorate of Defence Testing and Evaluation Promotion** to facilitate transparent allocation of proof ranges and testing facilities.
- Aimed at improving collaboration with the defence industry and ensuring efficient testing processes.
- **Enhanced Engagement with Private Industry**: Domestic private industries are now allowed to use DGQA''s testing facilities, which promotes the **Ease of Doing Business and** supports local manufacturing efforts.
- **Automation and Digitization**: Standardized QA processes are being automated and digitized, enhancing efficiency and transparency in operations.

Directorate General of Quality Assurance (DGQA):

- DGQA is an **Inter-Service Organisation** functioning **under the Department of Defence Production** in the **Ministry of Defence**.
- This organisation is **more than a hundred years old** and is **responsible for** second-party **Quality Assurance (QA) of all defence stores and equipment**, **both imported** as well as **indigenous**, **for the Army, Navy** (excluding Naval Armaments), **and** common user items for the **Air Force** procured from Private Sector, Public Sector Undertakings, and Ordnance Factories.
- DGQA approval implies that the products have been subjected to extensive testing, including simulations of extreme conditions.
- Apart from QA activities, the organisation is **responsible for import substitution and associates with DRDO in** the development **projects**.
- It also **ensures Documentation, Codification and Standardisation Action for** minimizing the variety of components/equipment.

- The **other services rendered** are **promotion of small-scale industries**, **post-procurement services, Defect Investigations** and **Technical Consultancy** to the users, the Ministry and the production agencies.

Organisational Structure:

- DGQA Organisation is structured into **eleven Technical Directorates**, **each responsible for a distinct range of equipment.**

- The **Technical Directorates are structured in two tiers** for functional purposes, comprising of **Control lerates and Field Quality Assurance Establishments**.

- In addition, **there are Proof Establishments in Armament Discipline** for carrying out proof of weapons and ammunition.

Defence Accounts Department to celebrate 277th Annual Day

Key Highlights of the Celebration

Launch of Publications and Initiatives:

- **Defence Travel System 2.0**: An upgraded system aimed at streamlining travel processes for defence personnel.

- **SPARSH Audit Manual**: A guide for internal audits within the DAD to enhance efficiency and transparency.

- **Comprehensive Statistical Handbook on Defence Expenditure 2024**: A detailed report providing insights into defence spending patterns and trends.

- **Market Intelligence Report 2023-24**: Analysis of market conditions relevant to defence procurement and financial management.

Defence Accounts Department (DAD) Overview

- **Establishment**: DAD traces its origins back to **1747**, with the appointment of the **Military Pay Master**. It has evolved significantly over the years to meet the needs of the Indian Armed Forces.

Functions:

- **Internal Audit**: Ensures financial compliance and accountability within the Defence sector.
- **Accounting**: Manages financial records and transactions related to defence expenditure.
- **Financial Advice**: Provides strategic financial guidance to the Ministry of Defence and the Armed Forces.
- **Defence Pensions Management**: Oversees the disbursement and management of pensions for defence personnel.

Significance of the DAD

- **Support to Armed Forces**: DAD plays a crucial role in ensuring the financial health and accountability of the defence sector, directly supporting the operational capabilities of the Armed Forces.
- **Reinvention**: The department has continuously adapted to changing needs and challenges, embracing technological advancements and modern management practices to enhance service delivery.
- **Commitment to Excellence**: Through initiatives like the Raksha Mantri Excellence Awards, DAD promotes a culture of performance and dedication among its employees, contributing to overall efficiency and effectiveness.

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INTERNATIONAL RELATIONS

5th India-Philippines Joint Defence Cooperation Committee meeting held in Manila

Key highlights

Discussions and Outcomes:

- **Bilateral and Multilateral Issues:** The meeting involved discussions on a wide range of bilateral and multilateral topics.
- **Service-to-Service Interactions:** The outcomes of the third Service-to-Service interactions held on September 10, 2024, were reviewed with satisfaction regarding the enhancement of bilateral defence cooperation.

India's Defence Initiatives:

- **Self-Reliance Defence Posture Act:** India acknowledged the Philippines' efforts under this act for modernizing its armed forces and shared its own vision of 'Aatmanirbhar Bharat' aimed at boosting indigenous defence capabilities.
- **Co-Development and Co-Production:** India invited the Philippines to collaborate in the co-development and co-production of defence equipment and sought investments for long-term equity partnerships.

Philippines' Defence Initiatives:

- The Philippines expressed interest in investing in assured supply chains and appreciated India's defence industry indigenisation model.

Commitments and Initiatives:

- Both countries reaffirmed their commitment to supporting each other's goals of self-reliance in defence production.

- They appreciated the operationalisation of the White Shipping Information Exchange and the forthcoming opening of the Defence Wing at the Indian Embassy in Manila.

Multilateral Cooperation:

- The Philippines was welcomed as a coordinating country for India in the ASEAN Defence Ministers'' Meeting Plus (ADMM-Plus).
- Discussions were held on strengthening cooperation in multilateral forums.
- India and the Philippinesare two democratic countries in the Indo-Pacific region that share common approach towards the Indo-Pacific**,** emphasizing the importance of a free, open, and stable region.

Political Relations:

- India and the Philippines formally established diplomatic relations on 26 November 1949,shortly after both countries gained independence. (Philippines in 1946 and India in 1947).
- When India launched **Look East Policy** and intensified partnership with Association of Southeast Asian Nations (ASEAN) in 1992,it also resulted in intensified relations with the Philippines both bilaterally and in the regional context.
- With the **Act East Policy (2014)**, the relationship with the Philippines has diversified further into political-security; trade and industry, etc.

Defence Cooperation:

- India and the Philippines have a growing defense and security partnership. One of the most significant developments in defence cooperation between India and the Philippines is the BrahMos missile deal, which is expected to be finalised soon.

Bilateral trade between India and Philippines

- It (in terms of value) increased from USD 1.89 billion in 2015-16 to USD 3.05 billion in 2022-23, crossing USD 3 billion mark for the first time.

- In 2022, an Agreement on **Cooperation and Mutual Assistance in Custom Matters** was signed which would facilitate trade.

- MOU for constitution of JWG on Cooperation in Financial Technology was signed in 2023. This would facilitate partnership between India and Philippines in the fields of digital payments, financial inclusion, fintech and related areas.

Significance of Philippines for India

- **Strategic and Security Interests:** The Philippines is a key player in Southeast Asia, a region of strategic importance to India.

- The two countries share common interests in maintaining freedom of navigation in the South China Sea and countering regional security threats.

- India's Look East Policy and its Act East Policy are aimed at strengthening ties with Southeast Asian nations, including the Philippines, to enhance regional stability and cooperation.

- **Economic Opportunities:** The Philippines is an emerging market with potential for trade and investment.

- Both countries are exploring opportunities for cooperation in areas such as renewable energy, education, and tourism.

- **Regional Cooperation:** Both countries are members of regional forums such as the Association of Southeast Asian Nations (**ASEAN**) and the **East Asia Summit.**

- Their collaboration in these forums is important for addressing regional challenges and promoting economic integration.

US to sell High Altitude Anti-Submarine Warfare sonobuoys to India

- It will enhance India's capacity to conduct anti-submarine warfare operations from its **MH-60R** helicopters.
- The proposed sale will also strengthen the US-India strategic and defence relationship.

Sonobuoys:

- Sonobuoys are small, expendable devices used in underwater acoustics and sonar systems to detect and analyze sound in the ocean, particularly for tracking submarines and other underwater objects.
- It is a core technology for anti-submarine warfare.
- It helps to track potentially hostile submarinesoperating in the open ocean and in coastal areas.
- Information from these systems can help enable precision attacks withair-launched torpedoes.
- They were first used during the Second World War to detect **German U-boats**.

Types of Sonobuoys:

- **Passive Sonobuoys**: These devices listen for sounds generated by submarines, such as engine noise or other mechanical sounds. They do not emit sound waves themselves, making them stealthy and harder for submarines to detect.
- **Active Sonobuoys**: These sonobuoys emit sound pulses (pings) into the water and listen for echoes that bounce off objects like submarines. This type provides more precise location information but can give away the position of the sonobuoy.
- **Special Purpose Sonobuoys**: These include devices designed for environmental

monitoring, such as measuring water temperature, salinity, and depth, which can influence sonar performance.

Components

- A typical sonobuoy consists of a cylindrical or spherical buoyant housing.
- Sensors for detecting acoustic signals.
- A battery or power source.
- A radio transmitter or other communication system to relay data to the host platform (e.g., aircraft or ship).

Benefits

Submarine Detection

- Extends reach and surveillance capabilities.
- Deploys sonobuoys over a wide area for detecting submerged threats.

Extended Range

- Long endurance and high altitude cover large ocean areas efficiently.
- Expands coverage range for monitoring and responding to potential threats.

Real-time Data

- Acoustic signals detected by sonobuoys transmitted in real-time.
- Enables rapid decision-making and response to submarine threats.

Versatility

- Choice of passive and active sonobuoys.
- Passive for discreet listening, active for active searching and locating.

Environmental Data

- Provides valuable environmental information (e.g., water temperature, noise levels).
- Enhances understanding of the underwater environment.

Cost-effective Surveillance

- Drones deploy sonobuoys, reducing the need for expensive manned assets.
- Offers persistent and cost-effective maritime surveillance.

Safety

- Reduces risks associated with manned aircraft deployments.
- Offers safer and more flexible deployment options.

India launches Operation Sadbhav to provide humanitarian assistance to Typhoon Yagi affected countries

- India sent urgent relief materials to Myanmar, Laos, and Vietnam to assist them in dealing with the impact of the major typhoon.
- 10 tonnes of aid, including dry ration, clothing and medicines, were dispatched to Myanmar onboard the Indian naval ship **INS Satpura.**
- A military transport aircraft of the Indian Air Force is carrying 35 tonnes of aid to Vietnam and 10 tonnes of relief materials to Laos. These include genset, water purification items, hygiene supplies, mosquito nets, blankets and sleeping bags.
- Operation Sadbhav is part of India's broader effort to contribute to **HADR** within the ASEAN region, in line with its 'Act East Policy'.

Typhoon Yagi: Origin and Impact

- Typhoon Yagi began as a tropical storm in the western Philippine Seaon September 1, 2024.
- Yagi, which means **goat or** the constellation of **Capricornus in Japanese**.
- It made landfall in the Philippines but intensified again due to warm waters in

the South China Sea, reaching Category 3 winds by September 4.

- Yagi further strengthened to a Category 5 typhoon with peak winds of 260 kmph, making it one of only four Category 5 storms recorded in the South China Sea.

- Although downgraded to a tropical depression, it continued to bring heavy rains and floods to Myanmar and other areas.

Typhoons

- Typhoons are a kind of storm. The storms, depending on where they occur, may be called hurricanes, typhoons or cyclones.

- **Typhoons:** In the China Sea and Pacific Ocean.

- **Hurricanes:** In the West Indian islands in the Caribbean Sea and Atlantic Ocean.

- **Tornados:** In the Guinea lands of West Africa and southern USA.

- **Willy-willies:** In north-western Australia and

- **Tropical Cyclones**: In the Indian Ocean Region.

- The scientific name for all these kinds of storms is tropical cyclones.

- Tropical cyclones are intense circular storms that originate over the warm tropical oceans with speed more than 119 kilometres per hour and heavy rains.

- Tropical cyclones rotate counterclockwise in the Northern Hemisphere.

- The **Regional Specialized Meteorological Centre (RSMC)** Tokyo - Typhoon Centre assigns a typhoon a name. The name 'Rai' is contributed by Micronesia.

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U.S.-India Strategic Clean Energy Partnership Ministerial Joint Statement

Highlights of the **Strategic Clean Energy Partnership (SCEP)**

RETAP Launch:

- The **Renewable Energy Technology Action Platform (RETAP)**, launched in August 2023, aims to develop actionable roadmaps for critical clean energy technologies. This includes hydrogen, long-duration energy storage, offshore wind, and geothermal energy through collaborative research, pilot projects, and industry networks.

Hydrogen Collaboration:

- The **National Centre for Hydrogen Safety** in India was recognized for its role in promoting safe hydrogen practices. Additionally, the 2nd **International Conference on Green Hydrogen**, held in September 2024, highlighted bilateral efforts in advancing hydrogen technologies and their implementation.

Energy Storage:

- The formation of the **public-private Energy Storage Task Force** was announced to address key issues related to energy storage. This includes exploring new storage technologies, improving safety, and developing regulatory frameworks. The task force will focus on long-duration energy storage and alternatives to lithium-ion batteries, with pilot projects planned for Assam and Haryana.

Sustainable Aviation Fuel (SAF):

- The partnership welcomed new engagement on SAF, including an inaugural workshop that will address R&D, supply chain development, market opportunities, and certification. Joint reports on SAF and biofuels under the Biofuels Task Force were also highlighted.

Electrification:

- The ministers discussed efforts to electrify medium- and heavy-duty vehicles,

supported by workshops and expert exchanges. The PM eBus Sewa Scheme, which aims to deploy 10,000 electric buses in India, was recognized as a key initiative.

Carbon Capture, Utilization, and Storage (CCUS):

- Progress was noted in CCUS efforts, including a workshop held in Delhi in August 2024. This workshop focused on geologic carbon storage and addressed technical and regulatory aspects of carbon capture.

STRATEGIC CLEAN ENERGY PARTNERSHIP PILLARS

Renewable Energy Pillar   Sustainable Growth Pillar   Power and Energy Efficiency Pillar   Responsible Oil and Gas Pillar   Emerging Fuels Pillar

Strategic Clean Energy Partnership

- The SCEP was launched in accordance with the US - India Climate and Clean Energy Agenda 2030 Partnership announced by both countries at the **Leaders' Summit on Climate held in 2021.**

- The SCEP advances energy security and innovation with greater emphasis on electrification and decarbonization of processes and end uses;scaling up emerging clean energy technologies; finding solutions for hard-to-decarbonize sectors; and deploying technical solutions.

- The SCEP was earlier establishedas the Strategic Energy Partnership in 2018 and had replaced the U.S.-India Energy Dialogue, the previous intergovernmental engagement for energy cooperation.

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Indus waters: India to freeze talks with Pak

Indus Water Treaty (IWT) Overview

The Indus Water Treaty (IWT) was signed in **1960** between India and Pakistan to regulate the sharing of six major rivers of the Indus basin, namely the Indus, Jhelum, Chenab (Western rivers), and Beas, Ravi, and Sutlej (Eastern rivers). The treaty was brokered by the **World Bank** and has been instrumental in resolving water-sharing disputes between the two countries, even during periods of war and political tensions.

Permanent Indus Commission (PIC)

- The PIC is the most consequential product of the IWT, created to oversee the implementation of the treaty.
- Commissioners from both India and Pakistan are mandated to meet at least once a year, with multiple meetings possible if necessary.
- These meetings help resolve issues related to water-sharing and construction of hydropower projects on the rivers covered by the treaty.

Despite tensions and conflicts between India and Pakistan, the PIC has functioned continuously, acting as a critical tool for water diplomacy.

Current Developments: India's Call for Renegotiation

- **Suspension of Meetings**: No further PIC meetings will take place until the governments of India and Pakistan meet to discuss the renegotiation of the 64-year-old IWT, as informed by a senior Indian official.
- **Lack of Response**: India has sent four communications to Pakistan since January 2023, requesting talks on revising the treaty, but has not received a "satisfactory response."
- **Renegotiation Trigger**: India's main concern is the need to reassess certain obligations under the treaty due to fundamental and unforeseen changes. These include:
  o Changes in population demographics.

- o Environmental challenges, including the need to accelerate clean energy development.
  - o The impact of persistent cross-border terrorism.

Impact on the Permanent Indus Commission

- India has proposed that only governments can renegotiate the treaty, not the commissioners, as their role is limited to executing the terms of the treaty.
- If governmental negotiations are initiated, India may consider reviving the PIC as a goodwill gesture.

Dispute Resolution Mechanism

- One of India''s primary focuses in renegotiating the treaty is the dispute resolution mechanism.
- **Treaty Allocation**:
- India has full rights over the eastern rivers (Beas, Ravi, Sutlej) and limited rights over the western rivers (Chenab, Jhelum, Indus).
- India can use the waters of the western rivers for non-consumptive purposes like hydropower generation and limited irrigation.

The treaty has remained a cornerstone of water diplomacy between India and Pakistan, but the evolving challenges in the region, including climate change, energy needs, and security concerns, necessitate a reassessment of the treaty''s terms.

ASOSAI (Asian Organization of Supreme Audit Institutions)

President Droupadi Murmu will inaugurate the 16th Assembly of ASOSAI in New Delhi on September 24, 2024.

ASOSAI (Asian Organization of Supreme Audit Institutions):

- ASOSAI is one of the **regional groups of the International Organization of Supreme Audit Institutions (INTOSAI).**
  - o It focuses on **fostering cooperation and improving public audit**

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standards in Asia.

- **Founded:** Established in **1979, with 11 member SAIs**; membership has since **grown to 48 SAIs.**

- **Proposal:** First proposed by **Mr. Tantuico, Chairman of the SAI of the Philippines,** during the **9th INTOSAI Congress** (October 1977, Lima, Peru).

- **Charter Signing:** In September **1978,** 9 Asian SAIs signed the **ASOSAI Charter in Berlin, West Germany.**

- **Assembly:** The Assembly consists of all members of the Organization and meets once in three years.
    - **First Assembly:** Held in **May 1979 in New Delhi, India**, where the rules and regulations were approved.

- **Secretariat:** The Secretariat of ASOSAI is headed by the **Secretary General,** who is **elected by the Assembly.**
    - ASOSAI Secretariat serves for **three-year terms** that can be renewed twice(up to 9 years).
    - **Presently**, the **Auditor General** of the National Audit Office of **China** is the Secretary General of ASOSAI.

- **India's membership**: India is a member of ASOSAI.
    - India is a **charter member of ASOSAI**, and the **CAG of India** has been elected as the **Chairman of ASOSAI** for the **period 2024-2027.**

4th Quad Leaders Summit

Prime Minister Narendra Modi participated in **the fourth Quad Leaders Summi**t which was **held in Wilmington, Delaware on September 21 2024.**

- Indian Prime Minister joined **President Biden (USA**), Prime Minister Albanese **(Australia)** and Prime Minister Kishida **(Japan)** for the Quad Summit.

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Key Announcements From The Summit

- **The 2025 Summit:** India will **host the 2025 Quad Leaders Summit** and **The United States will host the 2025 Quad Foreign Ministers Meeting.**

- **The QUAD Wilmington Declaration:**
  - The Joint Statement reiterated **the group nature as "a force for good"** and signalled that it is now more strategically aligned than ever **to deliver real, positive, and enduring impact for the Indo-Pacific Region.**
    - **Peace and Security:** The Group vouch for the **maintenance of peace and stability across the Indo-Pacific Region** as an indispensable **element of global security and prosperity**
    - The QUAD opposes any destabilising or unilateral actions that seek to **change the status quo by force or coercion**
    - The Group condemned the recent illicit missile launches in the region and expressed serious concern **over aggressions in the Indo-Pacific.**
  - **Quad Caucus:** The **USA Members of Congress announced the creation of a bipartisan,** bicameral Congressional Quad Caucus as the Quad countries have **decided to work with their respective legislatures** to deepen inter-parliamentary exchanges.

- **Expansion:** The Quad networking will expand to include the **Commerce and Industry ministers meeting for the first time**.

- **Initiatives Under The Quad Health Security Partnership:**
  - **Quad Cancer Moonshot:** It is a collective effort to **realise public and private resources to reduce the number of lives lost to cancer** in the Indo-Pacific, with an initial focus on cervical cancer.
  - **Pandemic Preparedness:** Quad plans to coordinate its efforts to **promote equitable access to safe, effective, quality-assured**

vaccines, including to try and expand vaccine manufacturing in low and middle-income countries.

- India will **host a workshop on pandemic preparedness** and release a **white paper o**utlining emergency public health responses.
- **Australia** will increase the **pool of deployable public health specialists** in response to disease outbreaks, with the **first training session scheduled to commence in Darwin, Australia.**
- **The United States is pledging over $84.5 million** to partner with fourteen countries in the Indo-Pacific region to **strengthen capacity to prevent, detect, and respond to infectious disease threats.**

- **Maritime Security:**
  - **Maritime Initiative for Training in the Indo-Pacific (MAITRI**): It has been announced to enable the Indo-Pacific regions **partners to maximize tools provided through Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA**) and to monitor and secure their waters, enforce their laws, and deter unlawful behavior.
    - **India will host the inaugural MAITRI workshop in 2025.**
- **Indo-Pacific Logistics Network:** A pilot project has been launched to **pursue shared airlift capacity and leverage collective logistics strengths** to support civilian response to natural disasters more rapidly and efficiently across the Indo-Pacific region.
- **Quad-at-Sea Ship Observer Mission in 2025:** The Coast Guards of the 4 countries are planning to launch their **first-ever Quad-at-Sea Ship Observer Mission in 2025 in the Indo-Pacific to improve interoperability.**
- **The Quad Ports of the Future Partnership:** The inaugural Regional Ports and Transportation Conference will be **hosted by India in Mumbai in 2025** and

aims to harness the Quad's expertise to support sustainable and resilient port infrastructure development across the Indo-Pacific.

- **Climate and Clean Energy:**
    - **Solar projects**: India has pledged an **investment of around $2 million** in new solar projects in **Fiji, Comoros, Madagascar, and Seychelles.**
    - **Quad Clean Energy Supply Chains Diversification Program:** The Programme will support projects which develop and diversify **solar panel, hydrogen electrolyzer and battery supply chains.**
- **AI and Technology:** The **United States plans to invest over $7 million t**o support the global expansion of **Asia Open RAN Academy (AORA),** by partnering with Indian institutions for training projects.

The Quadrilateral Security Dialogue (QUAD)

- The Quad is a diplomatic and Informal **partnership between Australia, India, Japan, and the United States** committed to supporting an **open, stable and prosperous Indo-Pacific** that is inclusive and resilient.
    - Quad partners engage regularly through **Leaders Summit , Foreign Ministers, Quad Sherpas, senior officials, and experts.**
- **Origins:** It dates back to the **collaboration between the 4 countries on disaster relief efforts in response to the December 2004 Indian Ocean tsunami**.
    - **2007:** The **PM of Japan, Shinzo Abe, formalised the alliance,** as the Quadrilateral Security Dialogue or the Quad.
    - **2017:** The QUAD was revived with the focus **shifting to the Indo-Pacific region to counter China's growing assertiveness** there. Over the years, the Quad has formed multiple working groups.
    - **2020: Australia joined the trilateral India-US-Japan Malabar naval exercise**s, marking the **first official grouping** of the Quad since 2017,

and the **first joint military exercises** among the four countries in over a decade.

- o **2021:** A joint statement titled **'The Spirit of the Quad,'** outlining the group's approach and objectives was released in a virtual leaders summit.
  - ▪ The first in-person meeting was held in Washington DC, later that year.

- **Informal Nature of the Organisation:**
  - o **Lacks Governing Bodies:** The QUAD **doesn't host a secretariat or any permanent decision-making body** like the EU or UN, instead focuses on expanding existing agreements.

- **The Objective:** The group primarily focuses on **maritime security, rules-based global order, freedom of navigation and a liberal trading system**. The coalition also aims to offer **alternative debt financing** for nations in the Indo-Pacific region.

- **QUAD+:** The QUAD grouping could also undergo expansion through a QUAD Plus Framework including countries like South Korea, New Zealand, and Vietnam, amongst others.

Significance

- **To Secure Sea Routes of Communication:** QUAD has emerged as a new strategy to **keep the critical sea routes in the resource-rich Indo-Pacific,** free of any influence, amidst China's growing military presence in the strategic region.

- **Contain China:** QUAD can **strategically counter China's economic and military coercion** as India can take the support of the other Quad nations in the event of Chinese belligerence on its border or naval front and can also conduct strategic explorations in the Indo-Pacific region.

- **Multilateral engagement:** India recently has a**dopted the strategy of Multi-Alignment from Non-Alignment** presenting an opportunity to work multilaterally on all kinds of initiatives that can help create, a free and open Indo Pacific region.
- **Make a presence in Indo- Pacific: India** through engagement with QUAD countries can make inroads in the political landscape of the Indo- Pacific area expanding its Trade prospects, security role, overall global standing.

Challenges

- **India's Suitability and Reliability as a QUAD Partne**r: India's strong **ties with Russia** and hesitation on data sharing, citing strategic autonomy, have raised concerns on India's suitability in the grouping.
- **Threat of China: QUAD's** formation in the wake of **China's subversion of the international order and attempts to flout the rules based order is still on weak ground** as all the countries still maintain a handsome **trade relation** with the country which does not allow escalation of conflict.
- **Less Institutionalisation:** The QUAD being an informal alliance has **seen some procedural difficulties in realising its various initiatives,** Thus an effective **Working Group or a Formalisation of the grouping** should be the next step forward .
- **Maritime Dominated: QUAD** main focus is to **maintain Maritime Security in the Indo-Pacific** which aligns with the security objectives of US, Japan And Australia but **doesn't fully aligns with India's security concerns,** which is the only country to have a land border dispute with China.
- **Missing Collective Progress:** QUAD lacks effective implementation mechanisms as it is an issue-specific partnerships with shared interests and security concerns, but sometimes **the national interests and priorities of individual countries takes precedence** over the QUAD's vision resulting in

poor execution efforts.

- o **Example: India- Russia Relations**
- **Maintaining Strategic Autonomy:** India, unlike Japan and Australia, is not an ally of the US and **emphasises its strategic autonomy often by taking a different stand on important issues** from the other QUAD members making it an Outlier
- **Diverging Strategic Focus within the Quad:** India's strategic focus differs from its Quad partners. While the US and its allies prioritize East Asia and the Western Pacific, India's challenges lie in South Asia and the Indian Ocean, where it faces the China-Pakistan threat with limited support from Quad members.

Way Forward

- **Formalise the Governing Structure:** The QUAD should **establish a governing body consisting of a rotating chair and secretariat,** bound by some legal framework to guide the implementation process and hold member nations accountable for progress while keeping the ad hoc and flexible nature of QUAD as it is.
- **Narrow down the Expansion:** The QUAD Countries should prioritise on the s**cale and scope of projects being undertaken based on their specific capability** so as to delegate funds and resources in a rational way.
- **Improve Credibility:** The QUAD countries need to collaborate on information and intelligence sharing through **adopting strict information-sharing protocols,** so as to uplift each other's capability and build trust in each other.

India becomes 3rd Most Powerful Nation in Asia, Surpasses Japan in Asia Power Index

- India has surpassed Japan to become the **third-largest power** in the Asia Power Index, reflecting its growing geopolitical influence.
- This achievement is attributed to India''s robust economic growth, youthful population, and expanding international presence.

Key Factors Behind India's Rise

1. **Economic Growth**

- **Post-Pandemic Recovery:** India has experienced a remarkable economic resurgence, leading to a 4.2-point increase in its Economic Capability.
- **Population and GDP:** With a large population and strong GDP growth, India is now the world's third-largest economy in purchasing power parity (PPP) terms.

2. **Future Potential**

- **Demographic Dividend:** India's Future Resources score increased by 8.2 points, indicating a youthful demographic that can sustain economic growth and workforce expansion.
- **Competitive Edge:** Unlike China and Japan, India''s demographics provide a unique advantage for future economic performance.

3. **Diplomatic Influence**

- **Leadership Recognition:** Prime Minister Narendra Modi's leadership has enhanced India's international profile.
- **Non-Aligned Strategy:** India's strategic posture allows it to navigate complex international relations effectively, ranking **6th in diplomatic dialogues** in 2023.

Cultural and Economic Influence

- **Cultural Impact:** India maintains a strong score in Cultural Influence, supported by its global diaspora and cultural exports.

- **Economic Outreach:** Though incremental, India's defense sales and participation in international dialogues, such as the Quad, showcase its growing geopolitical engagement.

India's Role in Asia

- **Optimistic Outlook:** The 2024 **Asia Power Index** positions India as a key player in the Indo-Pacific region, supported by a substantial resource base and strategic autonomy.

- **Regional Influence:** Continued economic growth and a burgeoning workforce place India in a strong position for future influence.

Asia Power Index Overview

- **Definition:** Launched by the **Lowy Institute** in 2018, the Asia Power Index assesses the power dynamics of 27 countries in the Asia-Pacific region.

- **Focus Areas:** It evaluates countries on their capacity to shape external environments, considering both material capabilities and influence.

Criteria for Power Measurement

- **Resource-Based Determinants**
1. **Economic Capability:** Measured through GDP (PPP), technological sophistication, and economic connectivity.
2. **Military Capability:** Evaluates defense spending, military strength, and long-range capabilities.
3. **Resilience:** Assesses internal stability and security against threats.
4. **Future Resources:** Projects future resource distribution, including economic and demographic factors.

- **Influence-Based Determinants**
1. **Economic Relationships:** Leverage through trade and investment.
2. **Defense Networks:** Strength of military alliances and partnerships.
3. **Diplomatic Influence:** Participation in multilateral forums and foreign policy

ambitions.

4. **Cultural Influence:** Ability to shape public opinion through cultural means.

ECONOMY

India signs first-of-its-kind agreements focused on Clean Economy, Fair Economy, and the IPEF Overarching arrangement under Indo-Pacific Economic Framework for prosperity

Key Agreements

1. **IPEF Clean Economy Agreement (Pillar III)**

- **Objective**: Promote technical cooperation, workforce development, and research collaborations to facilitate the deployment of clean energy and climate-friendly technologies.

- **Focus Areas**:

- Energy security and transition

- Climate resilience and adaptation

- Mitigation of greenhouse gas (GHG) emissions

- **Investment Facilitation**: Encourages project financing, particularly for **MSMEs**, to integrate Indian companies into global value chains.

- **Collaborative Actions**: Involves cooperative work programs and funds like the **IPEF Catalytic Capital Fund**and **IPEF Accelerator**.

1. **IPEF Fair Economy Agreement (Pillar IV)**

- **Objective**: Create a transparent trade and investment environment across the Indo-Pacific.

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- **Key Initiatives**:
- Combat corruption and bribery
- Enhance tax transparency and domestic resource mobilization
- Facilitate asset recovery and strengthen cross-border investigations
- **Technical Assistance**: Emphasizes the importance of technical assistance and capacity building to improve anti-corruption measures and tax administration.

2. **Overarching IPEF Agreement**
- **Purpose**: Establish a Ministerial-level oversight mechanism for the various individual IPEF agreements.
- **Significance**: Provides a framework for high-level political oversight, ensuring the effective implementation of the agreements and enhancing the longevity of the IPEF partnership.

Economic Impact and Investment

- **Investor Forum**: Aimed at catalyzing investments in green technology through annual business matching events. The first forum occurred in Singapore in June 2024, identifying **USD 23 billion** in priority infrastructure projects.

Funds under IPEF:

- **IPEF Catalytic Capital Fund**: Initial grant of **USD 33 million** to catalyze private investments totaling **USD 3.3 billion**.
- **PGI Investment Accelerator**: Received **USD 300 million** in funding from the USA to support energy transition and climate investments.

Additional Initiatives

- **IPEF Upskilling Initiative**: Launched in September 2022 to provide digital

skills training primarily for women and girls in partner countries. India has benefitted significantly from this initiative.

- **Critical Mineral Dialogue**: Focuses on mapping mineral resources, enhancing trade, and fostering sustainable mining practices to strengthen the critical mineral supply chain.

- **Tech Council**: Aims to enhance cooperation in key technologies, including cybersecurity and artificial intelligence.

- **Cooperative Work Program (CWP)**: Promotes collaborative efforts among IPEF countries on various projects related to clean energy and emissions accounting.

IPEF

- The Indo-Pacific Economic Framework (IPEF) was launched jointly by the US and other partner countries of the Indo-Pacific region in 2022.

- The 14 IPEF partners represent 40 percent of the global GDP and 28 percent of global goods and services trade.

- It seeks to strengthen economic partnershipsamong participating countries with the objective of enhancing resilience, sustainability, inclusiveness, economic growth, fairness, and competitiveness in the region.

- **Member Countries**: 14 countries, including **India, the USA, Japan, Australia, and several Southeast Asian nations.**

- The IPEF is **not a Free Trade Agreement (FTA)** but allows members to negotiate the parts they want to. The negotiations will be along **four main pillars:**

1. Supply-chain resilience
2. Clean energy, decarbonization & infrastructure
3. Taxation & anti-corruption
4. Fair & resilient trade

Cabinet approves seven major schemes for improving farmers' lives and livelihoods with total outlay of Rs 14,235.30 Crore

Detailed overview of the seven schemes:

1. Digital Agriculture Mission (Rs 2,817 crore):

- **Objective**: Leverage technology to improve agricultural practices and farmer outcomes.

   Components:

- **Agri Stack**: Includes farmers" registry, village land maps registry, and crop sown registry.

- **Krishi Decision Support System**: Utilizes geospatial data, drought/flood monitoring, weather/satellite data, groundwater availability, and crop yield/insurance modeling.

- **Additional Provisions**: Soil profile, digital crop estimation, yield modeling, crop loan connectivity, and integration of AI and Big Data. Provides farmers with new knowledge through mobile technology and connects them with buyers.

2. Crop Science for Food and Nutritional Security (Rs 3,979 crore):

- **Objective**: Enhance climate resilience and ensure food security by 2047.

Pillars:

1. Research and education
2. Plant genetic resource management
3. Genetic improvement for food and fodder crops
4. Pulse and oilseed crop improvement
5. Commercial crop enhancement
6. Research on insects, microbes, and pollinators

3. Strengthening Agricultural Education, Management, and Social Sciences (Rs

2,291 crore):

- **Objective**: Equip agriculture students and researchers with the skills to tackle contemporary challenges.

Components:

1. Modernizing research and education under the Indian Council of Agricultural Research (ICAR)
2. Alignment with the New Education Policy 2020
3. Incorporation of digital technologies like AI, big data, and remote sensing
4. Focus on natural farming and climate resilience

4. Sustainable Livestock Health and Production (Rs 1,702 crore):

- **Objective**: Enhance income from livestock and dairy farming.

Components:

1. Animal health management and veterinary education
2. Dairy production and technology development
3. Animal genetic resource management and improvement
4. Nutrition and development for small ruminants

5. Sustainable Development of Horticulture (Rs 1,129.30 crore):

- **Objective**: Boost income from horticultural activities.

Components:

1. Development of tropical, sub-tropical, and temperate horticulture crops
2. Cultivation of root, tuber, bulbous, and arid crops
3. Enhancement of vegetable, floriculture, and mushroom crops
4. Improvement of plantation, spices, medicinal, and aromatic plants.

6. Strengthening of Krishi Vigyan Kendra (Rs 1,202 crore):

- **Objective**: Support and improve agricultural extension services through Krishi Vigyan Kendras (KVKs).

7. Natural Resource Management (Rs 1,115 crore):

- **Objective**: Promote sustainable management of natural resources to support agricultural productivity and environmental health.

India's textile industry expected to grow to US$350 bn by 2030 and add 3.5 crore jobs: Shri Giriraj Singh

- This was stated by Union Minister of Textiles, Shri Giriraj Singh during the Curtain Raiser event of **'Bharat Tex 2025'** today in New Delhi.

Key Highlights of Bharat Tex 2025

1. **Growth Projections and Employment**:
- **Textile Industry Growth**: Expected to reach USD 350 billion by 2030.
- **Job Creation**: Anticipated addition of 35 million jobs.

2. **Government Initiatives**:
- **PLI Scheme**: Aims to enhance production, branding, and attract Foreign Direct Investment (FDI) in the textile sector.
- **5F Vision**: Emphasizes the integrated textile value chain from Farm to Fibre to Factory to Fashion to Foreign.

3. **Event Details**:
- **Dates and Venues**:
- Main Event: February 14-17, 2025, at Bharat Mandapam, New Delhi.
- Additional Exhibitions: February 12-15, 2025, at India Expo Centre and Mart, Greater Noida.
- **Scope**: Covers the entire textile value chain, including handicrafts, garment machinery, and ethnic apparel.

4. **Themes**:

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- **Resilient Global Value Chains**: Focus on strengthening global textile supply chains.
- **Textile Sustainability**: Emphasis on eco-friendly and sustainable textile practices.

5. **Activities and Features**:

- **Trade Fair and Expo**: Global-scale textile trade fair and expo with numerous exhibitors.
- **Conference and Seminars**: Includes global textiles conference, seminars, CEO roundtables.
- **B2B and G2G Meetings**: Opportunities for business and government-to-government engagements.
- **Special Events**: Product launches, strategic investment announcements, live demonstrations, cultural events, fashion presentations, and sustainability workshops.

India"s Textile Industry

- The textile industry is a vital sector of the Indian economy, with a rich history dating back centuries.
- The Indian textile manufacturing industry is diverse, encompassing a wide range of textiles, including apparel, home textiles, technical textiles, and traditional handloom textiles.

Present status of India"s Textile Industry

- **Contribution in Economy:** Textiles and apparel industry contribute **2.3% to the country's GDP**, 13% to industrial production and 12% to exports.
- **Employment:** It is one of the largest employers (with direct employment to around 45 million workers) in the country, generating jobs across the entire value chain, from cotton farming and spinning to weaving, dyeing, printing, and garment manufacturing.

- **Textiles production and export:** India is the world's second-largest producer of textiles and garments.
- It is also the sixth-largest exporter of textiles spanning apparel, home and technical products, having a 4% share of the global trade in textiles and apparel.
- India is set to achieve $250 Bn textiles production and $100 Bn exports by 2030.

Challenges faced by the textile sector

- **Quality of raw material:** India has a strong raw material base and is largest producer of cotton but high contamination level and poor quality of fibre, both in fineness and length, are major concerns.
- **Lack of technological advancement:** Sector lack technological advancements due to fragmented nature despite it being a highly resource intensive industry.
- **Globalization:** Globalization has significantly affected the garment industry by increasing competition and moving production to lower cost labour countries.
- In cotton yarn, India has lost market share over the past decade to Vietnam and China because of high cost and lack of FTAs (Free Trade Agreements).
- Also, three major factors of production viz. land, labour and capital are costlier in India than other competitive economies like Bangladesh, Philippines, Vietnam etc.

Government initiatives to promote the growth of the textile sector

- **Amended Technology Upgradation Fund Scheme (ATUFS)**: In order to modernize the textile industry's technology, the government approved the "Amended Technology Upgradation Fund Scheme (ATUFS)" in 2015.
- **The Scheme for Integrated Textile Parks (SITP) :** aims to help small and medium-sized textile business owners cluster investments in textile parks by providing financial support for the parks' top-notch infrastructure.

- The **SAMARTH (Scheme for Capacity Building in the Textile Sector)**: The government started the **SAMARTH Scheme for Capacity Building in Textile Sector (SCBTS)** to alleviate the scarcity of trained people.
- **Power-Tex India**: It includes innovative power-loom textile research and development, new markets, branding, subsidies, and worker welfare programs.
- **PM Mega Integrated Textile Region and Apparel (PM MITRA) Parks:** It aims to integrate the entire textile value chain from spinning, weaving, processing/dyeing, printing to garment manufacturing at one location.

Way Forward:

- **Technology upgradation:** In order to make the textile industry competitive, industry needs to focus on investing in technology upgradation and in capabilities and R&D.
- **Strengthen weaving and processing sectors:** Under ATUFS, the weaving sector may be considered to get capital subsidy at par with garmenting and technical textiles. At present, the weaving sector is getting subsidy at 10% subject to cap of 20 crore under ATUFS, whereas for garmenting and technical textiles, subsidy is provided at 15% subject to cap of 30 crore.
- **Sustainability:** India should focus on revamping processes including circular designs, use of blended fibres, zero liquid discharge, chemical management, and revamping policies including safety at workplace.
- **5F vision**, referring to the entire value chain from **Farm to Fibre, Fibre to Fabric, Fabric to Fashion, and finally Fashion to Foreign**, advocates incorporation of sustainable practices.
- **Focus on High-End Global Value Chain: India** should explore diversification of the export basket and explore other markets such as Japan, Australia, Africa etc.

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A webinar organised for convergence of schemes of Department of Animal Husbandry with SHG members in National Rural Livelihoods Mission

Programs and Schemes:

1. National Livestock Mission Schemes:

- Covered entrepreneurship in poultry, sheep, goat, and pig sectors.
- Explained how SHG members can benefit from these schemes.

2. Insurance Schemes:

- Promotion of livestock insurance with subsidies on premiums (up to 85%).
- Introduction of RFID technology to replace ear tags.

National Rural Livelihoods Mission

- It was launched in June 2011 and is now known as the **Deendayal Antyodaya Yojana – National Rural Livelihood Mission (DAY-NRLM)** in honor of Pandit Deendayal Upadhyaya, a noted philosopher and politician.
- The primary objective of NRLM is to reduce poverty by promoting diversified and gainful self-employment and wage employment opportunities for rural households, especially women.

Key Features:

Universal Social Mobilisation

- At least one-woman member from each identified rural poor household, is to be brought under the Self-Help Group (SHG) network in a time bound manner.
- Special emphasis is particularly on vulnerable communities such as manual scavengers, victims of human trafficking, Particularly Vulnerable Tribal Groups (PVTGs), Persons with Disabilities (PwDs) and bonded labour.
- NRLM has devised special strategies to reach out to these communities and

help them graduate out of poverty.

Participatory Identification of Poor (PIP) –

- The inclusion of the target group under NRLM is determined by a well-defined, transparent and equitable process of participatory identification of poor, at the level of the community.
- All households identified as poor through the PIP process is the NRLM Target Group and is eligible for all the benefits under the programme.
- Target Group is identified through the Participatory Identification of Poor (PIP) method.
- The NRLM Target Group (NTG) derived through the PIP is de-linked from the BPL.

Community Funds as Resources in Perpetuity –

- NRLM provides Revolving Fund (RF) and Community Investment Fund (CIF) as resources in perpetuity to the institutions of the poor, to strengthen their institutional and financial management capacity and build their track record to attract mainstream bank finance.

Financial Inclusion –

- NRLM works on both demand and supply sides of financial inclusion. On the demand side, it promotes financial literacy among the poor and provides catalytic capital to the SHGs and their federations.
- On the supply side, the Mission coordinates with the financial sector and encourages use of Information, Communication & Technology (ICT) based financial technologies, business correspondents and community facilitators like **'Bank Mitras'.**
- It also works towards universal coverage of rural poor against risk of loss of life, health and assets. Further, it works on remittances, especially in areas where migration is endemic.

78th Meeting of Network Planning Group under PM GatiShakti evaluates 18 road projects

Key highlights from the 78th **Network Planning Group (NPG)** meeting under the **PM GatiShakti** initiative

- **Evaluation**: Review of 18 significant road infrastructure projects proposed by the Ministry of Road Transport and Highways (MoRTH).
- **Objective**: To ensure these projects align with the PM GatiShakti **National Master Plan (NMP)** principles of integrated and multimodal infrastructure development.

Project Highlights

1. **Tamil Nadu and Kerala:**

- **Madurai-Kollam ICR**: 129.92 km, 4-lane; reduces travel distance by 10 km, enhances connectivity.
- **Madurai-Dhanushkodi Highway**: 46.67 km, 4-lane; improves access to tourist destinations.
- **Chennai-Mahabalipuram-Pondicherry Corridor**: 46.05 km, 4-lane; boosts tourism and local industries.
- **Thoppur Ghat Section**: 6.60 km, 8-lane; enhances safety and efficiency in hilly terrain.

2. **Karnataka and Madhya Pradesh:**

- **Belagavi Ring Road**: 75.39 km, 4-lane; decongests urban traffic.
- **Tumkur Bypass**: 44.10 km, 4-lane; streamlines traffic around Tumkur city.
- **Bhopal-Sagar Economic Corridor**: 138.00 km, 4-lane; facilitates central MP connectivity.
- **Western Bypass of Gwalior City**: 56.90 km, 4-lane; reduces congestion in Gwalior.
- **Ayodhya Nagar Bypass**: 16.44 km, 6-lane; enhances connectivity in Bhopal.

3. **Maharashtra and Telangana:**

- **Ahmednagar-Solapur Corridor**: 59.22 km, 4-lane; supports regional industrial growth.

- **Talegaon-Chakan-Shikrapur Corridor**: 54.00 km, 4-lane; streamlines freight movement near Pune.

- **Jagtial-Karimnagar Highways**: 58.87 km, 4-lane; improves state connectivity.

- **Armoor-Jagtial-Mancherial Highway**: 131.90 km, 4-lane; enhances access to markets in Telangana.

4. **Andhra Pradesh, Odisha, and Bihar:**

- **Badvel-Nellore Corridor**: 108.13 km, 4-lane; boosts Agri-economy by improving market access.

- **Sambalpur Ring Road**: 35.38 km, 4-lane; reduces congestion and supports industrial growth.

- **Cuttack-Paradip Corridor**: 86.79 km, 4-lane; critical for port connectivity and regional development.

- **Bakarpur-Manikpur-Sahebgunj-Areraj-Bettiah Highway**: 162.95 km, 4-lane; improves access to economic opportunities in Bihar.

Network planning group

- It is one of the institutional structures of the PM GatiShakti National Master Plan.

- It is an Integrated Multimodal Network Planning Group (NPG) with heads of the Network Planning Division of all connectivity infrastructure Ministries & Departments.

- It is responsible for unified planning and integration of the proposals and assists the Empowered Group of Secretaries (EGOS) in respect of its mandate.

- It will guide all the Departments/ Ministries responsible for the creation of

economic zones and connectivity infrastructure during the planning phase itself.

- NPG's role will be to ensure:
- Integration of networks.
- Enhance optimization through modification/expansion/new network creation.
- Avoid duplication of work for the holistic development of any region.
- Reduction of logistics costs through micro-plan detailing.

PM Gati Shakti

- PM Gati Shaktiis a master plan for multi-modal connectivity (launched in October 2021), to give more **speed (Gati)** and power (Shakti) to infrastructure projects by connecting 16 Ministries, including Railways and Roadways, on one digital platform.
- While the Government has not specified the size of the programme in financial terms, it will subsume the Rs 110 lakh crore **National Infrastructure Pipeline** (launched in 2019).

Six Pillars of PM GatiShakti NMP

Comprehensiveness
Integrating all existing/ planned initiatives of various Ministries

Prioritisation
Enabling different departments to prioritise their projects through cross-sectoral interactions

Optimization
Assist different ministries in planning for modifcation/expansion/ new projects after identification of critical gaps

Synchronisation
Providing visibility and coordination in planning and implementation of projects of individual Departments/ Ministries

Analytical
Providing the entire data in one place with GIS based spatial planning and analytical tool

Dynamic
Helping in identifying the vital interventions for enhancing and updating

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Over 17 Lakh Saplings Planted during Mega Oil Palm Plantation Drive 2024 Benefiting 10,000 Farmers under National Mission on Edible Oils-Oil Palm

Key Highlights:

- The Drive, launched on July 15, 2024, has achieved a significant milestone by planting demonstrating the collective efforts of Government of India, state governments and oil palm processing companies towards expanding oil palm cultivation in the country.

National Mission for Edible Oils - Oil Palm (NMEO-OP)

- Launched by the Government of India in August 2021, NMEO-OP targets a substantial increase in oil palm cultivation and crude palm oil production.
- It is a **Centrally Sponsored Scheme** with a special focus on the North east region and the Andaman and Nicobar Islands, with a focus on increasing the area and productivity of oilseeds and Oil Palm.

Financial Outlay:

- **Total Budget:** 11,040 crores.
- **Government of India Share:** 8,844 crores.
- **State Share:** 2,196 crores.
- **Includes:** Viability gap funding to support the price stability for farmers and reduce financial risks.

Target of National Mission on Edible Oils (NMEO-OP)

- Around 9 MT of palm oil is imported every year to the tune of Rs. 40,000 crore which is around 56 % of the total imports of edible oil. At present against a total potential area of around 28 lakh hectares, only 3.70 lakh hectares is under oil

palm cultivation.

- The target fixed for Oil palm area expansion by 2025-26 under NMEO-Oil palm is given below:

1. To increase area of oil palm to 10 lakh hectares from 3.5 lakh ha during 2019-20 by 2025-26 (additional 6.50 lakh ha) of which it is targeted 3.22 lakh hectares for general state and 3.28 lakh ha in North Eastern states with targeted FFBs production of 66.00 lakh tonnes.
2. To increase in Crude Palm Oil production from 0.27 lakh tonnes during 2019-20 to 11.20 lakh tonnes by 2025-26.
3. Increase consumer awareness to maintain consumption level of 19.00 kg/person/annum till 2025-26.

Significance of the Scheme:

1. **Reduction in Import dependance:**

- It is expected to incentivise production of palm oil to reduce dependence on imports and help farmers cash in on the huge market.
- India is the **largest consumer of vegetable oil in the world.** Of this, palm oil imports are almost 55% of its total vegetable oil imports.

2. **Rise in Yields:**

- India **produces less than half of the roughly 2.4 crore tonnes of edible oil that it consumes annually.**It imports the rest, buying palm oil from Indonesia and Malaysia, soyoil from Brazil and Argentina, and sunflower oil, mainly from Russia and Ukraine.
- In India, **1% of its palm oil is used in food products,**especially for cooking

purposes. This makes palm oil extremely **critical to India's edible oils economy.**

Special Provisions for North-East and Andaman:

- **Additional Support:** An extra 2% of the CPO price will be provided to farmers in these regions to align their support with the rest of India.

Seed Gardens Assistance:

- **Rest of India:** 80 lakhs for 15 hectares.
- **North-East and Andaman:** 100 lakhs for 15 hectares.
- **Additional Assistance:** Seed garden support of Rs. 40 lakhs (Rest of India) and Rs. 50 lakhs (North-East and Andaman).

IEPFA celebrates 8th Foundation Day in New Delhi

- The Foundation Day conference was on the theme of "Empowering Investors: Financial Literacy as the Key to Combat Fraud and Digital Scams".
- The theme reflected the growing need to equip investors with the knowledge and tools necessary to safeguard themselves in an increasingly complex financial landscape.

IEPFA's Mission and Initiatives:

- IEPFA has focused on protecting investors and promoting financial literacy since its inception.
- Over the past eight years, IEPFA has launched impactful initiatives, including:
- **Niveshak Didi Programme** with India Post Payments Bank.

- **Niveshak Sarathi Initiative** with Common Service Centres.
- **Financial Literacy Camps** in collaboration with the Institute of Chartered Accountants of India (ICAI).
- **Gyandarshan Tele-Lecture Series** with IGNOU.

Investor Education and Protection Fund Authority:

- It was established in 2016 under the **Companies Act, of 2013.**
- The Authority is entrusted with;
- The responsibility of administration of the Investor Education Protection Fund (IEPF).
- Make refunds of shares, unclaimed dividends, matured deposits/debentures etc. to investors and promote awareness among investors.
- **Nodal Ministry:** Ministry of Corporate Affairs
- The following amounts that **remained unpaid** and **unclaimed** for **a period of seven years** from the date they became due for payment are credited to the Fund:
- Amounts in the unpaid dividend accounts of the companies
- The application money received by companies for allotment of any securities and due for refund
- Matured deposits with companies
- Matured debentures with companies
- Grants and donations are given to the fund by the Central Government, State Governments, companies or any other institutions for the purposes of the Fund
- The interest or other income received out of the investments made from the fund.

The IEPF is to be utilized for:

- The fund is utilized for promoting investor awareness and protection of investor interests.

- The Fund is also utilised for distribution of any disgorged amountamong eligible applicants for shares or debentures, shareholders, debenture-holders or depositors who have suffered losses due to wrong actions by any person, in accordance with the orders made by the Court.

- When a person or entity in the securities market makes a profit by fraudulent means, a 'disgorgement' order is issued to repay those gains to affected investors with interest.

Five Successful Years of Pradhan Mantri Kisan Maan dhan Yojana (PM-KMY)

- Under the scheme, Bihar leads with over 3.4 lakh registrations while Jharkhand ranks second with over 2.5 lakh registrations.

- As of August 6, 2024, a total of 23.38 lakh farmers have joined the scheme

Pradhan Mantri Kisan Maandhan Yojana

- The Pradhan Mantri Kisan Maandhan Yojana (PMKMY), introduced by the central government in 2019, aims to provide old age protection and social security for **Small and Marginal Farmers (SMF).**

- Under this scheme, farmers aged 60 and above are guaranteed a minimum pension of Rs 3000 per month.

- This voluntary and contributory pension scheme is open to individuals aged 18 to 40.

Key Benefits Under PM-KMY

- **Minimum Assured Pension**: Each subscriber to the scheme is guaranteed a minimum pension of Rs. 3000 per month upon reaching the age of 60 years

- **Family Pension**: If a subscriber passes away while receiving their pension, their spouse will be entitled to a family pension equal to 50% of the amount the subscriber was receiving i.e. Rs.1500 per month as Family Pension. This is only applicable if the spouse is not already a beneficiary of the scheme. The family pension benefit is exclusively for the spouse.

- **PM-KISAN Benefit**: SMFs can choose to use their PM-KISAN benefits to make voluntary contributions to the scheme. For this, eligible SMFs must sign and submit an enrolment-cum-auto-debit-mandate form. This will authorize automatic debit of their contributions from the bank account where their PM-KISAN benefits are credited.

- **Equal Contribution by Government**: The Central Government, through the Department of Agriculture Cooperation and Farmers Welfare, also contributes an equal amount as contributed by the eligible subscriber, to the pension Fund

- **Monthly Contributions**: Monthly contributions are in the range from Rs. 55 to Rs. 200, based on the farmer''s age at the time of entry into the Scheme.

Enrolment Process

- To enroll in the scheme, eligible farmers need to visit the nearest Common Service Center (CSC) or contact the Nodal Officer (PM-Kisan) appointed by the State or UT Governments. Registration can also be completed through the scheme''s official web portal at www.pmkmy.gov.in.

The beneficiary will provide the following information at the time of registration:

- Farmer's / Spouse's name and date of birth
- Bank account number

- IFSC/ MICR Code
- Mobile Number
- Aadhaar Number

The following farmers' categories are eligible for the PM-KMY

- Small and medium-sized farmers are covered under other official social security schemes such as the Employees 'State Insurance Corporation, the National Pension Scheme (NPS), the Employees' Fund Organisation Scheme, etc.
- Farmers elected Pradhan Mantri Shram Yogi Maan Dhan Yojana (PM-SYM) and headed the Department of Labour and Employment.
- Farmers elected Pradhan Mantri Laghu Vyapari Man-Dhan Yojana (PM-LVM) headed by the Department of Labour and Employment.

The following high-income economic beneficiaries are not eligible for benefits under the scheme:

- All institutional landowners, Present and former constitutional positions, Former and former Ministers, Panchayats Regional Chairpersons, Mayors of Municipal Companies, Provincial Ministers and Members of Rajya Sabha, Lok Sabha, Provincial Legislative Councils, and Regional Legislative Meetings.
- People who have not paid income tax in the last year of testing. Professionals such as Engineers, Doctors, Chartered Accountants, Attorneys and Architects are registered in various professional and practice fields.
- All retired and current employees and officials of the Central or Provincial Government, Departments and units of the camp, Services, PSE Central or Provincial and affiliated offices, private government agencies and regular employees of Local Organisations (Excluding Class IV / Frequent Working Staff / D.)

Union Minister to launch Pradhan Mantri Matsya Kisan Samridhi Sah-Yojna and release Standard Operating Procedure on Production & Processing Clusters in Fisheries Sector

Key highlights

- **4th Anniversary Celebration** of Pradhan Mantri Matsya Sampada Yojana (PMMSY).

New Launches:

- **Pradhan Mantri Matsya Kisan Samridhi Sah-Yojna (PM-MKSSY):** A sub-scheme under PMMSY to support fishers and fish farmers with an investment of Rs. 6,000 crore for the year 2024-25.

- **Standard Operating Procedure (SOP):** On Production & Processing Clusters in the Fisheries Sector.

Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana

- PM-MKSSY, a **Central Sector Sub-scheme** under the Pradhan Mantri Matsya Sampada (PMMSY) for formalisation of the fisheries sector and supporting fisheries micro and small enterprises with an investment of over Rs. 6,000 crores over a period of next four years from **FY 2023-24 to FY 2026-27** in all States/Union Territories.

Aims and objectives of PM-MKSSY:

- Gradual **Formalization of the unorganized fisheries sector** through self-registration of fishers, fish farmers and supportive workers under a **National Fisheries Sector Digital Platform** including creation of work based digital identifies of fish workers for improved service delivery.

- Facilitating access to institutional financing fisheries sector micro and small enterprises.

- Providing one-time incentive to beneficiaries for purchasing **aquaculture insurance.**

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- lncentivizing fisheries and aquaculture microenterprises through performance grants for improving fisheries sector value-chain efficiencies including creation and maintenance of jobs.
- Incentivising micro and small enterprises through performance grants for adoption and expansion of fish and fishery product safety and quality assurance systems including creation and maintenance of jobs.

Intended Beneficiaries:

- Fishers, Fish (Aquaculture) Farmers, Fish workers, **Fish Vendors** or such other person directly engaged in fisheries value chain.
- Micro and Small enterprises in the form of Proprietary Firms, Partnership Firms and Companies registered in India, Societies, Limited Liability Partnerships (LLPs), Cooperatives, Federations, Village Level Organizations like Self Help Groups (SHGs), Fish Farmers Producer Organizations (FFPOs) and Startups engaged in fisheries and aquaculture value chains.
- FFPOs also include Farmers Producer Organizations (FPOs).
- Any other beneficiaries that may be included by the Department of Fisheries, Gol as targeted beneficiaries.

Pradhan Mantri Matsya Sampada Yojana Overview

- **Launched:** May 2020
- **Investment:** 20,050 crore (highest-ever investment in the fisheries sector)
- **Duration:** 2020-21 to 2024-25

Objectives:

- Enhance fish production and productivity.
- Improve post-harvest infrastructure and quality.

- Foster innovation and technology in the sector.
- Strengthen fisheries management and fishers" welfare.

Key Achievements:

- **Infrastructure Development:** Modernization of fishing harbours and vessels, establishment of cold chains, and post-harvest facilities.
- **Support for Fishers:** Livelihood support during lean periods, insurance coverage, and financial assistance through Kisan Credit Cards.

Ministry of Electronics and Information Technology launches Phase III of capacity-building initiatives under Digital India vision

These initiatives focus on critical areas such as

- Digital Public Infrastructure, Contract and Procurement Management
- The Application of AI & ML
- Managing Large Digital Transformation Projects, Digital Governance
- Data Management

Digital India

- Digital India, was launched on **1st July 2015** by the Indian Government.
- This program builds upon earlier e-governance efforts that began in the mid-1990s but lacked cohesion and interactivity.
- **Digital India Programme** envisions comprehensive digital infrastructure, increased digital literacy, and widespread digital access across all sectors, from governance and education to health and financial services.
- The Digital India initiative seeks to bridge the digital divide, promote digital

inclusion, and leverage technology to enhance the quality of life for all citizens while promoting economic growth and innovation

Objective:

- **Narrowing the Digital Divide:** The initiative works to lessen the disparity between tech-savvy individuals and those with limited digital access.

- **Promoting Digital Participation:** It strives to ensure equitable access to digital technology benefits for all citizens, encompassing areas like education, healthcare, and government services.

- **Stimulating Economic Development:** By tapping into technological advancements and innovative solutions, Digital India aims to drive economic growth across the country.

- **Elevating Living Standards:** The program seeks to enhance citizens'' overall quality of life through the strategic application of technology in various aspects of daily living.

Various Digital India Initiatives Taken for Digital India

- **Aadhaar**: A biometric identification system that assigns unique **12-digit identity numbers** to residents.

- **BharatNet:** A project aimed at providing high-speed broadband connectivity to villages, **enabling digital services in rural areas**.

- **Startup India**: An initiative to promote entrepreneurship and support startups through incentives, funding, and mentoring.

- **e-NAM:** An online trading platform that connects **agricultural markets,** facilitating efficient sale of produce.

- **Digital Locker:** A cloud-based platform for securely storing and accessing important documents digitally.

- **BHIM UPI**: A digital payment system that enables secure peer-to-peer transactions using smartphones.

- **eSign Framework:** Allows online signing of documents using digital signatures.

- **MyGov:** A citizen engagement platform that facilitates participation in governance and policy discussions.

- **e-Hospital:** Digitised hospital services, including online registration and access to **health records.**

- **Digital India Act (DIA), 2023:** The proposed act **aims to replace** the outdated IT Act of 2000, adapting to India''s growing internet user base, technological advancements, and new digital challenges. The DIA provides guidelines for responsible adoption of emerging technologies like **AI and blockchain,** encouraging innovation while maintaining ethical standards.

Trade Connect e-Platform for exports is single window, fast, accessible and transformational: Shri Piyush Goyal

Launch:

- The **Trade Connect e-Platform** was launched by Union Minister of Commerce and Industry, Shri Piyush Goyal, in New Delhi.

Objective:

- To transform international trade by providing a single-window solution for Indian exporters, especially MSMEs, to access new markets and opportunities efficiently.

Features and Functionality:

- **Comprehensive Trade Information**: Offers near real-time access to crucial trade-related data.

- **Market Insights**: Provides Product and Country guides, Trade Agreements, and Tariff explorer for leveraging Free Trade Agreements (FTAs).

- **E-Commerce Guidance**: Includes a Global E-Commerce Guide to facilitate

online market presence.

- **Educational Resources**: Features EXIM Paathshala to educate exporters and "Ask an Expert" for real-time advice from trade professionals.
- **Showcasing Products**: Source from India section to promote Indian products globally.

Accessibility and Integration:

- **Wide Connectivity**: Connects over 6 lakh IEC holders, more than 180 Indian Mission officials, over 600 Export Promotion Council officials, and other key stakeholders including DGFT and banks.
- **Integration**: Compatible with **Open Network for Digital Commerce (ONDC)** and **Government e-Marketplace (GeM)** portals to broaden market access and enhance competitiveness.

Government Support and Future Plans:

- **Multilingual Support**: Future versions of the platform will be available in Hindi and other regional languages.
- **E-Platform 2.0**: An enhanced version of the platform is expected before the next trade board meeting, incorporating user feedback.

Economic and Strategic Impact:

- **Export Targets**: Supports the government"s $1 trillion merchandise and $1 trillion services export targets by 2030.
- **Market Expansion**: Aims to increase India's market share globally, enhance competitiveness, and create new partnerships and synergies.

Alignment with Digital India Vision:

- **Transparency and Efficiency**: Promotes Digital India by offering a transparent, efficient, and user-friendly platform to streamline global trade processes.

DPIIT to launch BHASKAR: A Revolutionary Platform for India''s Startup Ecosystem

- This initiative aligns with the Government of India's vision to transform India into a global leader in innovation and entrepreneurship, reinforcing the country's commitment to the startup movement.

BHASKAR:

- **Name:** Bharat Startup Knowledge Access Registry (BHASKAR)
- **Launching Body:** Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry
- **Program Context:** Part of the Startup India program, which is designed to foster entrepreneurship and innovation in India.

Key Features of BHASKAR

- The primary goal of BHASKAR is to build the world's largest digital registry for stakeholders within the startup ecosystem. To achieve this, the platform will offer several key features:
- **Networking and Collaboration:** BHASKAR will bridge the gap between startups, investors, mentors, and other stakeholders, allowing for seamless interaction across sectors.
- **Providing Centralized Access to Resources:** By consolidating resources, the platform will provide startups with immediate access to critical tools and knowledge, enabling faster decision-making and more efficient scaling.
- **Creating Personalized Identification:** Every stakeholder will be assigned a unique BHASKAR ID, ensuring personalized interactions and tailored experiences across the platform.
- **Enhancing Discoverability:** Through powerful search features, users can

easily locate relevant resources, collaborators, and opportunities, ensuring faster decision-making and action.

- **Supporting India's Global Brand:** BHASKAR will serve as a vehicle for promoting India's global reputation as a hub for innovation, making cross-border collaborations more accessible to startups and investors alike.

Importance:

- **Innovation and Economic Growth:**
- **Startup Ecosystem Growth:** Supports the rapid growth and development of India's startup ecosystem.
- **Job Creation:** Contributes to job creation and economic expansion through entrepreneurial ventures.
- **Global Leadership Ambition:**
- **Vision Alignment:** Aligns with India's broader vision to be a global leader in innovation and entrepreneurship.
- **Competitive Edge:** Reinforces India''s competitive edge in the global market by fostering a dynamic startup environment.

FM Nirmala Sitharaman to Launch NPS-Vatsalya Scheme

- The NPS Vatsalya scheme will allow parents to save for their children's future by investing in a pension account and ensuring long-term wealth with the power of compounding.
- The scheme offers flexible contributions and investment options, allowing parents to invest Rs. 1,000 annually in the name of the child.

NPS Vatsalya Scheme:

- It is a scheme under the **National Pension Scheme (NPS).**
- It is designed to help parents and guardians plan for their children''s future financial needs.
- Under this scheme, parents or guardians can open an account for their minor children and make contributions towards their retirement savings.
- The funds will accumulate until the child turns 18.
- Once the child reaches adulthood, the accumulated amountwill be transferred to the standard NPS account.
- This plan could be seamlessly converted into a non-NPS plan when the child becomes an adult.
- The scheme operates similarly to the existing NPS.

National Pension Scheme (NPS):

- It is a **voluntary retirement benefit scheme** introduced by the Government of India to facilitate regular income post-retirementfor all subscribers.
- A citizen of India, either a resident, non-resident,or an Overseas Citizen of India, can open an NPS account.
- It helps individuals build a retirement corpusby making regular contributions throughout their careers.
- NPS contributions are invested in market-linked instrumentssuch as stocks and bonds, providing the potential for higher returns compared to traditional fixed-income options.
- Subscribers also have the option to exitthis plan before retirement or opt for superannuation.
- It is based on a unique Permanent Retirement Account Number (PRAN), which is allotted to every subscriber.

Prime Minister Shri Narendra Modi launches 'SUBHADRA' - the largest women-centric scheme in Bhubaneswar, Odisha

Key Highlights from the Prime Minister''s Recent Visit to Odisha

Launch of SUBHADRA Scheme:

- **Objective:** The SUBHADRA scheme is the largest single women-centric initiative by the Government of Odisha, targeting over 1 crore women.
- **Financial Assistance:** Each eligible beneficiary between the ages of 21-60 years will receive Rs. 50,000 over five years (2024-25 to 2028-29), with Rs. 10,000 distributed annually in two instalments.

Special Emphasis on Tribal Communities:

- **Janman Yojana:** Supporting the most backward tribes in Odisha, with 13 identified tribes receiving development benefits.
- **Health Campaign:** Screening of over 13 lakh people for sickle cell anemia.

Vishwakarma Yojana:

- **Objective:** Preserving traditional skills and supporting artisans like blacksmiths, potters, and sculptors.
- **Financial Assistance:** 13,000 crores allocated, with 20 lakh people registered for training and modern tools.

Overview of the SUBHADRA Scheme

Objective and Scope:

- **Purpose:** The SUBHADRA Scheme is designed to provide financial support specifically to women, aiming to uplift their socio-economic status.
- **Target Group:** Over 1 crore women across Odisha are expected to benefit from this scheme.

Financial Assistance:

- **Amount:** Each eligible beneficiary will receive a total of Rs. 50,000 over a period of five years (from 2024-25 to 2028-29).
- **Disbursement:** The amount will be distributed in two equal installments of Rs. 10,000 each per year. This will be directly credited to the beneficiaries'' Aadhaar-enabled and **_DBT-enabled bank accounts_**.

Eligibility Criteria:

- **Age:** Beneficiaries must be between 21 and 60 years of age.
- **Criteria:** Specific eligibility criteria were outlined to ensure that the scheme targets the intended demographic effectively. Generally, this might include income thresholds, social status, or other parameters defined by the state government.

Digital Integration:

- **RBI Digital Currency Pilot:** The scheme is linked to a pilot project of the RBI''s digital currency, reflecting the government''s push towards digital financial transactions and inclusion.
- **Banking:** The use of Aadhaar-enabled and DBT-enabled bank accounts ensures direct and transparent transfer of funds to the beneficiaries.

Impact:

- **Economic Empowerment:** The scheme is expected to enhance the economic stability and empowerment of women by providing direct financial assistance.
- **Social Benefits:** By targeting a large number of women, the scheme aims to improve their overall quality of life, contributing to gender equality and social development.

Over ₹3,148 Crore Loans Disbursed Under PMEGP in First 100 Days of Modi Govt's 3rd Term

- Around two lakh 10 thousand employment opportunities were generated as more than 26 thousand Micro enterprises were established under **PMEGP.**
- MSME sector has contributed more than 30 per cent to the nation's GDP.

PMEGP Scheme

Prime Minister's Employment Generation Programme (PMEGP)

- The Government of India approved theintroduction of a credit linked subsidy programme called Prime Minister''s Employment Generation Programme (PMEGP) in 2008 for generation of employment opportunities through establishment of micro enterprises in rural as well as urban areas.
- It allows entrepreneursto set up factories or units.

Administration:

- It is a central sector scheme being administered by the Ministry of Micro, Small and Medium Enterprises (MoMSME).
- Implementing Agency at the National Level:Khadi and Village Industries Commission (KVIC) a statutory organization under the administrative control of the Ministry of MSME.

Objectives:

- To generate employment opportunities in rural as well as urban areas of the country through setting up of new self-employment ventures/projects/micro enterprises.
- To bring together widely dispersed traditional artisans, rural and urban unemployed youth and give them self-employment opportunities to the extent

possible, at their place.

- To provide continuous and sustainable employment to a large segment of traditional and prospective artisans and rural and urban unemployed youth in the country, so as to help arrest migration of rural youth to urban areas.
- To increase the wage-earning capacity of workers and artisans and contribute to increase in the growth rate of rural and urban employment.

Eligibility:

- Individuals above 18 years of age.
- There will be no income ceiling for assistance for setting up projects under PMEGP.
- For setting up of projects costing a**bove 10 lakhs in the Manufacturing sector** and above 5 lakhs in the Business /Service sector, the beneficiaries should possess at least VIII standard pass educational qualification.

Maximum Cost of Project/Unit Admissible:

- Manufacturing Sector: Rs. 50 lakhs
- Service Sector: Rs.20 lakh

Government Subsidy:

- Rural Areas: 25% for general category and 35% for special category, which includes SC/ST/OBC/Minorities, NER, Hill and Border Areas, transgender, physically disabled, north eastern region, aspirational and border district applicants.
- Urban Areas: 15% for general category and 25% for special category.
- **Role of Banks:** Loans are provided by Public Sector Banks, Regional Rural Banks, Co-operative Banks and Private Scheduled Commercial Banks approved by respective State Task Force Committee.

Cabinet approves continuation of schemes of Pradhan Mantri Annadata Aay SanraksHan Abhiyan (PM-AASHA)

- **Cabinet Approval**: The Union Cabinet, chaired by Prime Minister Narendra Modi, has approved the continuation of PM-AASHA.
- **Financial Outlay**: ₹35,000 crore during the 15th Finance Commission Cycle (up to 2025-26).
- **Objective**: To provide remunerative prices to farmers and control price volatility of essential commodities for consumers.

Scheme Components

1. **Price Support Scheme (PSS)**: Procurement of notified pulses, oilseeds, and copra at Minimum Support Price (MSP).
2. **Price Stabilization Fund (PSF)**: Maintains strategic buffer stocks to manage price volatility.
3. **Price Deficit Payment Scheme (PDPS)**: Compensation to farmers when market prices fall below MSP.
4. **Market Intervention Scheme (MIS)**: Direct support to farmers for perishable horticultural crops.

Key Features

- **Procurement Strategy**: Starting from the 2024-25 season, procurement under PSS will be limited to 25% of national production for notified crops (except Tur, Urad, and Masur, which will have 100% procurement).
- **Enhanced Government Guarantee**: Increased to ₹45,000 crore for the procurement of notified crops at MSP.
- **Support for Pre-registered Farmers**: Procurement from farmers registered on the **eSamridhi portal (NAFED)** and **eSamyukti portal (NCCF)** when market

prices fall below MSP.

Price Stabilization Fund (PSF)

- **Buffer Stock Maintenance**: Strategic stocks of pulses and onions to manage price fluctuations and protect consumers.
- **Market Price Interventions**: Procurement at market prices when they exceed MSP.

Price Deficit Payment Scheme (PDPS)

- **Enhanced Coverage**: Coverage increased from 25% to 40% of state production of oilseeds.
- **Extended Implementation Period**: Increased from 3 months to 4 months for farmer benefits.

Market Intervention Scheme (MIS)

- **Increased Coverage**: From 20% to 25% of production of perishable horticultural crops.
- **Direct Payments to Farmers**: New provision for direct payments into farmers'' accounts instead of physical procurement.
- **Support for TOP Crops**: Government will cover transportation and storage expenses for operations by NAFED and NCCF during peak harvest times.

Pradhan Mantri AASHA Scheme

- PM AASHA Scheme (Pradhan Mantri Annadata Aay Sanrakshan Abhiyan) is an umbrella scheme designed to ensure farmers receive fair prices for their produce.
- The scheme is part of the Union Government's commitment in the 2018 Union Budget to pay farmers a fair price for their produce.

- The scheme is intended to supplement the increase in Minimum Support Price (MSP), translated into farmer income through a robust procurement mechanism developed in collaboration with the states.
- Additionally, the Indian government implemented this program in response to farmer unrest across the nation due to many important agricultural commodities trading below their MSP.

Concerns and Challenges of the PM AASHA Scheme

- There is a lack of awareness about the scheme among farmers, especially small and marginal farmers.

This is due to many factors:

1. poor communication and outreach efforts by the government,
2. illiteracy among farmers, and
3. the remoteness of many rural areas.

- The prices offered to farmers under the scheme are often lower than the market prices.

This is due to many factors:

1. high cost of production,
2. low demand for agricultural produce, and
3. government"s monopoly on the procurement of agricultural produce.
4. The infrastructure for the storage, processing, and marketing of agricultural produce is inadequate.
5. The scheme is heavily dependent on government support. This makes it vulnerable to political interference and to changes in government policies.

White Revolution 2.0 to empower women, fight malnutrition: Amit Shah

- White Revolution 2.0 will help the inclusion of women engaged in procurement of milk in formal employment as the money will be deposited in their bank accounts.
- The scheme aims at increasing procurement led by cooperatives from the present 660 lakh litres per day to 1,000 lakh litres.

White Revolution

Operation Flood (1970-1996):

- **Objectives**: To increase milk production, augment rural incomes, and provide consumers with fair prices.
- **Key Players**: The **National Dairy Development Board (NDDB)** played a crucial role, promoting cooperative models through the establishment of dairy cooperatives.
- **Achievements**:
1. Milk production in India surged from around 22 million tonnes in 1970 to over 210 million tonnes by 2018.
2. The cooperative model empowered millions of dairy farmers, particularly women.

Why there is a need of white revolution 2.0?

- **Inflation**- The all-India modal price of milk has risen significantly, from Rs 42 to Rs 60 per litre over the last five years.
- **Reduction in demand**- Higher prices may result in consumers cutting back on

their milk consumption, impacting the overall demand for dairy products.

- **Increased production cost**- The costs associated with fodder, feed, and raw materials have seen a significant increase, prompting dairies to raise procurement prices paid to farmers.

- **Impact on consumers**- Inflation and increased production cost falls on consumers, as there is a limit on how much more consumers can pay for milk before it causes demand destruction.

White Revolution 2.0: Proposed Objectives

- **Sustainability**: Focus on sustainable practices in dairy farming, reducing the carbon footprint, and enhancing animal welfare.

- **Digitalization**: Leverage technology for better management, supply chain efficiency, and direct farmer-consumer connections.

- **Diverse Products**: Expansion into value-added dairy products, enhancing income for farmers.

- **Climate Resilience**: Develop adaptive practices to mitigate climate change impacts on dairy farming.

- **Women"s Empowerment**: Increase participation of women in dairy cooperatives and decision-making processes.

- **Global Competitiveness**: Enhance quality and standards to compete in global markets.

Challenges

- **Infrastructure Gaps**: Need for better transportation and processing facilities.

- **Market Fluctuations**: Vulnerability to price fluctuations in the dairy market.

- **Quality Control**: Ensuring consistent quality standards across the supply chain.

- **Policy Support**: Need for coherent policies and support from the government.

- **Training and Education**: Providing adequate training to farmers on modern dairy practices.

Steps taken by India to promote milk production:

- **Rashtriya Gokul Mission**: It was initiated in 2014 with a focus on the conservation and *development of indigenous breeds* and improve their genetic makeup.

- **E-Pashu Haat**: An e-market portal connecting breeders and farmers to provide quality- disease free bovine germplasm.

- **Pashu Sanjivni:** An Animal Wellness Programme with the provision of animal health cards along with **UID identification.**

- **National Animal Disease Control Programme:** It was launched in 2019 to control and eradicate the **Foot & Mouth Disease (FMD)** and **Brucellosis** amongst the livestock

- **Animal Husbandry Infrastructure Development Fund (AHIDF):** It aims to incentivize the investments to establish dairy and meat processing and value addition infrastructure and animal feed plants.

Four-day mega event, World Food India begins in Delhi

Key Initiatives

- **100% FDI**: Introduction of 100% Foreign Direct Investment in the food processing sector to attract global investment.

- **Pradhan Mantri Kisan Sampada Yojana**: A scheme designed to enhance food processing capabilities.

- **Micro Food Processing Enterprises**: Formalization efforts to support small food businesses.

- **Production Linked Incentive (PLI)**: Encouragement for food processing

industries through incentives tied to production levels.

International Collaboration

- **Global Participation**: The event saw participation from over 90 countries, highlighting India''s openness to international cooperation in food processing.

- **Discussions on Best Practices**: Emphasis on addressing food safety, quality standards, and topics such as **food irradiation**and the **circular economy** during the event.

World Food India

- Recognizing the potential of food processing sector in transforming India as the food basket of the world, the Ministry of Food Processing Industries, Government of India has adopted measures to channelize investments in food processing subsegments.

- This includes backward linkages, food processing equipment, processing related R&D, cold chain storage solutions, start-ups, logistic & retail chains, encompassing the entire food processing value chain.

- With the objective of introducing the world to rich Indian food culture as well as promoting investments in the diverse food processing sector of the country, the Ministry of Food Processing Industries launched the first edition of World Food India in 2017.

- In view of celebrating 2023 as the International Year of Millets and to bring global food processing industry together, the Ministry of Food Processing Industries organized the second edition World Food India in 2023.

- This year World Food India 2024 will be organized from 19th to 22nd September 2024.

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Prime Minister Shri Narendra Modi addresses National PM Vishwakarma Program in Wardha, Maharashtra

- Launches **Acharya Chanakya Kaushalya Vikas Scheme** and **Punyashlok Ahilyabai Holkar Women Start-Up Scheme**.
- Lays foundation stone of **PM MITRA Park** in Amravati.
- Releases certificates and loans to PM Vishwakarma beneficiaries.
- Unveils commemorative stamp marking one year of progress under PM Vishwakarma.
- "Basic spirit of Vishwakarma Yojna is **'Samman Samarthya, Samridhi'**"
- "Government is setting up 7 PM Mitra Parks across the country. Our vision is Farm to Fibre, Fiber to Fabric, Fabric to Fashion and Fashion to Foreign"

PM Vishwakarma Scheme

- This is a **central sector scheme** launched by the Ministry of Micro, Small, and Medium Enterprises, which offers services like market linkage support, skill training, and incentives for digital transactions to artisans and craftspeople engaged in specified trades.
- Time period: Five years (FY 2023-24 to FY 2027-28).

Aim:

- To strengthen and nurture the ***Guru-Shishya parampara***, or family-based practice of traditional skills by artisans and craftspeople working with their hands and tools.
- The scheme also aims at improving the quality as well as the reach of the products and services of artisans and craftspeople and to ensure that the Vishwakarmas are integrated with the domestic and global value chains.

Eligibility& coverage:

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- It is available for rural and urban artisans and craftsmen across India.
- It covers 18 traditional crafts such as **Boat Maker**; Armourer; Blacksmith; Hammer and Tool Kit Maker; etc.
- Five lakh families will be covered in the first year and 30 lakh families over five years.

Benefits to the Artisans and Crafts Persons

- **Recognition**: Recognition of artisans and craftspeople through PM Vishwakarma certificate and ID card.
- **Skill Upgradation**: Basic Training of 5-7 days and Advanced Training of 15 days or more, with a stipend of Rs. 500 per day.
- **Toolkit Incentive**: A toolkit incentive of upto Rs. 15,000 in the form of e-vouchers at the beginning of Basic Skill Training.
- **Credit Support**: Collateral free "**Enterprise Development Loans**" of upto Rs. 3 lakh in two tranches of Rs. 1 lakh and Rs. 2 lakhs with tenures of 18 months and 30 months, respectively, at a concessional rate of interest fixed at 5%, with Government of India subvention to the extent of 8%. Beneficiaries who have completed Basic Training will be eligible to avail the first tranche of credit support of upto Rs. 1 lakh. The second loan tranche will be available to beneficiaries who have availed the 1st tranche and maintained a standard loan account and have adopted digital transactions in their business or have undergone Advanced Training.
- **Incentive for Digital Transaction**: An amount of Re. 1 per digital transaction, upto maximum 100 transactions monthly will be credited to the beneficiary''s account for each digital pay-out or receipt.
- **Marketing Support**: Marketing support will be provided to the artisans and craftspeople in the form of quality certification, branding, onboarding on e-commerce platforms such as GeM, advertising, publicity and other marketing activities to improve linkage to value chain.

CBDT notifies Rules and Forms for Direct Tax Vivad Se Vishwas (DTVSV) Scheme, 2024

- The Scheme to come into force with effect from 1st Oct. 2024
- DTVSV Scheme provides for lesser settlement amounts for a 'new appellant' in comparison to an 'old appellant'
- Four separate Forms have been notified for the purposes of the DTVSV Scheme.

These are as under:

1. **Form-1**: Form for filing declaration and Undertaking by the declarant
2. **Form-2**: Form for Certificate to be issued by Designated Authority
3. **Form-3**: Form for Intimation of payment by the declarant
4. **Form-4**: Order for Full and Final Settlement of tax arrears by Designated Authority

Direct Tax Vivad Se Vishwas Scheme 2024:

- The scheme aims to reduce ongoing litigations related to income tax.
- VSV 2.0 will enable taxpayers andthe Income Tax Department to resolve disputes through a streamlined appeals process.
- It will provide a mechanism forfiling appeals across various appellate forums, including the Joint Commissioner of Income-tax (Appeals), the **Income Tax Appellate Tribunal (ITAT)**, and higher courts.
- The scheme covers appeals, writ petitions, and special leave petitions pendingas of July 22, 2024, and will waive penalties and interest for settlements, ensuring no prosecution will be initiated for cases resolved under the scheme.
- The scheme also covers cases with objections filed before the **Dispute Resolution Panel (DRP)** where no final assessment order has been issued and

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pending revision applications before the Commissioner.

- However, certain cases are excluded from eligibility, including those involving searches**,** prosecutions, and undisclosed foreign income.

- Tax payer sunder specific legal restrictions or serious offenses will also not benefit from the scheme.

- The primary goal of VSV 2.0 is to provide a cost-effective mechanism for settling disputed issues, thereby alleviating the burden of litigation on taxpayers and the judicial system.

Who will benefit from this scheme?

As per the Finance Act, 2024 the Direct Tax Vivad Se Vishwas Scheme, 2024 can be used by the following appellants:

- A person in whose case an appeal or a writ petition or special leave petition has been filed either by him or by the income-tax authority or by both, before an appellate forum and such appeal or petition is pending as on the specified date; or

- A person who has filed his objections before the Dispute Resolution Panel under section 144C of the Income-tax Act and the Dispute Resolution Panel has not issued any direction on or before the specified date; or

- A person in whose case the Dispute Resolution Panel has issued direction under sub-section (5) of section 144C of the Income-tax Act and the Assessing Officer has not completed the assessment under sub-section (13) of that section on or before the specified date; or

- A person who has filed an application for revision under section 264 of the Income-tax Act and such application is pending as on the specified date.

GeM celebrates 100 days of governance; announces drastic reduction in its transaction charges

- GeM has announced a **New Revenue Policy** of the portal which was given effect to from 9thAugust 2024.

As per this Policy:

- All orders valued up to ₹10 Lakh will now attract zero transaction charges, as opposed to the earlier order value ceiling of ₹5 Lakh.

- Orders above ₹10 Lakh up to ₹10 Crore will be levied transaction charges worth 0.30% of total order value, as compared to earlier transaction charges of 0.45%.

- Orders above ₹10 Crore will now pay a flat fee of ₹3 Lakh, a massive reduction from the transaction charges previously capped at ₹72.5 Lakh.

GeM Portal

- Government e-Marketplace, shortly known as GeM, is a digital platform that enables buying and selling of goods and services.

- It is the **Public Procurement Portal** for procurement of goods and services for all Central Government and State Government Ministries, Departments, Public Sector Units (PSUs) and affiliated.

- The portal was launched in August 2016, by the Ministry of Commerce & Industry.

- The purchases through GeM by Government users have been authorised and made mandatory by Ministry of Finance by adding a new Rule No. 149 in the General Financial Rules, 2017.

- The sole purpose of GeM is to enhance efficiency; transparency and speed in public procurement.

Significance:

- **Boost to Digital Economy:**
- The e-marketplace can promote the use of technology in government procurement processes, contributing to the growth of India"s digital economy.
- In the last 6.5 years, GeM has revolutionised the ecosystem of public procurement in the country through technology, the digitization of processes, the digital integration of all stakeholders, and the use of analytics.
- **Improved vendor participation:** GeM can encourage more vendors, including small and medium enterprises, to participate in government procurement processes, leading to increased competition and better value for money for the government.
- **Transparency and Efficiency:** A government e-marketplace can improve the transparency and efficiency of procurement processes by standardising and automating procedures,reducing the scope for corruption and human error.

Challenges of GeM Portal

1. Registration/Onboarding Process:

- The biggest challenge faced by informal sector women workers is the onboarding process.
- These workers rarely have the requisite documentation (especially GSTIN or PAN cards) to onboard on GeM.
- Further, the current registration process is lengthy and requires large amounts of documentation.

2. Government Pricing Mandate:

- Many product/service offerings are not feasible for our members due to low mandated prices set by various government departments.
- The current system on GeM also mandates a compulsory minimum discount of 10%, even on small order quantities.
- Coupled with GST and shipping charges, this makes the cost to suppliers

prohibitive.

- Most enterprises struggle to cover their overheads, let alone make a tenable profit.

3. Location Matching:

- The available bids are often for distant locations, which not only eliminates the limited profit margin, but also starts cutting into the cost of production.

Value Addition in the GDP revision

The National Statistical Office (NSO) is considering using GST (Goods and Services Tax) data to estimate value addition in the upcoming GDP revision.

- This would replace the **MCA-21 database** from the **Ministry of Corporate Affairs**, which is currently used for the Private Corporate Sector (PCS), accounting for 38% of GDP.

- **Current and Proposed Base Year**
  - o The current GDP base year is **2011-12.**
  - o A revision is planned, proposing 2020-21 as the new base year.
  - o Most major datasets are ready, except for Census data.

About MCA-21 Database

- **Background:** The MCA-21 database was introduced during the last GDP revision (2011-12 base year) to improve the estimation of value addition in the Private Corporate Sector (PCS).
  - o **Previous Methods:**
    - ▪ **Annual Survey of Industries (ASI):** Earlier, ASI was used to estimate value added by factories.
    - ▪ **RBI Sample:** A small sample of large companies by the Reserve Bank of India (RBI) was used to measure non-financial corporate output.

- **Reason for the Shift:**
  - o **Limitations of ASI:** ASI didn't account for value added outside of factories within corporate entities.
  - o **Inadequate RBI Sample:** The RBI sample couldn't capture the rapid growth in PCS.**MCA-21 Benefits:**

What is Base Year?

- It is the first year in the financial index.
- It provides a reference point for measuring changes in the economic trends and variables such as GDP, CPI, PPI.
- In addition to the above, it helps policy decision makers by providing insightful data on inflation, employment, and economic growth.

  - The MCA-21 database is extensive.
  - It provides up-to-date data on corporate annual returns and results.
  - It offers a more accurate picture of corporate output.

Issues with MCA-21 Database

- **Overestimation:** The MCA-21 database led to overestimation of GDP growth rates, particularly in the manufacturing sector.

Impact of the 2011-12 Base Year Revision

- The 2011-12 base year led to:
  - o Smaller absolute GDP size but a faster growth rate.
  - o For 2013-14, industrial growth showed a sharp contrast: +5.4% growth in the new series versus -1.90% in the earlier series.
- This discrepancy raised concerns as other economic indicators, like bank credit growth and industrial capacity utilization, didn't align with the revised GDP figures.

  - **Comparison of Estimates:** Gross Value Added (GVA) and Gross Fixed

Capital Formation (GFCF) were compared between National Accounts Statistics (NAS) and Annual Survey of Industries (ASI) for the period 2012-13 to 2019-20.

- **Findings:**
  - GVA: NAS reported an average annual growth rate of 6.2%, while ASI reported 3.2%.
  - GFCF: NAS showed a growth rate of 4.5%, compared to 0.3% by ASI.
- **Inconsistent Data:** The data from MCA-21 did not align with other macroeconomic indicators, such as bank credit growth and industrial capacity utilization.
- **Lack of Transparency:** The government's refusal to make the MCA-21 data available for independent scrutiny raised doubts about the accuracy of the estimates.

Issues with GST Data

- **Unverified Data:** GST data may be unverified and could contain errors or inconsistencies.
- **Limited Access:** The lack of public access to GST data limits its potential for independent analysis and validation.
- **Methodological Challenges:** Developing accurate estimation methods using GST data may be challenging, especially for specific industries and sectors.

GDP

- GDP is a monetary measure of the total market value of all final goods and services produced within a country over a specific period.
- **Purpose:**
- **Used to assess the economic health of a country or region.**
- **Types of GDP:**

- o **Nominal GDP**
    - ▪ Measures economic output using current prices without adjusting for inflation.
    - ▪ **Calculation:** All goods and services are valued at their selling prices in the year they are produced.
    - ▪ **Usage:**
        - Useful for comparing output within the same year.
        - Expressed in local currency or U.S. dollars at current exchange rates for international comparisons.
- o **Real GDP**
    - ▪ An inflation-adjusted measure of economic output, reflecting the actual quantity of goods and services produced.
    - ▪ Real GDP is calculated using **"constant" prices,** removing the effect of inflation or price changes.
    - ▪ **Estimating Real GDP**
        - Base year is used to estimate real GDP and is updated every 5-10 years.
        - The National Statistical Office (NSO) is responsible for revising the GDP base year to reflect changes in prices and economic output.
    - ▪ **Purpose:**
        - Allows for year-to-year comparisons by showing real growth or decline in production.
    - ▪ **Calculation:**
        - Uses a GDP price deflator to account for price changes between the current year and the base year.
        - Nominal GDP is divided by the deflator to obtain real

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GDP.

Nominal GDP. vs. Real GDP

Nominal GDP	Real GDP
Nominal GDP is the monetary value of all goods and services produced within the domestic boundaries of a country based on the price of the goods and services of the same year.	Real GDP is the monetary value of all goods and services produced within the domestic boundaries of a country based on the price of the goods and services of the base year.
Nominal GDP is the Gross Domestic Product without any effect of inflation.	Real GDP is the inflation-adjusted GDP of a country.
The Nominal GDP of a country is expressed in terms of current year prices of goods and services.	The Real GDP of a country is expressed in terms of base year prices or constant prices of goods and services.
It is easy to calculate Nominal GDP.	It is quite difficult to calculate Real GDP.
The value of Nominal GDP is much higher than the value of Real GDP because it takes current market changes into consideration.	The value of Real GDP is much lower than the value of Nominal GDP because it takes the market price of the base year into consideration.
One can compare the Nominal GDP of different quarters of a country.	One can compare the Real GDP of different financial years of a country.
One cannot easily analyze the economic growth of a country with its	One can easily analyze the economic growth of a country using its Real GDP,

| Nominal GDP. | as it is a good indicator of economic growth. |

How to enable transit-oriented development?

Investment in Metro Rail Projects

- India is investing ₹3 trillion (2022–2027) in metro rail projects across 27 cities.
- These projects aim to enhance urban mobility, improve quality of life, and unlock vast economic potential by creating jobs and offering high economic returns, with studies suggesting returns of 5-7 times the initial outlay.

Transit Oriented Development (TOD) Policies

- The National **Transit Oriented Development (TOD)** Policy and Metro Rail Policy, approved in 2017, encourage compact, mixed-use development to integrate land use and sustainable transport modes like walking, cycling, and mass transit.
- These policies aim to decouple economic growth from resource consumption and reduce urban sprawl, congestion, and pollution.

Challenges in Urban Mobility

- Indian cities, such as Bengaluru, face severe traffic congestion, with Bengaluru"s annual social cost estimated at ₹38,000 crore (5% of its GDP).
- Long work commutes and increased private vehicle use limit access to jobs and decrease productivity.
- TOD offers a solution by integrating transport systems with job clusters to improve accessibility and reduce commute times.

Benefits of Clustering Jobs Near Transit

- The WRI India study reveals that job proximity to metro stations boosts innovation and economic growth.
- Clustering job growth around transit systems can increase workforce productivity, reduce carbon emissions, and support local real estate

development.

- However, only 28% of Bengaluru's jobs will be within 500 meters of metro stations once the ongoing phases are complete, highlighting the need for better last-mile connectivity.

Barriers to TOD Implementation

- Several challenges prevent businesses from locating near metro stations, including limited land availability, inadequate infrastructure, and restrictive development regulations.

- Small businesses are also discouraged by high property prices near metro stations, while larger enterprises face difficulties due to land constraints and complex regulations.

Global Comparisons and Future Directions

- Cities like Hong Kong have 57% of jobs within 500 meters of transit, with high transit usage and low car ownership, which has boosted economic growth while reducing emissions.

- To optimize Bengaluru's urban growth, its revised master plan should prioritize job densities near transit, identify high-potential areas for development, and encourage public-private partnerships to drive investment in transit-friendly commercial and industrial zones.

CPENGRAMS brings Financial Empowerment for Family Pensioners and Super-Senior Pensioners

- The **Department of Pension and Pensioners' Welfare** (DoPPW) is committed towards effective and expeditious redressal of grievances through Centralized Pension Grievance Redress and Monitoring System **(CPENGRAMS)**, an online portal.

- To ensure this, the grievances are monitored in terms of pace and quality of the

redressal by conducting **Inter-Ministerial Review Meetings (IMRMs),** both in physical and virtual mode.

- The resolution of these cases including those of Family Pensioners and Super-senior Pensioners has brought financial stability and social empowerment in the life of pensioners.

1. CPENGRAMS

- CPENGRAMS is an online web-enabled system for speedy redressal of grievances related to pension by various Central Government Ministries/ Departments/Organizations.

- This system, besides providing a faster access to pensioners, offers the following online facilities:

1. Registration of pension grievances online

2. Forwarding of reminders on line

3. Query on the statusof any of the registered grievances

4. Available (24*7) basis for submission of grievance online

- It has been developed with the objective of speedy redress and effective monitoring of the grievances besides providing fast access to pensioners.

- Pensioners can also appeal if they are not satisfied with the redressal of their grievance.

Make in India Celebrates 10 Years: A Decade of Transformational Growth

- Launched on **September 25, 2014**, the 'Make in India' initiative aims to position India as a global manufacturing hub.
- Spearheaded by Prime Minister Narendra Modi, it has significantly transformed the landscape of domestic manufacturing, innovation, skill development, and foreign investment.

10 Years of Impact: A Snapshot

Foreign Direct Investment (FDI)

- **Cumulative FDI Inflow (2014-24):** India attracted USD 667.4 billion, marking a **119% increase** from USD 304 billion during the previous decade (2004-14).
- **Manufacturing Sector FDI:** Inflows reached USD 165.1 billion, which is a **69% increase** compared to USD 97.7 billion in the prior decade. This investment has diversified across **31 states and 57 sectors**, fostering growth in various industries.
- **FDI Policy:** Most sectors are now open for **100% FDI under the automatic route**, allowing for greater foreign participation in the Indian economy.

Production Linked Incentive (PLI) Scheme

- **Investment Generated:** Since its inception in 2020, the PLI schemes have attracted investments worth ₹**1.32 lakh crore (USD 16 billion)**.
- **Manufacturing Output Boost:** As of June 2024, the manufacturing output linked to PLI has reached ₹**10.90 lakh crore (USD 130 billion)**.
- **Job Creation:** Over **5 lakh jobs** have been created directly and indirectly due to the initiatives under the PLI schemes.

Exports & Employment

- **Merchandise Exports:** India's merchandise exports surged past **USD 437 billion in FY 2023-24**, significantly bolstered by PLI schemes.

- **Employment Growth:** The manufacturing sector's total employment increased from **57 million in 2017-18 to 64.4 million in 2022-23**, reflecting the positive impact of these initiatives.

Ease of Doing Business

- **World Bank Ranking Improvement:** India improved its ranking from **142nd in 2014 to 63rd in 2019** in the Doing Business Report, highlighting significant reforms.

- **Compliance Reduction:** More than **42,000 compliances have been reduced**, and **183 provisions across 42 Central Acts** were decriminalized, making business operations smoother.

Key Reforms

Semiconductor Ecosystem Development

- **Semicon India Program:** Launched with an investment of **₹76,000 crore**, this program aims to boost the semiconductor and display manufacturing sectors, supporting a comprehensive ecosystem including **packaging, sensors, and more**.

National Single Window System (NSWS)

- **Launched in 2021:** This platform streamlines the investor experience by integrating clearances from **32 Ministries and Departments** and **29 States/UTs**, facilitating rapid approvals for investments.

PM Gatishakti

- **National Master Plan:** Initiated in October 2021, it employs a GIS-based platform for integrated multimodal infrastructure planning, which helps in reducing logistics costs and improving overall efficiency.

National Logistics Policy (NLP)

- **Launched in 2022:** Aims to reduce logistics costs and enhance the efficiency of logistics services, making Indian products more competitive globally.

Industrial Corridors & Infrastructure

- **Development of 11 Industrial Corridors:** The **National Industrial Corridor Development Programme** has approved **12 new projects** with a projected investment of **₹28,602 crore**, designed to provide world-class infrastructure.

One-District-One-Product (ODOP)

- **Promotion of Indigenous Products:** This initiative encourages local craftsmanship and economic development by setting up **Unity Malls** in **27 states**, providing platforms for unique products.

Startup India

- **Launched in 2016:** This initiative has led to the recognition of **1,40,803 startups as of June 2024**, creating over **5 lakh direct jobs** and fostering an ecosystem that nurtures innovation and attracts investment.

Future Directions: Make in India 2.0

- **Focus Areas:** The next phase emphasizes **sustainability, innovation, and self-reliance**. Strategic interventions in **renewable energy** and **advanced manufacturing** are being prioritized to ensure Indian products meet the highest global standards.

Union Textiles Minister Shri Giriraj Singh says roadmap set for textiles industry to grow to US$350 bn by 2030

- Union Minister Shri Giriraj Singh emphasized the significant progress made by the textiles sector in the first 100 days, outlining ambitious growth targets and various initiatives aimed at enhancing the industry"s contribution to the economy.

Key Projections and Goals

- **Projected Industry Growth**: The textiles industry is expected to reach **US$350 billion** by **2030**, creating millions of job opportunities.
- **Foundation for Future Success**: The achievements over the past 100 days are foundational for meeting the 2030 targets, with a comprehensive focus on all aspects of the textiles value chain.

Major Initiatives and Achievements

PM MITRA Park:

- Anticipated investment of ₹**70,000 crore** is expected to generate **21 lakh jobs**.
- Aimed at establishing India as a global hub for textile manufacturing and exports, the parks will provide world-class industrial infrastructure.

Bharat Tex Initiative:

- This platform is designed to attract foreign investment by promoting **4S: style, scale, skill, and sustainability.**
- It positions India as a key player in the global textiles market.
- **Design Importance**: Emphasized the role of the **National Institute of Fashion Technology** in fostering innovation and design in the textiles sector.
- **Technical Textiles Export Target**: Set an export target of **US$10 billion** for technical textiles by 2030, recognizing their potential across various sectors.

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- **Support for Artisans**: Engaged approximately **1 crore artisans** in the handloom and handicraft sectors, with initiatives aimed at improving their livelihoods and market presence.

Initiatives Launched

- **Skilling Program**:
  - The **'Bunkar and Karigar Utthan Upskilling Programme'** was launched to enhance technical and soft skills among artisans and weavers.
  - About **3,600 artisans and weavers** benefited from this initiative, receiving certificates and toolkits to boost their competitiveness in the market.

- **10th National Handloom Day**:
  - Celebrated on August 7, 2024, with the Vice-President awarding the **Sant Kabir Handloom Awards** and **National Handloom Awards** to recognize excellence in the sector.
  - Included various awareness programs, exhibitions, and campaigns to promote the significance of handloom weaving.

- **Shilp Didi Mahotsav**:
  - Inaugurated on August 22, 2024, this marketing event was dedicated to the **Shilp Didi Programme**, focusing on empowering women artisans.
  - Shilp Didis showcased their crafts at Dilli Haat, enhancing their marketing opportunities and e-commerce presence.

- **Textile Gallery Inauguration**:
  - A new **Textile Gallery** was opened at the Crafts Museum on August 8, 2024, highlighting various Indian weaving techniques and innovations.

- **Craft Tourism Village**: Inaugurated in Prayagraj, this initiative supports traditional artisans, promoting sustainable livelihoods and improving their socio-economic status.

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- **Eri Sericulture Promotional Project**: Launched in Gujarat on August 10, 2024, to encourage castor-growing farmers to adopt sericulture as an additional income source, expanding Eri culture in the region.

- **Central Silk Board Platinum Jubilee Ceremony**: Celebrated on September 20-21, 2024, this event highlighted the growth of the silk sector and introduced new technologies and partnerships to enhance the silk value chain.

- **New Pricing Methodology for Jute**: Announced on August 28, 2024, this new pricing strategy for jute sacking bags aims to provide better pricing to jute mills, benefiting around **4 lakh workers** and **40 lakh farmer families**.

- **VisioNxt Initiative**: Launched on September 5, 2024, this AI-driven fashion trend forecasting system supports industry professionals by providing insights into market trends and consumer preferences.

- **Bharat Tex 2025**: The Ministry unveiled the website and brochure for this global textile event, expecting participation from over **5,000 exhibitors** and **6,000 international buyers**.

- **International Conference on Technical Textiles**: Held on September 6-7, 2024, to discuss the future of technical textiles, promote indigenous products, and explore new markets.

- **Support for Startups in Technical Textiles**: The Ministry approved **11 startup proposals** under the **GREAT initiative**, providing grants for innovative projects in technical textiles.

- **PM MITRA Park in Amravati**: Laid the foundation for a **1000-acre PM MITRA Park** in Maharashtra on September 20, 2024, aimed at attracting large-scale investments and fostering innovation within the textiles sector.

MoS Prof. S. P. Singh Baghel to inaugurate National Workshop on People's Plan Campaign 2024 – Sabki Yojana Sabka Vikas Abhiyan

Key Components of the National Workshop:

Purpose:

- The workshop aims to launch the **People's Plan Campaign 2024** (Sabki Yojana Sabka Vikas) which will commence nationwide on **2nd October 2024**.

- This campaign marks the beginning of the annual process for developing Panchayat Development Plans (PDP) across all tiers of Panchayati Raj Institutions (PRIs).

- **Participants**: Approximately **400 stakeholders**, including officials, elected representatives, and trainers from various ministries and state-level organizations.

- **Technological Enhancements:** Updates to the **eGramSwaraj portal** to improve data quality and facilitate robust validation processes.

- **Focus on Livelihood Generation:** The workshop will emphasize integrating livelihood generation plans and involving **Self Help Groups (SHGs)** to enhance community participation in development activities.

- **Capacity Building:** Efforts will be made to enhance the capacity of PRIs to use the **Gram Manchitra** facility for planning at the Gram Panchayat level, facilitating village-wise planning especially in **PESA** (Panchayats Extension to Scheduled Areas) areas.

Background of the People's Plan Campaign

- **Launched in 2018**, the People's Plan Campaign, known as **"Sabki Yojana Sabka Vikas,"** focuses on preparing participatory Panchayat Development Plans with the involvement of elected representatives, frontline workers, SHGs, and

community-based organizations.

Objective:

- The campaign aims to create a structured process for the participatory planning of development initiatives in rural areas, ensuring that the voices and needs of local communities are central to the planning process.

- It is rooted in the philosophy of **Sabka Saath, Sabka Vikas, Sabka Vishwas, Sabka Prayas**, promoting inclusive growth and the well-being of all sections of society.

Participatory Approach:

- The campaign emphasizes the involvement of various stakeholders, including elected representatives, frontline workers from line departments, **Self Help Groups (SHGs)**, and community-based organizations (CBOs).

- This collaborative framework encourages the community to actively participate in discussing their needs, available resources, and priorities for development.

Annual Planning Cycle:

- The campaign is structured around an annual planning cycle that begins with the launch on **2nd October**, coinciding with the **Gandhi Jayanti** The first step is a mandatory **Gram Sabha** meeting where community members deliberate on developmental needs and resource availability.

- The discussions culminate in the preparation of a **Gram Panchayat Development Plan (GPDP)** that outlines the planned activities and projects for the upcoming financial year.

Impact:

- The campaign has led to a greater emphasis on community-driven development, with a notable increase in local ownership of development projects. It has encouraged innovation and adaptability in addressing local challenges.

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Union Cabinet Approves National Centre of Excellence for AVGC

Overview of the National Centre of Excellence (NCoE) for Animation, Visual Effects, Gaming, Comics, and Extended Reality (AVGC-XR):

Growth of the AVGC Sector:

- The Indian AVGC sector is experiencing significant growth, with a **25% annual growth rate** and an estimated market value of **₹46 billion by 2023** (FICCI-EY Report).
- The sector encompasses animation, visual effects, gaming, and comics, driven by increasing demand for content in both national and global markets.

Global Positioning:

- India now holds the **second-largest anime fan base** in the world, contributing to an expected **60% increase in global anime interest** in the coming years.
- Successful films like **Baahubali** and **RRR** have set new benchmarks for storytelling and visual effects in Indian cinema, inspiring further projects and innovation in this space.

Structure of NCoE:

- NCoE will operate as a **Section 8 Company** under the Companies Act, 2013, ensuring a non-profit model focused on excellence in the AVGC sector.
- Key industry bodies, including the **Federation of Indian Chambers of Commerce & Industry (FICCI)** and the **Confederation of Indian Industry (CII)**, will collaborate with the Government of India as partners.

Objectives of NCoE:

- **Talent Development**: Create a world-class talent pool to meet the demands of both the Indian and global entertainment industries.
- **Cultural Integration**: Leverage India''s rich cultural heritage to foster the creation of **indigenous intellectual property (IP)**, thus promoting unique

content.

- **Industry Growth**: Generate a **multiplier effect** in the AVGC industry, enhancing employment and economic opportunities.
- **Educational Focus**: Integrate education and skilling, with a curriculum designed to align closely with industry needs.

Operational Model:

- The NCoE will follow a **hub-and-spoke model**, with the main center serving as the hub for innovation and several affiliated centers (spokes) focusing on specific areas of research and development.
- This structure aims to foster collaboration across states and promote a cohesive ecosystem for the AVGC sector.

Employment Generation:

- It is estimated that the NCoE will create approximately **500,000 jobs** in various segments of the AVGC industry, significantly contributing to employment and skill development in the sector.

Curriculum and Training:

- The NCoE will offer a robust curriculum emphasizing **hands-on learning**, ensuring that students gain practical experience through industry-driven courses.
- Opportunities for **internships and mentorship** will be available, helping aspiring professionals connect with established figures in the AVGC field.

Focus on Technology:

- The center will specialize in emerging **immersive technologies** such as **Virtual Reality (VR)**, **Augmented Reality (AR)**, and **3D modeling**, which are increasingly shaping the landscape of media and entertainment.
- This focus will equip students with the skills necessary to innovate and create high-quality content that resonates with contemporary audiences.

Collaboration and Innovation:

- NCoE will promote partnerships between **government bodies, academic institutions**, and the **industry**, fostering a collaborative environment for research and technological advancement.
  - This synergy aims to create a dynamic ecosystem conducive to innovation, enabling India to lead in the AVGC sector globally.

SALIENT FEATURES OF NCOE

1. NCoE will also extensively focus on creation of India's IP for both domestic consumption and global outreach.

2. Will function as an incubation centre by providing resources for nurturing start ups and early stage companies in AVGC-XR field.

3. Will also position India as a content hub for providing state-of-the-art content.

4. Enhance India's soft power globally and attracting foreign investment into M&E sector.

5. To be set up in Mumbai, Maharshtra and FICCI and CII to represent industry bodies as partners with the Government of India

6. To act as pinnacle institution to anchor the AVGC-XR ecosystem in the country.

7. Will foster R&D and will bring together experts from various science & art fields that can lead to major breakthroughs in AVGC - XR

ENVIRONMENT

Union Environment Minister Bhupender Yadav extends deadline for idea submission in Ideas 4 LiFE till 15 October 2024

- The Ministry in collaboration with the Maharashtra Environment Department organised "**Ideas4LiFE** at IIT Bombay to inspire innovative environmental solutions.

- The event is an initiative to engage students, faculty and researchers in generating ideas that promote an eco-friendly lifestyle.

Ideas4LiFE portal:

- It was launched for inviting ideas related to products and services, which induce behavioral changes related to environment-friendly lifestyles.

- This initiative aims to encourage and motivate students,faculty and research scholars to contribute their innovative ideas to the global initiative of Mission LiFE.

- It is a remarkable opportunity for inspired minds to participate in global movement dedicated to environmental sustainability.

Key facts about Mission LiFE

- **Mission LiFE**, or Lifestyle for Environment, is an India-led global mass movement to nudge individual and community action to protect and preserve the environment.

- It was launched at the **26th UN Climate Change Conference of the Parties (COP26)** in Glasgow in November 2021.

- The program hopes to "mobilize one billion Indians as well as people in other countries to become individuals who practice sustainable lifestyles.

- It emboldens the spirit of the P3 model, i.e., **Pro Planet People**.
- It aims at following a three-pronged strategy for changing people"s collective approach towards sustainability,
- nudging individuals to practice simple yet effective environment-friendly actions in their daily lives (demand)
- enabling industries and markets to respond swiftly to the changing demand (supply)
- to influence government and industrial policy to support both sustainable consumption and production (policy).

India to hold 2nd edition of International Conference on Green Hydrogen from Sept 11-13

- New and Renewable Energy Minister Pralhad Joshi highlighted the crucial role of Green Hydrogen in driving India and other developed nations towards a clean and green energy transition.

Green Hydrogen

- Green hydrogen is hydrogen produced through the **electrolysis of water** using renewable energy sources such as wind, solar, or hydropower. This process results in **zero carbon emissions**, making it a clean alternative to hydrogen produced from **fossil fuels (gray hydrogen)** or from **natural gas (blue hydrogen).**

Comparing with grey and blue hydrogen:

- While hydrogen gas does not emit GHGs when burned, the electricity used to produce it may have been generated by fossil fuels. This is commonly known as

'grey hydrogen', which currently accounts for **95%** of the total production.

- Hydrogen produced using electricity generated by burning fossil fuels, but paired with **carbon capture and storage (CCS)** technologies, which prevent GHGs from entering the atmosphere, is labelled **'blue'.**

Applications of Green Hydrogen

- **Power Generation:** Green hydrogen can be used in gas turbines or fuel cells to generate electricity. This can provide backup power during peak demand or when renewable energy sources are unavailable.

- **Residential and Commercial Heating:** Hydrogen can be used for space heating and water heating in homes and businesses, reducing the reliance on fossil fuels and lowering carbon emissions.

- **Decentralized Power Generation:** Remote areas with limited access to electricity grids can use green hydrogen to generate power locally using **fuel cells or hydrogen combustion.**

- **Aviation and Shipping**: Green hydrogen can be used to produce synthetic aviation and marine fuels, helping to decarbonize these hard-to-abate sectors.

- **Hydrogen Injection**: Green hydrogen can be **blended with natural gas** in existing pipelines, reducing the carbon intensity of the gas supply.

- **Hydrogen Fuelling Stations**: Infrastructure for refuelling hydrogen-powered vehicles is being developed, enabling the expansion of FCVs in regions with a focus on clean transportation.

- **Carbon Capture and Storage (CCS):** Green hydrogen can be used in conjunction with CCS technologies to create "blue" hydrogen, where the carbon emissions from hydrogen production are captured and stored underground.

- **Agriculture:** Green hydrogen can be utilized for sustainable agricultural practices, including producing fertilizers and running agricultural machinery.

Difficulties in Green Hydrogen Implementation

Cost:

- The cost of green hydrogen is currently high compared to traditional fossil fuels. The production, storage, and distribution of green hydrogen require specialized equipment and infrastructure, making it more expensive than conventional fuels.

- However, with advancements in technology and scaling up of production, the cost of green hydrogen is expected to decrease over time.

Energy Storage:

- Green hydrogen production is dependent on renewable energy sources like wind, solar, and hydro power. However, these sources are intermittent, meaning that their output can fluctuate over time.The development of effective energy storage solutions is critical to enable the widespread adoption of green hydrogen.

- Energy storage solutions likebatteries and hydrogen storage can store excess energy produced by renewable sources and provide a constant supply of green hydrogen.

Safety:

- Green hydrogen is a highly flammable gas that requires special handling and storage.

- The development of proper safety protocols and regulations is crucial to ensure the safe handling and storage of green hydrogen.

Initiatives for Green Hydrogen Production In India

- **National Green Hydrogen Mission (Jan 2023):** The mission envisages the

substitution of grey hydrogen with green hydrogen in industries such as **fertilizer production, petroleum refining, steel, shippin**g etc.

- **Aims:** To achieve a green hydrogen production capacity of at least **5 MMT per annum** and an additional renewable energy capacity of about **125 GW by 2030.**

- **Green Hydrogen Policy, February 2022:** It has been framed to aid in the reduction in the landed costs of renewal power and to encourage the transition from fossil fuel to green hydrogen/green ammonia

- **Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme:** It will provide financial incentives for domestic manufacturing of electrolyzers and green hydrogen production.

- **Exemption of Inter-State Transmission Charges:** The government has exempted inter-state transmission charges for 25 years for producers of green hydrogen and green ammonia for projects commissioned before December 31, 2030.

- **Electricity (Promoting Renewable Energy through Green Energy Open Access) Rules, 2022: These** facilitate renewable energy supply through open access for green hydrogen production.

Way Forward

High Cost of Production and Utilization:

- Green hydrogen is currently more expensive than conventional hydrogen produced from fossil fuels or other low-carbon sources, such as nuclear or blue hydrogen.So, to address this issue, there is a need to develop efficient technologies that can reduce the production cost of green hydrogen.

- One promising approach is to use more efficient electrolysis systems that require less energy to produce the same amount of hydrogen.This can be

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achieved using advanced materials for the electrodes or the use of more efficient catalysts.

- Another approach is to integrate green hydrogen production with other renewable energy technologies such as wind or solar farms. This can reduce the cost of electricity used in the electrolysis process, making green hydrogen more competitive with conventional hydrogen.

Implement Regulatory Incentives:

- The government can play a key role in promoting the adoption of green hydrogen by implementing regulatory incentives, such as tax credits and subsidies, to encourage the production and use of this technology.

Lack of Adequate Infrastructure and Supply Chain:

- Green hydrogen requires dedicated infrastructure and supply chain for its production, storage, transport and distribution.
- The existing infrastructure and supply chain for conventional hydrogen are not sufficient or compatible for green hydrogen, efficient and cost-effective supply chain must be developed.

Awareness and Capacity Building among Potential Users and Producers:

- Green hydrogen is still a developing technology that requires awareness and capacity building among potential users and producers.
- There is a need to demonstrate the benefits, safety and feasibility of green hydrogen in various applications and sectors.
- There is also a need to develop skills and competencies for green hydrogen production and utilization.

PM Narendra Modi virtually addresses first International Solar Festival being held in Delhi

India''s Solar Energy Progress

- **Growth:** India's solar energy capacity has increased 32-fold in the past decade.
- **Target:** India aims to achieve 500 gigawatts (GW) of non-fossil fuel capacity by 2030.
- **Paris Agreement:** India is the first G20 nation to meet its Paris Agreement commitments in renewable energy.

International Solar Alliance (ISA)

- **Establishment:** ISA was established in 2015.
- **Membership Growth:** ISA''s membership has reached 100 countries, with 19 more countries in the process of ratifying the framework agreement.
- **Vision:** Promotes the vision of **"One World, One Sun,"** emphasizing global unity in harnessing solar energy.

International Solar Festival

- **Purpose:** The festival celebrates the impact of solar energy and aims to build a better planet.
- **Participants:** The event brings together youth, women, communities, policymakers, and the private sector.
- **Activities:** Includes technical sessions, exhibitions, experience zones showcasing solar technologies, and cultural performances.

Solar Energy

- Solar technologies use clean energy from the sun rather than polluted fossil fuels.

There are two main types:

1. **solar thermal,** which uses solar energy to heat water
2. **solar photovoltaic (PV),** which uses solar cells to transform sunlight into electricity.

Solar Energy - Working and Usage

- The sun radiates an enormous amount of energy in the form of **electromagnetic radiation**. Solar technologies utilise various methods to tap this abundant renewable energy source.
- There are two primary ways solar energy is harnessed -
- Direct conversion into electricity using
- **Capturing heat** from the sun"s rays to generate electricity indirectly.
- **Usage:** Solar technologies are **scalable** and **flexible**- they can power an entire city through solar farms, provide electricity in remote areas via decentralized systems, and light up homes and commercial buildings by installing rooftop solar panels.
- **For example: Cochin International Airport**
- **Significance: The** adoption of solar energy provides several benefits, including **reducing reliance** on depleting fossil fuels, mitigating carbon emissions, improving air quality, and boosting energy access and security, among others.

India's solar energy potential:

Solar Resource Potential

- **Solar Insulation:** India receives an average solar insolation of 5-7 kWh/m²/day across most of its regions.
- **Geographical Area:** With about 300 sunny days a year, India"s geographical expanse offers significant potential for solar energy harnessing.

Current Installed Capacity

- **Installed Capacity:** As of early 2024, India's installed solar power capacity

stands at approximately 63 gigawatts (GW). This includes both grid-connected and off-grid solar installations.

Future Targets

- **2030 Targets:** India has set an ambitious target to achieve **500 GW of non-fossil fuel** capacity by 2030, which includes a substantial increase in solar energy capacity.

- **2025 Targets:** The government aims to install **100 GW of solar power capacity by 2025** as part of its National Solar Mission.

National Solar Mission

- **Launch Year:** The National Solar Mission was launched in 2010 as part of India's National Action Plan on Climate Change.

- **Goals:** It aims to promote solar energy by creating favorable conditions for its deployment in the country.

Policy and Initiatives

- **Solar Park Scheme:** India has developed several solar parks to facilitate large-scale solar installations. Notable ones include the **Kurnool Ultra Mega Solar Park** and the **Pavagada Solar Park.**

- **Green Energy Corridor:** Projects like the Green Energy Corridor are being developed to facilitate the integration of renewable energy into the national grid.

Union Environment Minister Sh. Bhupender Yadav reviews clean air action plans under National Clean Air Programme

Key Highlights of the 4th Meeting of the Apex Committee of the National Clean Air Programme (NCAP)

NCAP Implementation Review:

- **Coverage**: 24 States/UTs and 131 cities.

- **Performance-Based Grant**: ₹19,612 crore allocated (2019-20 to 2025-26).

- **Disbursed Amount**: ₹11,211 crore provided to cities.

Achievements:

- **Air Quality Improvement**: Significant reduction in PM10 levels.

- **Performance**: 95 cities improved air quality; 18 cities met NAAQS in PM10 levels.

- **Reduction Targets**: 51 cities achieved 20% reduction; 21 cities achieved 40% reduction.

Key Initiatives:

- **Nagar Van Yojana**: Creation of 3,776 hectares of green spaces in 64 cities with ₹142 crore sanctioned.

- **Ek Ped Maa Ke Naam**: Extensive tree plantation drives.

National Clean Air Programme

- It was launched by the Ministry of Environment, Forests and Climate Change (MoEFCC)in January 2019.

- It is thefirst-ever effort in the country to frame a national framework for air quality management with a time-bound reduction target.

- It covers 132 non-attainment cities which were identified by the Central Pollution Control Board (CPCB).

- Non-attainment cities are those that have fallen short of the National Ambient Air Quality Standards (NAAQS)for over five years.

Key features of NCAP

- **Target:** Achieving 20% to 30% reduction target in Particulate Matter (PM10 and PM2.5) concentrations by 2024, where 2017 is kept as the base year for the comparison of concentration. But it has been revised to 40%by 2026.

- **Cities based on air quality**: Identification of 122 non-attainment cities across

the country based on the 2014-2018 Air Quality data.

- **City specific plans:** Preparation of city-specific action plans, including measures to strengthen the monitoring network, reduce vehicular/industrial emissions, and increase public awareness.

- **Coordination between centre, state and local**: Facilitating collaborative, multi-scale, and cross-sectoral coordination between the relevant central ministries, state governments, and local bodies.

- **Right mix with exixting policies:** Establishing a right mix with the existing policies and programs, including the National Action Plan on Climate Change (NAPCC) and other government initiatives related to climate change.

- **Changes as per additional scientific information**: Constant change, activity, and progress to get evolved based on the additional scientific and technical information as they emerge.

- **Monitoring station**: Increasing the number of monitoring stations in the country, including rural monitoring stations, technology support, and data analysis.

- **Awareness and capicity building:** Emphasis on awareness and capacity building initiatives, including public awareness campaigns, training programs, and research and development activities.

Performance of NCAP

Air Information Centers and Pollution Forecasting:

- NCAP aimed to establish air information centres at central and regional levels by 2020.

- However, as of December 2023, only the central **'Portal for Regulation of Air Pollution in Non-Attainment Cities (PRANA)'**portal by Central Pollution Control Board (CPCB) is functional.

- Despite NCAP's goal for air pollution forecasting systems in non-attainment

cities by 2022, only Delhi has a functional system by December 2023.

Committee Setup and Utilization of Funds:

- Committees at various levels were proposed by NCAP, but their functionality, transparency, and public availability of information remain challenging.

- Out of total allocations of 1253 crore to 82 non-attainment cities, only 498 crores (40%) was utilized till November 2023.

- The trend reflects significant underutilization of the allocated funds.

Monitoring Stations and Continuous Ambient Air Quality Monitoring Stations:

- NCAP envisaged augmenting the manual monitoring stations under the National Air Quality Monitoring Programme (NAMP) from the existing 703 stations to 1,500 stations by 2024.

- However, as of December 2023, only 931 manual stations were operational, with a minimal increase from the previous year, showing critical shortfall against the target.

- NCAP aimed for 150 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), but 531 stations are currently operational, indicating very good progress.

- The rural monitoring network consists of 26 manual stations covering limited areas.

- Efforts to set up 100 monitoring stations by 2024 in rural areas are yet to be fully realized and seem difficult to achieve.

Challenges faced by NCAP

Implementation by States has been inconsistent

- Most cities proactively submitted their CAAPs yet their implementation has been inconsistent.

- Implementation delays hinder NCAP's success.

Lack of standard operating procedures

- There is also a lack of standard operating procedures for the implementation process.
- Time-consuming tasks required to implement control measures and the absence of well-defined timelines create further delays.
- **Other Challenges:** Other challenges include bureaucratic red-tape and lingering doubts regarding the effectiveness of proposed mitigation measures.

Way forward

- **Emissions Inventory (EI) and Source Apportionment (SA) studies are critical**
- EI and SA studies are critical to identify and understand the origins of pollution.
- EIs provide insights into local pollution sources and their contributions. EIs also help shape targeted pollution control strategies.
- SA studies offer a detailed analysis of contributions from various pollution sources, including those located afar.
- **Important role of Air Quality (AQ) modelling**
  EIs and SA studies have limitations.
- EIs have limitations in assessing the impact of transboundary pollution sources — such as when determining the effect of stubble-burning outside Delhi on the city's air quality.
- Similarly, SA studies can't distinguish between the origins of pollution, like, say, emissions from diesel trucks 200 m away and 20 km away, because diesel emissions have similar chemical signatures.
- These gaps can be bridged through AQ modelling, which informs our understanding of pollution dispersion, including from distant sources.

President of India to inaugurate the 8th India Water Week (IWW) at Bharat Mandapam, New Delhi

- **Theme**: 'Partnerships and Cooperation for Inclusive Water Development and Management'
- **Objective:** Emphasizes the need for collaboration across all sectors and levels to achieve sustainable water management.

Key highlights of the event:

- **Inaugural session and Ministerial Plenary** where Government leaders will share their vision and perspectives on water sector;
- **Global Water Leaders' Plenary** where global experts in water sector will share their insightful and thought-provoking ideas for water sector;
- **Water Leaders' Forum** covering all major thematic sectors where experts drawn from public, private and non-government sector;
- **Country Forum** on the sidelines with countries like Denmark, Israel, Australia, Singapore, etc.
- **Practitioners' Forum** where Government, Private and Non-Government experts will share experiences of implementing water sector programs and initiatives highlighting the best practices.
- **Water Convention** where papers will be presented on various themes.
- **Startup Forum** where startups will get an opportunity to pitch for their ideas in water sector.
- **Exhibition** spread over 4,800 square meters - showcasing high-tech solutions and technologies on display from number of countries like Australia, Bangladesh, Canada, Colombia, UK, USA, many African countries etc.
- **Valedictory session** shall reflect on key insights and outcomes of the IWW.
- Will host 5000+ delegates from around the world in parallel events and

conference sessions.

Sub themes and topics

1. Collaboration and Cooperation for Water Security
- Public Private Partnership (PPP) for Efficient Water Management in Urban and Rural Areas.
- Need for Cooperation and Coordination for Water Security keeping in view of the Climate Change Scenario.

2. Integrated Water Resources Development & Management
- Role of Inter Basin Water Transfer in Water Resources Development.
- Inclusive Water Planning.
- Issues in Water Scarcity and way forward.

3. Challenges in Water Sector Infrastructure
- Waste Water Management — Recycle, Reuse and Circular Economy.
- Operation and Management of Water Assets and Infrastructure
- Source Sustainability -Irrigation, Domestic Use etc.

4. Risk and New Approaches to Climate Resilience
- Role of Advanced Technologies in Water Security.
- Managing Climate Uncertainty in Water Sector.
- Risks in Water Sector due to Climate Change.

5. Ground Water Sustainability and Management
- Ground Water Assessment — Tools & Techniques.
- Challenges in Sustainable Management of Ground Water.

6. Water governance and financing

- Water Infrastructures — Financing and Operation & Maintenance Models.

- Role of Policy in Water Security.

- Convergence of Various Stakeholders in Water Sector.

7. Water related Disasters and its Management

- Glacial Lake Outburst Flood Risks and Mitigation

- Challenges in Management of Floods & Droughts

- National Disaster Managements Policies and Action Plan.

India Water Week:

- Conceptualized and organized first in 2012, the Ministry of Jal Shakti, Government of India is organizing the India Water Week 2024 biannually.

- It is a 4-day conference and exhibition which is India's international water resources event.

- Seven editions of events have been organized in 2012, 2013, 2015, 2016, 2017, 2019 and 2022.

- The India Water Week has continued to focus on the inter-relatedness of water and life-systems over the years.

Prime Minister Shri Narendra Modi inaugurates 4th Global Renewable Energy Investor's Meet and Expo (RE-INVEST) in Gandhinagar, Gujarat

Key Themes and Announcements

1. **India's Renewable Energy Milestones:**

- India has achieved over **200 GW of installed non-fossil fuel** capacity.
- The Prime Minister highlighted the commitment to expand this capacity, aiming for **500 GW of renewable energy by 2030**.

2. **Government's Achievements and Plans:**

- **100 Days of Governance:** Focused on rapid development, including infrastructure expansion and policy implementation.
- **Housing Initiatives:** Plans to construct 7 crore houses; 4 crore houses completed in previous terms.
- **Industrial and Transport Projects:** Creation of 12 new industrial cities, 8 high-speed road corridors, and 15 semi-high speed Vande Bharat trains.

3. **Green Energy Initiatives:**

- **Offshore Wind Energy:** Introduction of a viability gap funding scheme worth Rs 7,000 crore.
- **Hydropower:** Plans to generate 31,000 MW of hydropower with an investment of Rs 12,000 crore.
- **Solar Energy:** Launch of **PM Surya Ghar Free Electricity Scheme** for rooftop solar setups; 1 crore 30 lakh families registered.

4. **Global Recognition and Initiatives:**

- **Paris Agreement Commitments:** India is the first G20 nation to meet its

climate commitments 9 years ahead of the deadline.

- **International Solar Alliance:** Highlighting India''s role in global solar energy leadership.
- **Green Hydrogen Mission:** Launch of a mission worth Rs 20,000 crore to promote green hydrogen.
- **Waste to Energy Campaign:** Efforts to convert waste into energy.

5. **Local and Symbolic Highlights:**

- **Modhera Solar Village:** Gujarat's solar village that powers itself entirely with solar energy.
- **Ayodhya Solar City:** Initiative to transform Ayodhya into a model solar city.

6. **Employment and Economic Impact:**

- **Job Creation:** The PM Surya Ghar scheme is expected to generate around 20 lakh jobs, including 1 lakh solar PV technician.
- **Economic Benefits:** Estimated savings of Rs 25,000 annually per family from the solar scheme; potential investment returns through Public Provident Fund.

RE-INVEST

- RE-INVEST is a GoI's flagship event to showcase India's RE potential to the world & to invite investment in the sector by initiating multilateral dialogue.
- It is a global renewable energy investor meet and expo organized by the Ministry of New and Renewable Energy (MNRE), Government of India.
- It is a platform for bringing together global investors, developers, manufacturers, and innovators in the renewable energy sector.
- The event is aimed to accelerate the development and deployment of renewable energy in India, and to connect the Indian energy stakeholders with the global

investment community.

- The first RE-INVEST India was held in 2015, and the second was held in 2018 and the third RE-INVEST India was held in 2020.
- The RE-INVEST India events have been successful in attracting a large number of participants from India and abroad.

What is the current status of the introduction of African cheetahs?

Project Cheetah represents India''s ambitious effort to introduce African cheetahs into its ecosystems, focusing on both species conservation and restoring savanna habitats. However, the project has faced challenges, including extended captivity and fatalities, which have raised concerns about its long-term success.

Objectives of Project Cheetah

- **Species Conservation**: The project aims to conserve the African cheetah and restore the ecological balance in savanna ecosystems.
- **Flagship Species**: Cheetahs are to serve as a flagship species for promoting the conservation of degraded dry-open forests and savanna ecosystems.
- **International Cooperation**: India plans to assist Iran and the global community in conserving the Asiatic cheetah.
- **Local Communities**: The project aims to benefit local communities through eco-tourism.

Challenges and Failures

- **Extended Captivity**: The prolonged captivity of cheetahs has hindered their adaptation to the wild, contrary to the project"s original plan. Captivity can make cheetahs unfit for release into the wild.
- **Deaths**: Several cheetahs have died due to pre-existing conditions, mismanagement, and environmental factors such as heatstroke and septicaemia. The death toll has raised concerns about the project"s execution.

Selection of Kuno National Park

- **Site Selection**: Kuno National Park in Madhya Pradesh was selected after surveying 10 sites across five states. It was found to have suitable habitat and prey for cheetahs.
- **Fenced Captivity**: The cheetahs have been largely held in captivity at Kuno, contrary to plans of releasing them into the wild by 2024 or 2025.
- **Other Sites**: Gandhi Sagar Wildlife Sanctuary and **Nauradehi Wildlife Sanctuary** have also been considered for future cheetah introductions.

Management and Oversight

- **Responsible Agencies**: The National Tiger Conservation Authority (NTCA), Ministry of Environment, Forests and Climate Change (MoEFCC), and Madhya Pradesh Forest Department are responsible for managing the project. Technical inputs come from the Wildlife Institute of India.

Success Criteria and Long-Term Prospects

- **Short-Term Goals**: The initial objectives include a 50% survival rate for the first year, establishment of home ranges, and reproduction in the wild. These goals have not been met due to prolonged captivity.
- **Long-Term Success**: Over 15-40 years, the project aims to establish a viable metapopulation, improve habitat quality, increase prey diversity, and generate sustainable conservation benefits for local communities.

Concerns and Sunset Clause

- **Habitat Adequacy**: The key question is whether India has sufficient habitat of the required quality (4,000-8,000 sq. km) to sustain a free-ranging cheetah population.

Constant Management: The project will require long-term management, with success measured over decades, potentially stretching to 30-40 years.

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ICG inks MoU with key environmental foundations to Combat Marine Pollution & Protect Biodiversity

The key efforts will include:

- **Ghost Net Removal**: Addressing the problem of discarded fishing nets, which significantly harm marine ecosystems.

- **Mapping and Classifying Ghost Gear Aggregation Areas**: Enhancing knowledge about regions most affected by ghost gear to prioritize clean-up efforts effectively.

- **Surveys in Ecologically Sensitive Regions**: Monitoring and protecting biodiversity, focusing on vulnerable marine habitats.

- **Community Involvement**: Engaging coastal communities in conservation activities to promote stewardship of marine ecosystems.

Marine Pollution-

- Marine pollution, also known as ocean pollution, is the spreading of harmful substances such as oil, plastic, industrial and agricultural waste and chemical particles into the ocean.

Causes of Marine Pollution: Shipping & Maritime Operations, Oil & Chemical Spills, Industrial & Agricultural Runoff, Plastic Pollution, Improper Waste Disposal, Coastal Development

Effects of Marine Pollution:

- Harm to marine life through direct toxicity, physical entanglement, and disruption of marine habitats.
- For example, coral bleaching, Heavy metals/oil toxicity, fishing gear/plastic debris entanglement (Great Pacific Garbage Patch), etc.
- Damage to ecosystems by disrupting food chains and habitats.
- For example, **oil spills kill algae disrupting** the food chain, sewage discharge leading to algal blooms, etc.
- Depletion of oxygen in seawater: Excess debris in the ocean slowly degrades over many years, resulting in less oxygen in the ocean.
- For example, low levels of oxygen in the ocean lead to the death of ocean animals such as penguins, dolphins, whales, and sharks.
- **Threat to human health:** Pollutants in the ocean make their way back to humans. Small organisms ingest toxins and are eaten by larger predators, many of which are seafood that we eventually eat.
- For example, the toxins in contaminated animals when deposited in human tissue can lead to long-term health conditions, cancer, and birth defects.
- Economic impacts include damage to fishing and aquaculture industries, the loss of livelihood of coastal communities, damage to tourism, etc.
- For example, according to an Australian government study, Great Barrier Reef tourism areas are at risk of losing 1 million visitors per year and 10,000 tourism jobs.

Global Initiatives

- **The Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities:** The GPA is the only global

intergovernmental mechanism directly addressing the connectivity between terrestrial, freshwater, coastal and marine ecosystems.

International conventions:

1. **MARPOL convention (1973)**

- It covers pollution of the **marine environment by ships** from operational or accidental causes.
- It lists various forms of marine pollution caused by oil, noxious liquid substances, harmful substances in packaged form, sewage and garbage from ships, etc.

2. **The London Convention (1972)**

- Its objective is to promote the **effective control of all sources of marine pollution** and to take all practicable steps to prevent pollution of the sea by dumping of wastes and other matter.

- **Greenpeace:**

- It is an environmental NGO that is dedicated to conserving the oceans and marine life across the globe.
- Its grassroots efforts have resulted in the ban of destructive fishing practices, companies changing their fishing policies, and the creation of whale sanctuaries.

Prevention:

- Implement renewable energy sources, such as wind or solar power, to limit off-shore drilling.
- Limit agricultural pesticides and encourage organic farming & eco-friendly pesticide use.
- Proper sewage treatment and exploration of eco-friendly wastewater treatment

options.

- Cut down on the industry and manufacturing waste and contain it into landfillsto avoid spillage.
- At individual level reduce carbon footprint by adopting a "green" lifestyle.
- Have a global treaty on banning single-use plastics and collaborated effort to clean up the ocean.

Blockchain, smart materials, among innovative projects mooted in PM solar scheme

- As part of the 75,000-crore **PM Surya Ghar: Muft Bijli Yojana**, the Ministry of New and Renewable Energy (MNRE) has announced a 500-crore sub-component for "Innovative Projects".

- Some examples of innovative projects envisioned include "blockchain based peer-to-peer **RTS [Rooftop Solar]**, digital solutions for RTS, smart building materials, RTS with EV (electric vehicles), grid responsive RTS with battery storage solutions, DISCOM (Distribution Company) systems for RTS management".

- The **PM Surya Ghar scheme** was established on February 29, 2024 to increase the share of solar rooftop capacity and have residential households to generate their own electricity. The scheme has an outlay of 75,021 crore and is to be implemented till FY 2026-27.

PM Surya Ghar Muft Bijli Yojana:

- It is a government scheme launched on February 15, 2024, that aims to **provide free electricity to households in India.**

- Under the scheme, **households** will be **provided with a subsidy to install solar panelson their roofs.**

- The subsidy will cover **up to 40% of the cost of the solar panels**.

- The scheme is expected to **benefit 1 crore households** across India.

- It is estimated that the scheme will save the government Rs. 75,000 crore per year in electricity costs.

- The scheme has an outlay of Rs 75,021 crore and is to be implemented till FY 2026-27.

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Who are eligible to apply for the Scheme?

- The applicant must be an Indian citizen.

- Must own a house with a roof that is suitable for installing solar panels.

- The household must have a valid electricity connection.

- The household must not have availed of any other subsidy for solar panels

Impact of PM Surya Ghar Muft Bijli Yojana

- Through PM-Surya Ghar Muft Bijli Yojana, the households will be able to save electricity bills as well as earn additional income through the sale of surplus power to DISCOMs.

- A 3-kW system will be able to generate more than 300 units a month on average for a household.

- The proposed scheme will result in the addition of **30 GW** of solar capacity through rooftop solar in the residential sector, generating 1000 BUs of electricity and resulting in a reduction of 720 million tonnes of CO_2 equivalent emissions over the 25-year lifetime of rooftop systems.

- It is estimated that the scheme will create around 17 lakh direct jobs in manufacturing, logistics, supply chain, sales, installation, O&M, and other services.

Challenges

- **Household Reluctance:** A significant challenge is the reluctance of households to adopt rooftop solar systems due to the availability of free electricity provided by several states and union territories.

- **Restricted Space Use:** Serving the 1-2 kW segmentis complicated due to limited terrace space, uneven terrain, shading, low property ownership, and risks like vandalism or theft of solar panels.

- **Operational Strain on DISCOMs:** The current net metering system is

financially burdensome for DISCOMs, which already face substantial losses.

- DISCOMs become unpaid storage facilities for homeowners who generate energy during the day but draw from the grid at other times especially night.

- **Storage Integration:** The lack of a mandate for storage systems with rooftop solar installations could lead to grid management issues similar to the **"duck curve"**.

- The Duck Curve refers to a graphical representation of electricity demand from the grid on days when solar energy production is high and demand in the grid is low.

- **Quality Assurance Challenges:** Customers often find it difficult to assess the quality of the installed systems, making them vulnerable to substandard service and performance.

Way Forward

- **Ensure Targeted Beneficiary Outreach:** Partner with local bodies to develop strategies to reach the economically disadvantaged households that consume less than 200-300 units monthly.

- **Community Solar Projects:** Encourage the development of Community Solar Projects that allows shared solar generation from a central plant, benefiting low-income and rural households who cannot install rooftop solar systems.

- **Revise Net Metering:** Explore options like **Time-of-Use (TOU) pricing,** where consumers are charged based on the time they consume energy, to reduce the grid strain from surplus daytime solar generation.

- **Mandate Storage Integration:** Make storage integration mandatory for all rooftop solar installations to enhance grid stability and optimize the use of surplus solar energy.

19 years of Ethical IAS Coaching

Azerbaijan's New Climate Fund

Azerbaijan, the host of this year's climate change conference, **COP29,** has proposed to **launch a new climate fund for developing countries**

- **Climate Finance:** The **United Nations** has defined climate finance **as the local, national or transnational financing** drawn from **public, private** and alternative sources of financing that seeks to **support mitigation and adaptation actions** that will address climate change.

- **Paris Agreement Mandate:** The current obligation for developed countries is to mobilise **at least $100 billion annually,** which needs to be increased post-2025, as per the Paris Agreement.

COP29

- COP 29 refers to the **29th annual Conference of the Parties** to the **UN Framework Convention on Climate Change.**
  - **COP is the annual United Nations (UN) climate meeting**

- **Held on:** It will be held in **Baku, Azerbaijan**, from **11-24 November 2024.**

- **Host:** Azerbaijan.

- **Objective:** The key objective of **COP29 is** to **finalise a finance agreement** that **determines the amount of money developed countries** should **raise after 2025** to help developing nations combat climate change. (**New Collective Quantified Goal-NCQG is a part of the post-2025 climate finance goal).**

- **Last COP:** The COP28, was held in Dubai and was the largest attended climate COP in history.
  - The conclusion of the **first ever Global Stock Take** (GST) (a mid-term review of progress towards the 2015 Paris Agreement) was the event's key outcome.

- It **operationalised** the **Loss and Damage Fund** as an **entity** entrusted with the operation of the Financial Mechanism of the Convention, which would also serve the Paris Agreement.

- **COP 29:** The **New Collective Quantified Goal (**NCQG) is meant to be adopted at COP29 in Azerbaijan.

- At the same time, **Azerbaijan announces a climate finance action fund (CFAF)** at **COP29** to support green projects and help member nations reach the 1.5C target.

Azerbaijan's New Initiative: Climate Finance Action Fund (CFAF)

- **Climate Finance Action Fund (CFAF)** will be capitalised with **the voluntary contributions from fossil fuel producing countries** and **companies across oil, gas and coal,** and Azerbaijan will be a founding contributor.

  - Members will commit to transfer annual contributions as a **fixed-sum or based on volume of production.**

  - Initial fundraising aiming for **$1 billion**, as COP29 President-Designate calls for contributors to come forward with climate finance.

Issues with Azerbaijan's Climate Fund

- **Voluntary Contributions:** The proposed fund by Azerbaijan would rely on **voluntary contributions** from oil and gas-producing countries and companies, raising doubts about its effectiveness.

- **Loss and Damage Fund Comparison:** Similar funds, like the **Loss and Damage Fund created at COP27,** have struggled with low pledges, making it uncertain how much Azerbaijan's fund will attract.

- **Legacy-Building:** Azerbaijan's proposal is seen as an **effort to leave a legacy for COP29,** similar to initiatives by previous COP presidencies.

- **Quantum of CFAF:** The proposal for the CFAF indicates an **initial round of $1 billion per year by 10 countries or shareholders.**
  - o This amount is **too little contribution by fossil fuel producing countries.** To put it in perspective, the revenue of oil and gas companies is at the order of a few trillion per year. Saudi Arabia alone has an oil revenue of over $300 billion per year.

Issues with Climate Finance in General

- **Difference over Definitions:** Currently, there are strong differences over even definitions of **climate finance.**
- **Double-Counting and Innovative Accounting:** Developing countries often complain that **actual climate finance flows are much lower than the figures reported** by developed nations due to **double-counting practices.**
- **Neglect of Adaptation:** A significant portion of climate finance is directed towards **mitigation projects,** the ones that lead to emissions reductions.
  - o However, the **adaptation projects received less than 20% of the funds.**
  - o Even this amount has reduced in absolute terms in the last couple of years, according to a 2023 UN report.
  - o Developing countries are demanding that **at least 50% of climate finance** should go towards **adaptation.**

The New Collective Quantified Goal (NCQG): post-2025 climate finance goal

- **New Financial Target:** It is a **key element of the Paris Agreement,** designed to set a **new financial target** to support developing countries in their **climate actions post-2025.**
  - o It **succeeded the previous goal set in 2009** at the **Copenhagen**

Climate Summit, where **developed countries committed to mobilising $100 billion per year by 2020** to address the needs of developing countries.

    o The NCQG is **currently under negotiation** and is expected to be finalised by 2025.

- **Quantum of Finance Required:** Several developing nations, including India, have proposed that the **NCQG amount should be between $1 trillion and $1.5 trillion annually,** reflecting the amount needed for effective climate action.

Reasons for the importance of NCQG

- **Addressing Climate Finance Gaps:** The NCQG (New Collective Quantified Goal) aims to **bridge the persistent gaps in climate finance.**

    o The NCQG focuses on **providing concessional finance to developing countries,** which need substantial resources for climate mitigation, adaptation, and transitioning to sustainable energy systems.

- **Supporting Vulnerable Developing Countries:** Emerging markets, especially **small island states and least developed countries,** are disproportionately affected by climate change. By setting higher targets for climate finance, the NCQG can provide the **necessary resources to help these countries** build resilience against severe climate impacts like extreme weather and rising sea levels.

- **Enhancing Global Climate Action:** The NCQG **fosters global cooperation** by encouraging developed countries to demonstrate responsibility and solidarity.

- **Leveraging Private Sector Investment:** Public financing alone cannot meet the massive requirements for climate action. The NCQG signals stability and commitment, which can **attract private investors to climate-friendly projects.**

- **Promoting Accountability and Transparency:** The NCQG promotes accountability and transparency in climate finance by setting clear goals, parameters, and reporting mechanisms, ensuring funds are tracked and reach intended recipients.

Challenges of NCQG

- **Challenges in Meeting Targets: Developed countries have failed** to **meet even the existing $100 billion targets,** making it unlikely that they will agree to the much larger sums proposed.
- **Expansion of the Donor Base:** Developed countries argue that High-Income Nations like **China, South Korea, and oil-rich Gulf states** should also contribute to climate finance.

Way Forward

- **Address Three pillars of Climate Change:** To ensure that all the Three Pillars of Climate Action: **Adaptation, Mitigation and Loss and Damage** are addressed adequately.
- **Designing the NCQG to Support High-quality Climate Finance:** Beyond the dollar amount of the NCQG, the **quality of the finance delivered is also important.**
  - "High-quality" climate finance mechanisms ensure that the funding can be used most effectively and efficiently.
- **Donor Base of the New Fund:** It is essential to determining **which countries should contribute to the New Finance Goal.**
  - Developed countries have suggested various indicators to assess who can and should pay into the NCQG. For example, countries' potential to contribute could be analysed based on their ability to pay (income) and historical responsibility for climate change (emissions).

Ministry achieves 100-Day Target of 100 Nagar Vans with objective to Enhance Urban Greenery

- 111 Nagar Vans approved against the target of 100 Nagar Vans in 100 Days Action Plan
- Scheme Offers Rs. 4 Lakh Per Hectare to **Promote Urban Forests** with Citizen Involvement
- It aims to develop 1000 Nagar Vans by 2027 with the financial support of **National Fund of National Compensatory Afforestation Management and Planning Authority**
- Nagar Van to Feature Biodiversity Parks, **Smriti Vans**, Butterfly Conservatories, Herbal Gardens

Nagar Van Scheme

- The Nagar Van Scheme, at its core, is a visionary endeavor to foster urban forestry in India. By introducing green lungs in the heart of cities, this scheme aims to combat the adverse effects of rapid urbanization, such as pollution, habitat loss, and the overall degradation of the environment.
- Nagar van scheme was launched by Ministry of Environment, Forest and Climate Change.

Objectives of Nagar Van Yojana

- **Objective:** Establish 200 City Forests nationwide, with each city featuring a Municipal Council.
- **Purpose:** Create green spaces and enhance the aesthetic appeal of urban environments.
- **Education and Awareness:** Raise awareness about plants and biodiversity.
- **Conservation Focus:** Educate on the significant flora and fauna of the region, emphasizing threat perception.

- **Ecological Rejuvenation:** City Forests act as green lungs, contributing to environmental improvement in cities.
- **Environmental Benefits:** Mitigate pollution, promote cleaner air, reduce noise, harvest water, and counter the heat island effect.
- **Biodiversity Conservation:** Emphasize in-situ conservation efforts.
- **Health Benefits:** Provide health benefits to citizens.
- **Climate Resilience:** Contribute to making cities more resilient to the impacts of climate change.

World Rhino Day

World Rhino Day is celebrated annually on September 22 to raise awareness about the Rhinoceros and the urgent need for their conservation

Significance of the Day

- World Rhino Day is celebrated by the World Wildlife Fund (WWF) and other international organizations.
- The day was first announced by **WWF-South Africa in 2010** to raise awareness and funds for the five species of rhinos.

Facts About Rhinos

- **Related to Horses and Zebras:** Rhinos are part of the same group of odd-toed ungulates, making them relatives of horses and zebras.
- **Horn Made of Keratin:** Rhino horns are composed of keratin, the same protein found in human hair and nails.
- **Long Gestation:** Female rhinos have a gestation period of about **16 months.**
- **Traditional Medicine:** Rhino horns are used in traditional medicine, driving illegal poaching despite a lack of proven benefits.

One-Horned Rhino

- One among the 5 different species of Rhino

- **Significance** :Largest of the rhino species.
- Only rhino species found in India
- **Naturally found** in Bhutan, Nepal, Indonesia, Malaysia, and India
- **Habitat:** Assam, West Bengal and Uttar Pradesh
- **Protected Areas:** Pobitora Wildlife Reserve, Rajiv Gandhi Orang National Park,Kaziranga National Park, and Manas National Park.
- **Protection Status**
  - o **IUCN Red List** – Vulnerable.
  - o **CITES** – Appendix I
  - o **Wildlife Protection Act, 1972** – Schedule I

Conservation Efforts

- **5 Rhino range nations** (India, Bhutan, Nepal, Indonesia and Malaysia) signed **'The New Delhi Declaration on Asian Rhinos 2019'**
- **Project Rhino** is an initiative that aims to protect India's rhino population.
  - o It focuses on preventing poaching, improving habitats, and raising public awareness.
  - o The project collaborates with conservation groups and government agencies to ensure rhino survival.
- **National Rhino Conservation Strategy** was launched in 2019
- **Indian Rhino Vision 2020** aim was to increase the wild rhino population to 3,000 by 2020, spread across seven protected areas in Assam.
- **Population Growth** – Rhino population growth in Assam from the **1960s (600 rhinos) to 2024 (over 4,000 rhinos).**
- **Global Rhino Population in Greater Kaziranga – 70%** of the global population of greater one-horned rhinos species resides in Kaziranga.

Swachh Vayu Diwas: India's Commitment to Clean Air

International Day of Clean Air for Blue Skies

Establishment: Designated by the United Nations General Assembly in 2019 to raise awareness about air quality and its impact on health and climate.

- **Theme for 2024**: "Invest in #CleanAirNow" emphasizes the urgency of investment in measures that ensure clean air.
- **Significance**: Highlights the global commitment to combat air pollution, urging nations to prioritize air quality management for better health outcomes.

Swachh Vayu Divas 2024

- **Key Outcomes**:
- **National Clean Air Programme (NCAP)**: Focused actions have led to significant reductions in air pollution across 95 cities.

Swachh Vayu Survekshan Awards 2024 — Best performing NCAP cities were awarded under three categories.

Category-1: Surat, Jabalpur, Agra — Population over 10 Lakhs

Category-2: Firozabad, Amravati, Jhansi — Population Lakhs 3-10

Category-3: Raebareli, Nalgonda, Nalagarh — Population under 3 Lakhs

Impressive Statistics:

- 51 cities reported PM10 reductions of over 20%.

- 21 cities achieved reductions exceeding 40% compared to the baseline year of 2017-18.

- **Recognition**: The event featured the Swachh Vayu Survekshan Awards, rewarding cities for outstanding efforts in improving air quality.

National Clean Air Programme (NCAP)

- **Launch Year**: 2019.

- **Objective**: Aims to reduce PM10 concentrations by 20-30% by 2024-25 (revised to 40% by 2025-26).

- **Coverage**: Targets 131 cities across 24 states, recognizing the urgent need for cleaner air due to rapid urbanization and industrialization.

- **Financial Commitment**: ₹19,614.44 crores allocated for air quality initiatives from FY 2019-20 to FY 2025-26, with ₹11,211.13 crores already released for implementing City Action Plans (CAPs).

- **Air Quality Monitoring**: The initiative includes 1510 monitoring stations across 543 cities to track ambient air quality.

Implementation Strategies

- **City Action Plans (CAPs)**: Developed for all 131 cities, these plans address specific pollution sources such as:

- **Dust from Construction and Demolition**: Implementing dust control measures.

- **Vehicular Emissions**: Promoting cleaner fuels and electric vehicles.

- **Waste Management**: Reducing open burning of waste and enhancing solid

waste management practices.

- **Public Engagement**: Establishment of Public Grievance Redressal Portals to handle citizen complaints regarding air pollution.

- **Emergency Response Systems**: Developed for rapid action during air quality crises, ensuring timely interventions based on air quality alerts.

Supporting Initiatives

- **Nagar Van Yojana**: Launched in 2020, this initiative aims to create **urban forests (Nagar Vans)** to enhance green cover, improve air quality, and provide recreational spaces for residents.

- **Ek Ped Maa Ke Naam**: Encourages tree planting by citizens to foster community involvement and environmental stewardship.

- **Air Quality Index (AQI)**: Communicates air quality levels in a simplified manner, categorizing conditions from "Good" to "Severe" based on pollutant concentrations and their health impacts.

- **Ethanol Blended Petrol (EBP) Programme**: Promotes the use of ethanol in fuel to reduce vehicular emissions and reliance on fossil fuels.

- **Air Quality Early Warning System**: Implemented in cities like Delhi, Kanpur, and Lucknow to provide timely alerts about deteriorating air quality, enabling preemptive action.

Union Minister for Road Transport and Highways Sh. Nitin Gadkari to inaugurate Oxygen Bird Park (Amrit Mahotsav Park)

- **Inauguration**: Union Minister for Road Transport and Highways, Nitin Gadkari, will inaugurate the park along the Nagpur-Hyderabad National Highway-44.

- **Location**: Near Jamtha, Nagpur, Maharashtra.

- **Area**: The park spans **23 hectares**, including **2.5 hectares** designated for

social forestry.

Key Features

1. **Eco-Initiative**: Developed by the **National Highways Authority of India (NHAI)** as part of a broader effort to promote environmental sustainability along national highways.

2. **Natural Habitat**: The park serves as a habitat for various bird species, contributing to biodiversity conservation.

3. **Recreational Space**: Designed for both locals and tourists, the park provides a serene environment for recreation and relaxation.

4. **Sustainability Focus**: The "Oxygen Park" feature emphasizes:

- Planting fast-growing, oxygen-producing trees.

- Reducing air pollution and promoting a healthier environment.

5. **Social Forestry**: The **Social Forestry Division of Nagpur plays** a vital role in the   development and maintenance of the park's green spaces.

Financial Aspects

- **Development Cost**: The project has a budget of **₹14.31 crores**.

- **Approval Date**: The initiative was formally approved in **March 2023**.

Significance

- **Environmental Impact**: The park contributes to ecological balance and air quality improvement.

- **Community Engagement**: It promotes awareness and engagement with nature among residents and visitors.

- **Tourism Development**: Enhances the recreational offerings along the busy Nagpur-Hyderabad route, potentially boosting local tourism.

India signs agreement to protect marine life in the high seas

Key Highlights of the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement

- **Signing of the Agreement**: India signed the **BBNJ Agreement,** also known as the "Treaty of the High Seas," by External Affairs Minister S. Jaishankar at the UN General Assembly.

- **Purpose of the Agreement**: Aims to protect marine life in areas beyond national jurisdiction (starting **370 kilometers** from any coastline), covering **two-thirds** of the world's oceans.

- **Sustainable Resource Use**:
  - Promotes sustainable use of ocean resources, preventing individual countries from claiming these resources.
  - Ensures fair sharing of benefits derived from marine biodiversity.

- **Inclusivity in Conservation**: Encourages integration of traditional knowledge and modern scientific approaches in marine protection efforts.

- **Environmental Safeguards**: Establishes regulations for conducting environmental impact assessments to mitigate harm to marine ecosystems during activities in the high seas.

- **Alignment with Sustainable Development Goals**: Supports **Sustainable Development Goal (SDG) 14**, which focuses on conserving and sustainably using the oceans, seas, and marine resources.

- **Adoption and Approval**:
  - After **20 years** of discussions, the BBNJ Agreement was adopted last year.
  - India''s government approved joining the agreement in **July 2024**.

- **Challenges to India''s Marine Biodiversity**:
  - India hosts over **2,492 marine fish species**, with **91 species unique** to

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its waters, of which around **50 are threatened** according to the IUCN.

- o Major threats include overfishing, pollution, habitat destruction, and dredging.

- **Opportunities for India**:
    - o The agreement allows India to establish marine protected areas in the high seas and conduct necessary environmental assessments.
    - o Promotes international cooperation and technology sharing to bolster India's marine conservation efforts.

- **Global Participation**:
    - o A total of **91 countries** have signed the BBNJ Agreement, indicating a global consensus on the need for marine protection.
    - o Countries such as **Australia, Canada, and several EU nations** are among the signatories.

- **Target for Protected Areas**:
    - o Supports the global target of protecting **30% of the world's land and sea by 2030**, established at the **Kunming-Montreal Global Biodiversity Framework** meeting in 2022.

- **Legal Framework**:
    - o Part of the **United Nations Convention on the Law of the Sea**, addressing critical issues like ocean protection, equity, environmental damage, climate change, and biodiversity loss.

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GEOGRAPHY

Government has decided to rename the capital of Andaman & Nicobar Islands Port Blair as "Sri Vijaya Puram"

- The Minister said, it is also the place that hosted the **first unfurling of the Tiranga** by Netaji Subhash Chandra Bose.

Name Change and Current Developments

- **New Name**: Port Blair, the capital of the Andaman and Nicobar Islands, is now officially named **'Sri Vijaya Puram'** as announced by Union Minister Amit Shah on September 13, 2024.
- **Reason for Change**: The renaming is intended to reflect a departure from colonial legacy and to honor the victory achieved in the Indian freedom struggle. It aligns with Prime Minister Narendra Modi''s vision of erasing colonial imprints.

Historical Background of Port Blair

- **Origin of Name**: Port Blair was named after **Archibald Blair**, a British naval surveyor and lieutenant in the Bombay Marine, who conducted a thorough survey of the Andaman Islands in the late 18th century.
- **Initial Naming**: Blair initially named the natural harbor Port Cornwallis, after Commodore **William Cornwallis**. It was later renamed Port Blair in his honor.
- **Early Colonization**: The East India Company (EIC) used the islands as a strategic outpost to monitor Malay pirates and as a refuge for shipwrecked people.
- **Penal Colony**: By 1857, following the Revolt of 1857, the area was re-established as a penal colony where many freedom fighters were imprisoned,

including Veer Damodar Savarkar. The infamous Cellular Jail, also known as **Kaala Paani,** was built during this period.

Historical Connections with Imperial Cholas and Srivijaya

- **Chola Empire**: Historical records suggest that the Andaman Islands were used as a **naval base by Chola emperor Rajendra I** in the 11th century.

- **Strategic Role**: The Cholas used the islands to launch an attack on **Srivijaya**, a powerful maritime empire located in present-day Indonesia.

- **Historical Records**: An inscription from Thanjavur dated to 1050 CE refers to the islands as **Ma-Nakkavaram land**, which may have influenced the name Nicobar.

- **Chola Expeditions**: Scholars debate the motives behind the Chola invasion of Srivijaya. Reasons include potential obstacles to Chola trade or a desire to expand the empire's influence.
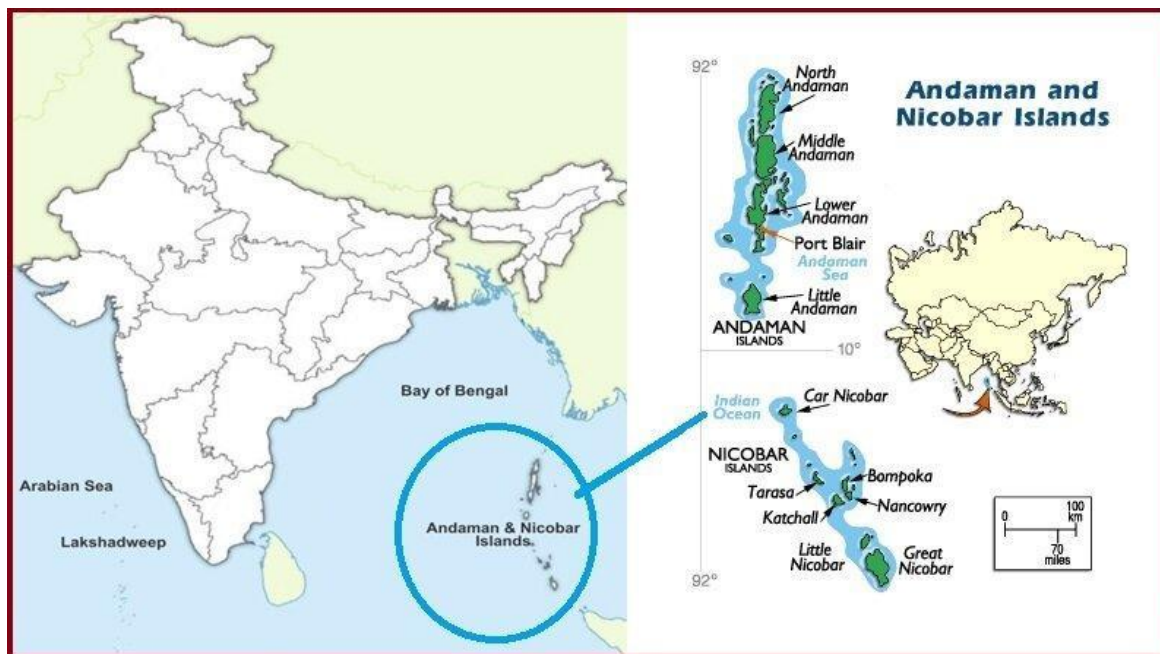
Key Facts of the Andaman and Nicobar Islands:

- The **Ten Degree Channel** is a narrow strait that separates the Andaman Islands from the Nicobar Islands. It is located approximately at the 10-degree latitude mark.

- **Indira Point** is the southernmost tip of the Nicobar Islands. It is situated on Great Nicobar Island and marks the southernmost point of India.

- The ANI is home to **5 Particularly Vulnerable Tribal Groups**: Great Andamanese, Jarwas, Onges, Shompens and North Sentinelese.

Central Water Commission (CWC)

Chief Minister of West Bengal blamed the CWC for unilaterally releasing water from Damodar Valley Corporation (DVC) reservoirs, causing widespread flooding in south Bengal.

Central Water Commission (CWC)

- Established in 1945, CWC works as an **advisory body** to the Government of India on matters relating to water resources development and management.

- It is a Statutory Body.

- **Headquarter of CWC:** New Delhi

- Nodal Ministry: **Ministry of Jal Shakti**

- **Functions**
  - General responsibilities of initiating, coordinating and furthering (in consultation of the State Governments concerned) schemes for control.
  - Conservation and utilisation of water resources throughout the country.
  - For the purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Water Power Development.

- CWC deals with **only surface water**.

- o **Central Groundwater Board (CGWB**) deals with **groundwater.**
- CWC Chairman also serves as the Government of India's Ex-Officio Secretary
- Work of the Commission is divided among 3 wings:
    - o Designs and Research (D&R) Wing
    - o River Management (RM) Wing
    - o Water Planning and Projects (WP&P) Wing

Damodar River

- Known as the **Sorrow of Bengal** because of its ravaging floods in the plains of West Bengal
- It rises in **Palamu hills** of the Chota Nagpur plateau in the state of Jharkhand.
    - o Passes through two Indian States of **Jharkhand and West Bengal.**
- It flows in South-easterly direction and joins Hoogly River in West Bengal which then flows into Bay of Bengal.
- Dmodar**'s Biggest Tributary** is **Barakar** which joins it near Asansol in West Bengal.

Damodar Valley Corporation

- Established in 1948 as **the first multipurpose river valley project** of independent India.
- It is a government organisation under the Ministry of Power.
- It constructed four dams in the state of Jharkhand, including Maithon Dam, Tilaiya Dam, and Konar Dam.
- It Operates Power Stations in the Damodar River areas in Jharkhand and the West Bengal
- **Irrigation and canal system** of DVC was handed over to the **Government of West Bengal in 1964.**

Rains may cool surge in coal shipments to India

Coal shipments to India rose 10% year-on-year between January and August 2024, outpacing the 8% year-on-year increase in domestic coal mining.

How Coal requirements are impacted by Rain?

- Most of the Coal Import was thermal coal shipments, driven by strong demand for electricity and the coal import mandates.

- Coal demand and shipments to India are expected to reduce with an **increase in hydropower generation as the monsoon rains.**
  - Monsoon this year has **picked up in August** despite a slow start.
  - It has pushed up reservoir levels by 26% year-on-year.

Coal and its Imports

- **Reserve:** India has a total coal reserve of 344.02 billion tonnes and is the second largest producer of coal in the world.

- India is the second largest coal importer globally

- **Power generation from coal:** Rose 13% year-on-year, compensating for the 6% decrease in hydropower generation due to low water levels.
  - **72%** of the electricity in India is generated from coal

- **Indonesia** is source for 45 % of India's seaborne coal imports (Mostly thermal coal)

- Top 5 States in terms of total coal reserves in India are:
  - **Jharkhand > Odisha > Chhattisgarh > West Bengal > Madhya Pradesh.**

- Categorization of Resources → Coal resources of India are available in older Gondwana Formations of peninsular India and younger tertiary formations of north-eastern region.

Classification of Coal

- **Anthracite:** Best quality of coal with **highest calorific value** and carries 80 to 95% carbon content.
  - It ignites slowly with a blue flame and is found in small quantities in Jammu and Kashmir.
- **Bituminous: Low level of moisture content** with 60 to 80% of carbon content and has a high calorific value.
  - Jharkhand, West Bengal, Odisha, Chhattisgarh and Madhya Pradesh have deposits
- **Lignite: Carries 40 to 55% carbon content** and is often brown in colour with high moisture content.
  - Gives smoke when burnt.
  - Rajasthan, Lakhimpur (Assam) and Tamil Nadu has deposits
- **Peat:** First stage of transformation from wood to **coal with low calorific value** and less than 40% carbon content.

SCIENCE AND TECHNOLOGY

NCA-F, IISC AND ITU collaborate to host workshop on Bharat 6G Vision: TRANSLATING RESEARCH TO STANDARDS

Key Highlights

- **Event:** "BHARAT 6G VISION: TRANSLATING RESEARCH TO STANDARDS" Workshop
- **Day 1 Focus:** ITU standardization process, drafting and negotiating contributions, panel with DoT officials and industry leaders
- **Day 2 Focus:** Standard Essential Patents (SEPs) in telecom, Intellectual Property Rights, panel with government, patent office, industry, academia

Bharat 6G Project

About:

- India's 6G project will be implemented in two phases, the first one from 2023 to 2025 and the second one from 2025 to 2030.
- The government has also appointed an apex council to oversee the project and focus on issues such as standardization, identification of the spectrum for 6G usage, createan ecosystem for devices and systems, and figure out finances for research and development, among other things.
- A key focus of the council will be on new technologies such as Terahertz communication, radio interfaces, tactile internet, artificial intelligence for connected intelligence, new encoding methods and waveforms chipsets for 6G devices.

Objectives:

- Facilitate and finance R&D, design, and development of 6G technologies by Indian startups/companies/research organisations/universities;

- Allow India to become a global leader in IP, products, and solutions for affordable 6G telecom solutions.

- Utilise 6G technology as a force multiplier for India by 2030.

- Enable an inclusive and significant improvement in the quality of life for citizens in India and around the world.

Challenges Related to 6G in India

- **Complex Technology:** The complexity, stemming from a multitude of components and subsystems, may introduce challenges during the developmental and implementation phases of 6G.

- **Infrastructure:** 6G requires substantial investments in infrastructure. For example, **THz waves** are also more difficult to transmit and receive, so 6G networks will need to use new antenna designs and signal processing techniques.

- **Security Concerns:** The ultra-fast speeds and massive data volumes transmitted through 6G networks could expose them to cyber threats.

- **Low availability of bandwidth:** 6G is expected to enable a 1 Tbps data rate in which a large continuous bandwidth is required but in reality, these bandwidths are limited and split over several bands.

- **Lack of fibre connectivity**: With less than 30 per cent of the country''s telecom towers now linked by fibre, the networks are ill-equipped to support 6G data speeds.

What is 6G Technology?

- **6G (Sixth-Generation Wireless)** is the successor to **5G cellular technology.**

- It will be able to use **higher frequencies than 5G networks** and provide substantially higher capacity and much lower latency (delay).

- One of the goals of 6G internet will be to support one **microsecond-latency communication (delay of one-microsecond in communication).**

- This is 1,000 times faster - or 1/1000th the latency - than one millisecond throughput.

- It seeks to utilize the **terahertz band** of frequency which is currently unutilized.

- Terahertz waves fall between infrared waves and microwaves on the electromagnetic

- These waves are extremely tiny and fragile, but there''s a huge amount of free spectrum up there that would allow for spectacular data rates.

Cabinet approves one more semiconductor unit in Sanand, Gujarat under India Semiconductor Mission (ISM)

- The capacity of this unit will be 60 Lakh chips per day.
- The chips produced in this unit will cater to a wide variety of applications which include segments such as industrial, automotive, electric vehicles, consumer electronics, telecom, mobile phones, etc.

India Semiconductor Mission (ISM)

- The ISM was launched in 2021 with a total financial outlay of Rs76,000 crore under the aegis of the Ministry of Electronics and IT (MeitY).
- It is part of the comprehensive program for the development of sustainable semiconductor and display ecosystems in the country.
- The programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem.
- Envisioned to be led by global experts in the Semiconductor and Display industry, ISM will serve as the nodal agency for efficient, coherent and smooth implementation of the schemes.

Components:

- **Scheme for setting up of Semiconductor Fabs in India:** aimed at attracting large investments for setting up semiconductor wafer fabrication facilities in the country.
- **Scheme for setting up of Display Fabs in India:** aimed at attracting large investments for setting up **TFT LCD / AMOLED** based display fabrication facilities in the country.
- Scheme for setting up of Compound Semiconductors / Silicon Photonics /

Sensors Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India.

- **Design Linked Incentive (DLI) Scheme.**

Key Objectives of ISM:

- Develop long-term semiconductor and display manufacturing strategies.
- Build a secure and trusted semiconductor supply chain.
- Support Indian semiconductor design growth.
- Promote intellectual property creation, technology transfer, and economies of scale.
- Fund cutting-edge semiconductor research and collaborations.

Union Health Ministry approves introduction of new shorter and more efficacious treatment regimen for drug-resistant TB in India

Key highlights of the introduction of the BPaLM regimen for **MDR-TB** treatment in India

Introduction of BPaLM Regimen:

- **New Treatment**: The Union Ministry of Health & Family Welfare has introduced the BPaLM regimen for **Multi-Drug-Resistant Tuberculosis (MDR-TB).**
- **Components**: The regimen includes a combination of three existing drugs—**Bedaquiline, Linezolid,** and the newly approved **Pretomanid, with optional Moxifloxacin**.

Benefits of BPaLM Regimen:

- **Treatment Duration**: The BPaLM regimen offers a shorter treatment duration

of six months compared to traditional MDR-TB treatments, which can last up to 20 months.

- **Effectiveness**: It has shown higher efficacy and a better safety profile compared to previous treatments.
- **Cost Efficiency**: The new regimen is expected to reduce overall treatment costs and improve the cost-effectiveness of TB management.

National TB Elimination Program (NTEP):

- **Objective**: The program aims to eliminate TB in India by 2025, five years ahead of the global target under the Sustainable Development Goals.
- **Previous Program**: NTEP was formerly known as the Revised National Tuberculosis Control Programme (RNTCP).

Support Initiatives:

- **Pradhan Mantri TB Mukt Bharat Abhiyaan (PM TBMBA)**: Launched by the President of India to foster collective efforts for TB elimination.
- **Ni-kshay Mitra Initiative**: Provides additional support such as diagnostics, nutrition, and vocational aid for TB patients, encouraging community and corporate involvement.
- **Ni-kshay 2.0 Portal**: Facilitates community support and engagement in TB care.

MultiDrug Resistant TB

- Mycobacterium tuberculosis, the bacteria that cause tuberculosis (TB) can develop resistance to the antimicrobial drugs used to cure the disease.
- Multidrug-resistant TB (MDR-TB) is TB that does not respond to at least isoniazid and rifampicin, the 2 most powerful anti-TB drugs.

- Most people with TB are cured by a strictly followed, 6-month drug regimen that is provided to patients with support and supervision.

- **Inappropriate or incorrect** use of antimicrobial drugs, or use of ineffective formulations of drugs (such as use of single drugs, poor quality medicines or bad storage conditions), and premature treatment interruption can cause drug resistance, which can then be transmitted, especially in crowded settings such as prisons and hospitals.

- Extensively drug-resistant TB, XDR-TB, is a rare type of multidrug-resistant tuberculosis (MDR TB) that is resistant to isoniazid and rifampin, plus any fluoroquinolone and at least one of three injectable second-line drugs (i.e., **amikacin, kanamycin, or capreomycin**). It has been reported in 1117 countries worldwide.

Tuberculosis (TB)

- Tuberculosis (TB) is a **bacterial infection** spread through inhaling tiny droplets from the coughs or sneezes of an infected person.

- It mainly affects the lungs, but it can affect any part of the body, including the tummy (abdomen), glands, bones and nervous system.

- TB is a potentially serious condition, but it can be cured if it''s treated with the right antibiotics.

Current status of TB in India:

- **Incidence Rate:** As of 2022, the incidence rate of TB in India was reported at 199 cases per 100,000 population, a decline from 237 per lakh population in 2015. This reflects a 16% decrease in new TB cases since 2015.

- **Prevalence:** The estimated prevalence of tuberculosis infection (TBI) among

individuals over 15 years of age was around 31% according to a national survey conducted from 2019 to 2021.

- **Global Contribution:** India accounted for approximately 26% of the global incidence of TB cases in 2020. In that year, India also represented 38% of global TB deaths among HIV-negative individuals.

- **Mortality Rate:** The mortality rate due to TB decreased from 28 per lakh population in 2015 to 23 per lakh population in 2022, indicating progress in managing the disease.

- **Total Cases:** Estimates suggest that the total number of TB cases in India has increased from 2.2 million to 2.6 million in recent years, reflecting ongoing challenges in detection and treatment.
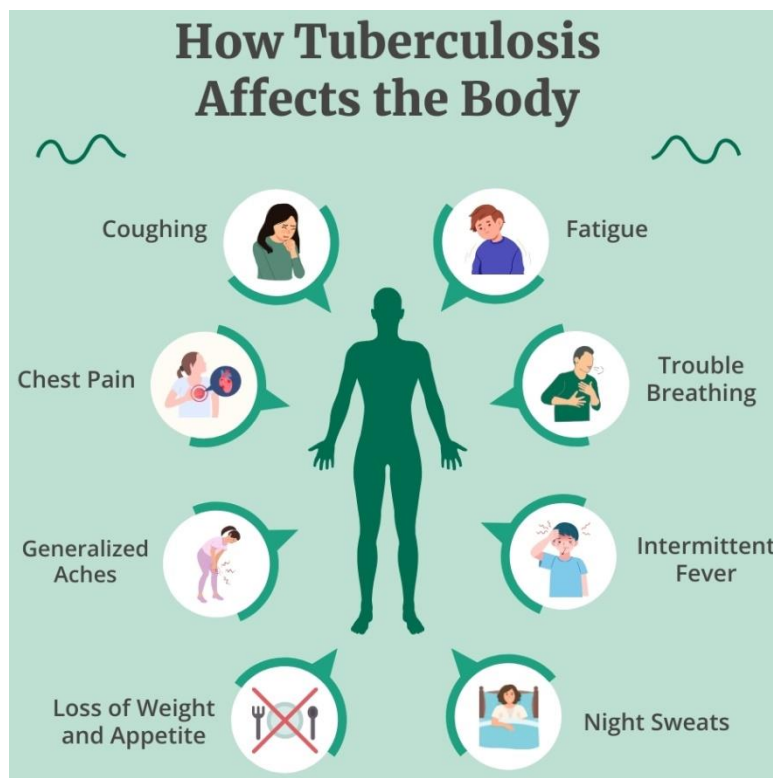
How Tuberculosis Affects the Body

Health Ministry Reports Suspected Mpox Case in Recent Traveler; Patient Stable and Isolated

About:

- Mpox, also known as monkeypox, is a **DNA virus.** It belongs to the family **Poxviridae,** which consists of large, **double-stranded DNA.**
- The virus was first identified in monkeys in 1958 but has since been found to infect humans as well.
- **Transmission:** Mpox is primarily transmitted to humans from animals, particularly rodents and primates, through direct contact or through contaminated objects.

Monkeypox Treatment

- **Isolation:** The persons infected by Mpox must be isolated and cared far away from other people.
- **Prioritising Vulnerable:** It is recommended for people at high-risk health workers**,** sex workers**,** etc to get vaccinated to prevent infection with Mpox during an outbreak.
- **Medications:** Several antivirals, such as tecovirimat, need to be made accessible to the persons infected.

Monkeypox Vaccines

The ACAM2000, MVA-BN, and JYNNEOS vaccines are the available vaccines for controlling the current outbreak.

- The vaccines should be given within 4 days of contactwith someone who has Mpox (or within up to 14 days if there are no symptoms).
- **MVA-BN:** It is a third-generation live, attenuated**,** nonreplicating**,** modified vaccinia Ankara vaccine.
- **ACAM2000**: It is a smallpox vaccine that is also a second-generation live, attenuated vaccinia virus vaccine**.**

- **JYNNEOS vaccine**: It is presently being used to treat monkeypox, and was developed using the **Modified Vaccinia Ankara (MVA).**

MONKEYPOX VIRUS SYMPTOMS

HIGH FEVER   INTENSE HEADACHE   CHILLS   MUSCLE ACHES   SWOLLEN LYMPH NODES   RASH

ILLNESS LASTS FOR 2-4 WEEKS

Current Trends of Monkeypox

- **2022-2023 Outbreak:**The current outbreak of Mpox all over the world is very concerning because:
- There are around 91,328 cases of Mpox across the world.
- In the USA, there were 55 deaths reported out of 31,010 cases of Mpox.
- **Cases in India:**India reported its first case of monkeypox in July 2022 with the patient having traveled from the UAE to Kerala.
- Till July 2023, a total of 27 confirmed cases of monkeypox were reported in India, with 12 cases from Keralaand 15 from Delhi.
- Most of these cases were characterized as mild, and treatment remained largely supportive.
- **Re-infection after vaccination:** In June 2023**,** Israeldetected a case of monkeypox in a man who had been vaccinated against the virus but contracted it after travelling from Portugal to Israel.
- **Clade 9 Variant:**In September 2023, the ICMR National Institute of Virology (ICMR-NIV) identified the presence of the Clade 9 variant of the varicella-zoster virus (VZV) in India for the first time.

Understanding ovarian cancer: its causes, symptoms, and screening methods

Ovarian cancer is the most lethal gynecological cancer, often referred to as a "silent killer" due to its non-specific symptoms, leading to late diagnosis. In India, it ranks among the top three cancers affecting women.

Statistics:

In 2022, India reported 47,333 new cases and 32,978 deaths due to ovarian cancer, underscoring the severity of the disease.

Symptoms:

Common symptoms include bloating, pelvic pain, loss of appetite, fatigue, back pain, and postmenopausal bleeding. These are often mistaken for other conditions, leading to delayed diagnosis.

Subtypes:

- Type I: Less common, detected earlier, better prognosis.
- Type II: More aggressive, diagnosed at later stages, responsible for most deaths.

Treatment & Survival:

Around 20% of patients with advanced ovarian cancer may achieve disease-free status with surgery and chemotherapy. There are no effective screening tests for ovarian cancer, unlike breast or cervical cancer.

Risk Factors:

- **Genetic Links:** Ovarian cancer is highly heritable, with **BRCA1 and BRCA2 gene mutations** significantly increasing risk.
- **Endometriosis:** Linked to certain types of ovarian cancer but the overall risk remains low.
- **Lifestyle Factors:** Use of talcum powder, hair dyes, and chemical hair straighteners may increase risk, though more research is needed.

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Hormone Replacement Therapy (HRT): HRT has been linked to an increased risk of ovarian cancer, especially in postmenopausal women. Alternatives should be considered.

Genetic Counseling: Women with a family history of ovarian or breast cancer can benefit from genetic counseling for early detection and preventive measures.

Conclusion:

Awareness of ovarian cancer symptoms, genetic risks, and lifestyle factors can lead to early detection and better outcomes.

Panic in the time of cholera: issues critical to managing a resurgence

Cholera and Climate Change: A Growing Global Health Crisis

- Cholera, an acute diarrheal disease caused by the bacterium *Vibrio cholerae*, remains a major global health threat, especially in regions with poor sanitation and limited access to clean water.
- The World Health Organization (WHO) has reported a significant rise in cholera cases in recent years, with mortality rates increasing.
- While technological advancements like AI-assisted vaccine platforms show promise, basic issues such as water safety, hygiene, and sanitation remain critically neglected, leading to a deepening crisis.

Impact of Climate Change on Cholera Spread

- Rising global temperatures have created conditions favorable for the bacterium to thrive, especially in warmer surface waters.
- Floods and droughts, both exacerbated by climate change, further aid in spreading the disease. Floodwaters can cause latrines to overflow into water sources, while droughts force people to rely on shrinking, contaminated water supplies.

- This linkage between climate change and cholera outbreaks cannot be ignored, as both amplify the severity and spread of the disease.

Alarming Statistics: Cholera Cases and Deaths Rising

- According to the WHO and UNICEF, a staggering **2 billion people** still lack access to safe drinking water, and 3.6 billion people do not have access to proper sanitation.
- This lack of basic infrastructure is directly linked to the spread of cholera.
- In 2023, cholera killed over 4,000 people globally, with the number of cases rising by 13% compared to the previous year.
- As of July 2024, more than 5,000 cholera cases have been reported in the South-East Asia region alone, with India, Myanmar, Bangladesh, and Nepal heavily impacted.

Vaccine Shortages and Challenges in Cholera Control

- Between 2021 and 2023, the demand for cholera vaccines exceeded supply, with only 36 million doses produced last year — half the amount requested by 14 affected countries.
- In response, the WHO''s International Coordinating Group has had to adopt a single-dose vaccination approach instead of the standard two-dose regimen to stretch limited supplies.
- This highlights the critical need for increased vaccine production, particularly as only one manufacturer currently produces cholera vaccines.

The Role of Sanitation, Clean Water, and Hygiene

- While vaccination is a crucial tool in combating cholera, long-term solutions lie in improving access to clean **water, sanitation, and hygiene (WASH).**

- WHO Director-General Dr. Tedros Adhanom Ghebreyesus emphasized that safe water and improved sanitation remain the only sustainable solutions to ending cholera outbreaks.

- Without addressing these foundational issues, vaccination efforts alone will not be enough to prevent future outbreaks.

Global Efforts to Combat Cholera

- The WHO''s **Global Task Force for Cholera Control (GTFCC)** has developed a **"Global Roadmap for Ending Cholera by 2030,"** which emphasizes multi-sectoral interventions.

- This includes identifying transmission hotspots, improving sanitation, promoting hygiene education, and facilitating **oral cholera vaccine (OCV)** campaigns in high-risk areas.

- In May 2024, seven countries and ten health partners, including UNICEF and the International Federation of Red Cross and Red Crescent Societies (IFRC), committed to accelerating these efforts and increasing investment in WASH infrastructure.

Nipah death confirmed in Malappuram; 150 contacts asked to isolate themselves

- A 24-year-old man from Kerala's Malappuram district died from Nipah virus, confirmed by the National Institute of Virology, Pune.

- Initially admitted with hepatitis symptoms, he later showed signs of encephalitis. Authorities swiftly initiated Nipah containment protocols.

Nipah Virus

- It is a **zoonotic virus** (it is transmitted from animals to humans).
- The organism that causes Nipah Virus encephalitis is an RNA or **Ribonucleic acid virus**of the family Paramyxoviridae, genus Henipavirus, and is closely related to Hendra virus.
- **Hendra virus (HeV) infection**is a rare emerging zoonosis that causes severe and often fatal diseases in both infected horses and humans.
- It **first broke out in Malaysia and Singapore**in 1998 and 1999.
- The disease is named after a village in Malaysia, Sungai Nipah, where it was first detected.
- It**first appeared in domestic pigs** and has been found among several species of domestic animals including dogs, cats, goats, horses and sheep.

Nipah Virus Symptoms

- **Common signs:** The infected person shows **fever, head pain, muscle aches, nausea,** and **a scratchy throat.**
- **Progression:** It shows symptoms such as **dizziness, drowsiness,** and neurological signs suggestive of **acute encephalitis** may appear.
- **Severe cases:** The seizures can occur in severe cases, leading to a coma within 24 to 48 hours.
- **Severity:** It can cause mild to severe disease, including swelling of the brain (encephalitis) and potentially death.

Treatment of Nipah Virus

- There is currently **no known treatment or vaccine**available for humans or animals.
- However, **Ribavirin,** an antiviral, may play a role in lowering mortality in patients with Nipah virus encephalitis.

- The main approach to managing the infection in people is **intensive supportive care** combined with symptom treatment.

Nipah Virus Prevention

- Avoid contact with infected bats or areas contaminated with bat excreta or saliva.
- Use protective equipment when handling infected patients or their bodily fluids.
- Properly cook all meat products before consumption.
- Maintain good hygiene practices.
- Stay informed about outbreaks and follow guidelines from health authorities.
- Quarantine and monitor people who have been in contact with infected individuals.

What is a Telescope? How good are modern telescope?

A telescope is an optical instrument designed to observe distant celestial objects by collecting and magnifying light. It typically uses mirrors (in reflecting telescopes) or lenses (in refracting telescopes) to gather light, allowing astronomers to view and analyse objects such as stars, planets, and galaxies with enhanced brightness and clarity. Telescopes play a crucial role in advancing our understanding of the universe.

Principles of Telescopes:

- **Light Collection:** Telescopes collect light emitted from celestial objects and concentrate it into an image.

Types of Telescopes:

- **Reflecting Telescopes:** Use concave mirrors to focus light. Most contemporary telescopes fall under this category due to their efficiency. Giant telescopes use

parabolic mirrors to avoid multiple focal points, which blur the image.

- **Refracting Telescopes:** Use lenses to bend light and form an image directly. Limited by the maximum size of the lenses (~1 m), as larger lenses deform under their weight.

Primary Function of Telescopes:

- **Light-Gathering Power:** The main purpose is to enhance the brightness of celestial objects by gathering more light, rather than magnifying them. Telescopes are like larger containers that can collect more light, similar to a tub collecting more rain than a small cup.

Features of Telescopes:

- **Apparent Magnitude:** The brightness of stars and celestial objects is measured logarithmically. A star with magnitude 4.0 is 2.512 times brighter than one with magnitude 5.0. **Lower magnitudes mean brighter objects** (e.g., Sun = -26.78, Venus = -4.92, Sirius = -1.46).

- **Resolution:** Telescopes'' resolution depends on overcoming atmospheric turbulence, which is why many telescopes are located atop mountains.

Why Telescopes are Built on Mountains?

- **Reduced Atmospheric Disturbance:** Higher altitudes reduce air turbulence, enhancing telescope performance. For example, space telescopes like Hubble, located beyond the Earth''s atmosphere, have significantly better resolution (0.04 **arcsec**) compared to ground-based telescopes (0.3-0.5 arcsec).

New Technologies in Telescopes:

- **Adaptive Optics:** Use lasers to create artificial stars in the upper atmosphere. By analyzing air turbulence and correcting it using deformable mirrors, astronomers can obtain clearer images.

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- **Tomography:** Further enhances resolution by examining air columns and correcting aberrations for more precise images.

Limitations of Telescope Size:

- **Primary Mirror Size: Larger** mirrors can sag under their own weight, distorting images. Current technology limits mirror sizes to about 8.5 meters. Solutions include using **segmented mirrors** to counteract this issue.

Advanced Telescopes Around the World:

- **Large Binocular Telescope (LBT):** The largest operating telescope, with two 8.4-m mirrors and an effective aperture of 11.9 m, located in Arizona, USA.
- **Extremely Large Telescope (ELT):** Under construction in Chile, it will be the world's largest optical telescope upon completion in 2028.
- **Subaru Telescope:** An 8.2-m-wide Japanese telescope that captured a faint object with a magnitude of 27.7 after 10 hours of exposure time.

Cabinet approves 'Bio-RIDE' scheme to support cutting edge research and development in Biotechnology

Key highlights of the **Biotechnology Research Innovation and Entrepreneurship Development (Bio-RIDE)** scheme

Overview

- **Continuation of Umbrella Schemes**: The scheme merges two existing initiatives under the Department of Biotechnology (DBT).
- **Total Outlay**: ₹9,197 crore for the period from 2021-22 to 2025-26.

Components of Bio-RIDE

- Biotechnology Research and Development (R&D)**.**

- Industrial & Entrepreneurship Development (I&ED)**.**

- Biomanufacturing and Biofoundry(new component).

Objectives

- **Foster Innovation**: Enhance research and product development in biotechnology.

- **Promote Bio-Entrepreneurship**: Nurture startups through seed funding, incubation, and mentorship.

- **Facilitate Industry-Academia Collaboration**: Create synergies to accelerate **commercialization of bio-based products**.

- **Encourage Sustainable Practices**: Focus on environmentally friendly biomanufacturing aligned with India's green goals.

- **Support Extramural Funding**: Provide funding for diverse fields, including agriculture, healthcare, and environmental sustainability.

- **Nurture Human Resources**: Develop skills and capacity among students, young researchers, and scientists in biotechnology.

Circular Bioeconomy

- **Biomanufacturing and Biofoundry Component**: Aligns with the "Lifestyle for the Environment (LiFE)" initiative to promote green solutions and tackle climate change.

- **Goals**: Improve healthcare outcomes, enhance agricultural productivity, and foster growth in the bioeconomy.

Vision and Impact

- **Global Competitiveness**: Position India as a leader in biotechnology research and innovation.
- **Economic Target**: Aim for a US$300 billion bioeconomy by 2030.
- **Contribute to 'Viksit Bharat 2047'**: Support India's long-term development goals.

Department of Biotechnology (DBT)

It is a key ministry under the Government of India, established in 1986, focused on promoting research and innovation in biotechnology and its applications.

Objectives

- **Promote Excellence in Biotechnology**: Foster innovative research and development in biotechnology to enhance public health, agriculture, and environmental sustainability.
- **Facilitate Technology Transfer**: Support the commercialization of biotechnological innovations through partnerships with industry.
- **Strengthen Human Resources**: Develop skilled manpower in biotechnology through training and capacity-building initiatives.

Key Areas of Focus

- **Health Care**: Development of biopharmaceuticals, vaccines, and diagnostic tools.
- **Agriculture**: Enhancing crop yield and resistance through biotechnological methods, including genetically modified organisms (GMOs).
- **Environmental Biotechnology**: Promoting bioremediation and sustainable practices to address environmental challenges.

Industrial Biotechnology: Supporting the production of biofuels, bioplastics, and other bio-based products.

Are antibiotics responsible for bowel diseases?

- Recent research published in *Science Advances* has highlighted the significant effects of antibiotics on the integrity of the intestinal mucus barrier. This study raises concerns about the consequences of irrational antibiotic use beyond the well-known issue of antimicrobial resistance.

Study Overview

- **Experimental Setup**: Mice were treated with four different antibiotics—**ampicillin, metronidazole, neomycin, and vancomycin**—twice daily for three days.
- **Main Discovery**: All four antibiotics disrupted the mucus layer that protects the intestinal epithelium, allowing microbes to interact closely with host tissues. This can trigger immune responses and increase susceptibility to intestinal inflammation.

Implications for Inflammatory Bowel Disease (IBD)

- **Potential Link to IBD**: Researchers propose that the erosion of the mucus barrier from repeated antibiotic use could contribute to the development of inflammatory bowel diseases over time, particularly when combined with genetic predispositions.

Recovery Strategies

- **TUDCA Treatment**: The study explored the use of **tauroursodeoxycholic acid (TUDCA)** to reverse the mucus secretion deficits caused by vancomycin. TUDCA alleviated ER stress in goblet cells, restoring mucus production and supporting the hypothesis that ER stress is a critical factor in antibiotic-induced damage.
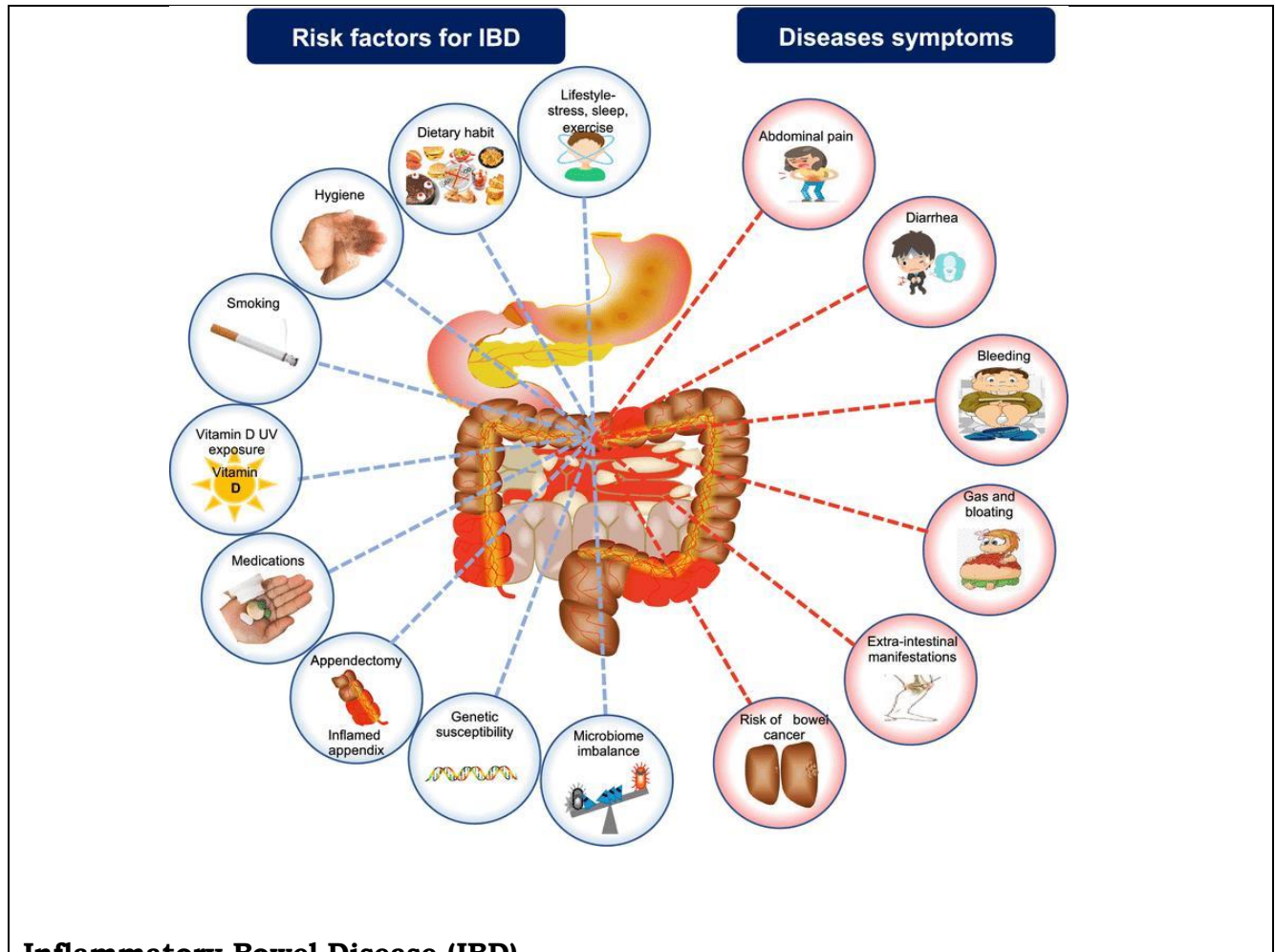
Inflammatory Bowel Disease (IBD)

- IBD is a term that describes disorders involving long-standing (chronic) inflammation of tissues in your digestive tract.
- For some people, IBD is only a mild illness. For others, it''s a debilitating condition that can lead to life-threatening complications.

Types of IBD include:

- Ulcerative colitis: This condition involves inflammation and sores (ulcers) along the lining of your large intestine (colon) and rectum.

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Crohn''s disease.

- This type of IBD is characterized by inflammation of the lining of your digestive tract, which often involves the deeper layers of the digestive tract.

- Crohn''s disease most commonly affects the small intestine. However, it can also affect the large intestine and, uncommonly, the upper gastrointestinal tract.

- A third category, indeterminate colitis IBD, refers to IBD that has features of both Crohn's disease and ulcerative colitis.

India's First Comprehensive Cancer Multi-omics Data Portal

The Indian Cancer Genome Atlas (ICGA) foundation recently announced that it has launched **India's first comprehensive cancer multi-omics data portal**.

ICGA cancer multi-omics data portal:

- The **India Cancer Genome Atlas (ICGA) Foundation** has launched **India's first cancer multi-omics data portal.**

- This platform provides **open access** to data specifically from I**ndian cancer patients**, making it a **significant tool for cancer research** in the country.

- The portal offers **clinically correlated data** aimed at advancing research and improving cancer treatments for Indian populations.

- It is the **first of its kind in India** to provide **integrated DNA, RNA, and protein profiles** of **breast cancer patients**, alongside their clinical outcomes.

- The data is **accessible to researchers globally** under **India's PRIDE guidelines**, which foster ethical data sharing and collaboration in cancer research.

Indian Cancer Genome Atlas (ICGA)

- The Indian Cancer Genome Atlas (ICGA) is a **national initiative** aimed at

mapping various types of cancer across India.

- It is operated by the **ICGA Foundation**, a **Section 8 not-for-profit organisation**, which functions through a **public-private-philanthropic partnership**.
  - The initiative is supported by a **diverse team of over 50 clinicians, researchers, and data analysts.**
- **Main goal of the ICGA:** To improve **cancer diagnosis and treatment** for Indian patients, while also contributing to the **global understanding of cancer biology**.
- **Foundation's first projec**t: Focuses on **multi-omics profiling of breast cancer**, with future plans to extend this approach to other cancers.

Vancomycin

Methicillin-resistant Staphylococcus aureus rarely resists vancomycin; only 16 such cases have been reported in India so far.

Methicillin-resistant Staphylococcus aureus (MRSA):

- **Staphylococcus aureus** is a significant **bacterial species contributing to AMR**.
- **Methicillin-resistant Staphylococcus aureus (MRSA)** is a **strain** that has developed **resistance to many antibiotics.**
- **In 2019,** MRSA was responsible for **over 100,000 deaths globally**.

Vancomycin:

- Vancomycin is an **antibiotic** used to **treat severe bacterial infections** caused by **gram-positive bacteria**, including **methicillin-resistant Staphylococcus aureus (MRSA).**
- Vancomycin has been a key **first-line treatment for MRSA for 40 years.**

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- MRSA **rarely develops resistance to vancomycin**, but when it does, it becomes **Vancomycin-resistant Staphylococcus aureus (VRSA)**.
- VRSA is still relatively **rare**, with **only 16 reported cases in India** to date.
- VRSA acquires **resistance** to vancomycin through the **transfer of a gene cluster** known as the **vanA opero**n from other **vancomycin-resistant bacteria during co-infections.**
- The acquisition of vancomycin resistance usually leads to **slower bacterial growth and lower fitness**, which is why VRSA remains rare.

Antimicrobial Resistance (AMR):

- Antimicrobial Drug Resistance or Antimicrobial Resistance (AMR) occurs when **bacteria, viruses, fungi and parasites no longer respond to antimicrobial medicines.**
- **Impact:** Infections become **difficult or impossible to treat**, increasing the risk of disease spread, severe illness, disability and death.
- **Reason:** AMR is a **natural process** that **happens over time** through genetic changes in pathogens.

India Committed to Achieving UN's 2030 Goal of Ending HIV/AIDS: MoS Anupriya Patel

- **Theme** "Revitalized Multilateralism: Recommitting to Ending AIDS Together."
- India Reaffirms Commitment to End HIV/AIDS as a public health threat by **2030**
- New annual HIV infections have decreased by **44% since 2010**, outperforming the global reduction rate of **39%.**
- "India offers comprehensive HIV and Syphilis testing to all pregnant women with more than 30 million free HIV tests being conducted annually"
- "India currently supplies over **70% of global anti-retroviral medicines**, ensuring affordable access for nations in need"
- As per the recent India HIV Estimations 2023 report, over **5 million people** are living with HIV in India, but thanks to concerted efforts, the adult HIV prevalence is at 0.2 % and estimated annual new HIV infections are at around 66,400.
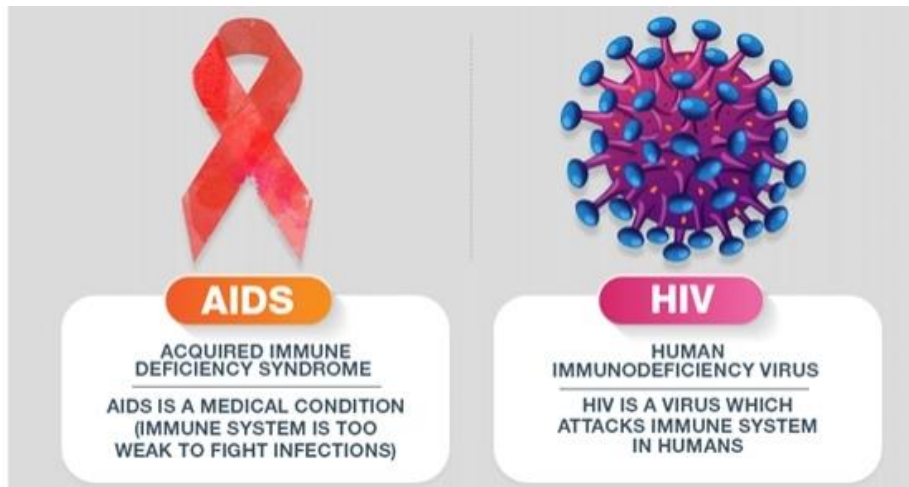
HIV/AIDS

- Acquired immunodeficiency syndrome (AIDS) is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus (HIV).
- HIV attacks the body's immune system, making a person more vulnerable to other infections and diseases.
- If HIV is not treated, it can lead to AIDS.

Transmission:

- It is a sexually transmitted infection (STI).
- It can also be spread by contact with infected blood, and from illicit injection

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drug use, or sharing needles.

- It can also be spread from mother to child during pregnancy, childbirth, or breastfeeding.

AIDS
ACQUIRED IMMUNE DEFICIENCY SYNDROME

AIDS IS A MEDICAL CONDITION (IMMUNE SYSTEM IS TOO WEAK TO FIGHT INFECTIONS)

HIV
HUMAN IMMUNODEFICIENCY VIRUS

HIV IS A VIRUS WHICH ATTACKS IMMUNE SYSTEM IN HUMANS

Treatment:

- There is currently no effective cure. Once people get HIV, they have it for life.

- But with proper medical care, HIV can be controlled. People with HIV who get effective HIV treatment (called antiretroviral therapy, or ART) can live long, healthy lives and protect their partners.

India's Efforts to Prevent HIV

- **HIV and AIDS (Prevention and Control) Act, 2017:** According to this act, the central and state governments shall take measures to prevent the spread of HIV or AIDS.

- **Access to ART:** India has made **Antiretroviral Therapy (ART)** affordable and accessible to over 90 per cent of people living with HIV in the world.

- **Memorandum of Understanding (MoU):** The Ministry of Health and Family Welfare signed a MoU with the Ministry of Social Justice and Empowerment in 2019 for enhanced HIV/AIDS outreach and to reduce the incidence of social stigma and discrimination against victims of drug abuse and Children and

People Living with HIV/AIDS.

- **Project Sunrise: Project Sunrise** was launched by the Ministry of Health and Family Welfare in 2016, to tackle the rising HIV prevalence in **north-eastern states** in India, especially among people injecting drugs.

- **Pre-Exposure Prophylaxis (PrEP):** Offering PrEP medications to individuals at high risk of contracting HIV can significantly reduce the chances of infection when taken consistently.

Prime Minister Shri Narendra Modi dedicates to nation three PARAM Rudra Supercomputers via video conferencing

- **Event**: Prime Minister Narendra Modi dedicated three PARAM Rudra Supercomputers, valued at approximately **Rs 130 crore,** to the nation via video conferencing.

- **Locations**: The supercomputers are deployed in **Pune, Delhi, and Kolkata.**

Indigenous Development

- **Mission**: The supercomputers were developed under the **National Supercomputing Mission (NSM).**

- **Objective**: To enhance India's capabilities in scientific research and development through indigenous technology.

High-Performance Computing (HPC) System

- **Inauguration**: The Prime Minister also inaugurated an **HPC system named "Arka" and "Arunika",** specifically designed for weather and climate research.

- **Investment**: This project represents an investment of **Rs 850 crore.**

Empowering the Youth

- **Youth Dedication**: The Prime Minister dedicated the supercomputers to the youth, emphasizing their role in future scientific advancements.

- **Educational Initiatives**: Increase in STEM scholarships and the establishment of over **10,000 Atal Tinkering Labs in schools**.

National Capability and Self-Reliance

- **Computing as National Capability**: The Prime Minister highlighted that computing capacity is synonymous with national capability and is essential for economic growth, disaster management, and ease of living.
- **Atmanirbharta**: Emphasized self-reliance through scientific research, supported by campaigns like Digital India and Make in India.

Space and Semiconductor Industries

- **Space Achievements**: Noted India''s success in space exploration, including the recent lunar mission to the South Pole.
- **Semiconductor Mission**: Launched to build a robust semiconductor ecosystem, crucial for global supply chains.

Impact on Agriculture and Weather Forecasting

- **Farmers'' Benefits**: Supercomputers will aid in weather and soil analysis, providing insights to farmers and fishermen, improving decision-making and reducing risks.
- **Enhanced Forecasting**: The HPC system will improve the accuracy and lead time of weather predictions, including severe weather events.

Supercomputer

- **Supercomputers are high-performing computers**, designed to tackle complex computational challenges.
- They encompass multiple central processing units that break down the required tasks into multiple parts and process them simultaneously, which effectively results in high-speed computation.

- The performance of supercomputers is measured in terms of **floating-point operations per second (FLOPs).**

Applications of Supercomputers

- **Weather Forecasting and Climate Research:** When the supercomputer is fed with data gathered via satellites, radars and weather balloons, field experts become better informed on how atmospheric conditions affect us.

- They become better equipped to advise the public on weather-related topics.

- For example, the **Derecho** supercomputer is being used to explore the effects of solar geoengineering and how releasing aerosols influences rainfall patterns.

- **Genome Sequencing:** It is a type of molecular modelling which scientists use to get a closer look at a virus' DNA sequence that helps them diagnose diseases.

- The supercomputer can perform DNA sequencing in a few hours.

- For example, Researchers at Stanford University scored the **Guinness World Record** title for the fastest genomic sequencing.

- **Aviation Engineering:** Supercomputing systems in aviation have been used to **detect solar flares**, **predict turbulence** and approximate **aeroelasticity** to build better aircraft.

- For example, **Frontier** has been recruited by GE Aerospace to **test open fan engine architecture** designed for the next generation of commercial aircraft that can reduce carbon dioxide emissions significantly.

- **Oil and Gas Exploration:** They can be used to collect huge quantities of geophysical seismic data to aid in finding and developing oil reserves.

- **Military and defence:** Supercomputing can allow the military to perform **virtual testing of nuclear explosions** and ballistic weapons.

- **Smog prediction:** Many scientists and climatologists use supercomputers in the laboratory to **predict fog and other pollution** and smog levels in a particular region.

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Alexander Dunn to get 2024 SASTRA Ramanujan Prize

- S. A press release said the prize is being given to Mr. Dunn, who has achieved several breakthroughs in the study of modular forms, half-integral weight forms, **metaplectic forms** and their connections to prime numbers and integer partitions.

Sastra Ramanujan Prize:

- The prize was instituted **in the year 2005.**
- It is **awarded every year** by the SASTRA University on its campus near Kumbakonam in Tamil Nadu, on Ramanujan's birth anniversary, December 22.
- The prize is **conferred annually to mathematicians from across the world who** is less than **32 years of age**, working in an area influenced by the Srinivasa Ramanujan.
- The age limit is 32 years to commemorate the fact that Ramanujan accomplished a phenomenal body of work in this short span.
- **Cash prize:** It carries a citation and an award of $10,000.

Who was Srinivasa Ramanujan?

- Ramanujan was born on **22ndDecember 1887 in the village Erode** (400 km from Chennai, then known as Madras).
- The famous **British mathematician Godfrey Harold Hardy recognised his talent** in 1913. He went to Cambridge, on Godfrey Harold Hardy's invitation.
- Ramanujam made **substantial contributions to the analytical theory of numbers** and worked on elliptic functions.
- He also **worked on the partition of the whole number, hypergeometric** series and Euler''s constant.

- His papers were published in English and European journals, and in 1918 he was elected to the Royal Society of London.
- He died on April 26th, 1920, at the age of 32, just after returning to India after a long illness.
- In India, 22nd December is celebrated as **National Mathematics Day** in the memory of Srinivasa Ramanujan.

Contributions:

Formulas and Equations:

- Ramanujan compiled around 3,900 results consisting of equations and identities. One of his most treasured findings was **his infinite series for Pi.**
- He gave several formulas to calculate the digits of Pi in many unconventional ways.
- **Ramanujan's Book:** One of Ramanujan's notebooks was discovered by George Andrews in 1976 in the library at Trinity College. Later the contents of this notebook were published as a book.

Ramanujan number:

- 1729 is known as the Ramanujan number.
- It is the smallest number which can be expressed as the sum of two different cubes in two different ways.
- 1729 is the sum of the cubes of 10 and 9 - cube of 10 is 1000 and cube of 9 is 729 adding the two numbers results in 1729.
- 1729 is also the sum of the cubes of 12 and 1, cube of 12 is 1728 and cube of 1 is 1 adding the two results in 1729.

Union Health Ministry Releases Revised Operational Guidelines and Training Manual of Non-Alcoholic Fatty Liver Disease

Key Highlights:

- **Public Health Concern**:
- **NAFLD is recognized as a major non-communicable disease (NCD) in India**, with **prevalence rates ranging from 9% to 32%** in the community.
- **1 to 3 out of 10 individuals** may be affected by NAFLD, closely linked to obesity, diabetes, and cardiovascular diseases.

Government Initiative:

- The revised guidelines aim to enhance patient care and outcomes through **evidence-based practices**.
- **India is the first country** to integrate NAFLD into the **National Programme for Prevention and Control of NCDs (2021)**.
- **Comprehensive Framework**:
- The guidelines and training modules are designed for healthcare workers at all levels, emphasizing **early detection and management** of NAFLD.
- A **multidisciplinary approach** is advocated, encouraging collaboration among various healthcare providers.

Focus Areas:

- **Health promotion and lifestyle modification** are critical for reducing NAFLD prevalence.
- The training module covers topics such as **epidemiology, risk factors, screening, diagnosis**, and **treatment protocols**.
- **Capacity Building**: The training module aims to equip healthcare professionals

with necessary knowledge and skills to manage and prevent NAFLD effectively, particularly at the **primary care level**.

- **Associated Risks**: **NCDs, including liver-related diseases, account for over 66% of deaths in India**, with lifestyle factors such as poor diet, inactivity, and tobacco use contributing significantly.

- **Expert Involvement**: The initiative involves contributions from various experts and institutions including WHO, ILBS, and major medical colleges, reflecting a **collaborative effort** to address the rising burden of NAFLD in India.

Non-Alcoholic Fatty Liver Disease (NAFLD):

- It is the **abnormal accumulation of fat in the liver** in the absence of secondary causes of fatty liver, such as harmful alcohol use, viral hepatitis.

- It is a **serious health concern as it encompasses a spectrum of liver abnormalities,** from a simple non-alcoholic fatty liver (NAFL, simple fatty liver disease) to more advanced ones like **non-alcoholic steatohepatitis (NASH), cirrhosis** and even liver cancer.

- **Steatohepatitis** is characterized by **inflammation of the liver** with concurrent fat accumulation in the liver. Mere deposition of fat in the liver is termed steatosis.

- **Cirrhosis** is a complication of liver disease that involves loss of liver cells and irreversible scarring of the liver.

- NAFLD acts as an **independent predictor of future risk of cardiovascular diseases,** type 2 diabetes and other metabolic syndromes like hypertension, abdominal obesity, dyslipidaemia, glucose intolerance.

Treatment:

- There''s currently no specific medication for NAFLD.

- Doctors recommend weight loss to treat NAFLD.

- Weight loss can reduce fat, inflammation, and fibrosis in the liver.

- Treatment may also be recommended for associated conditions(high blood pressure, diabetes, and cholesterol) or complications.
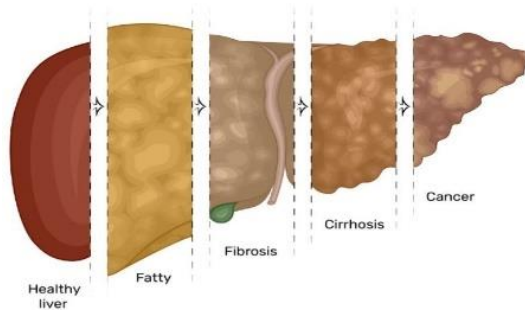
World Rabies Day

Theme: "Breaking Rabies Boundaries"

- **World Rabies Day** is observed every year on **28th September** to raise awareness about the **world's deadliest infectious disease** and **bring together partners** to enhance prevention and control efforts worldwide.

Rabies Day:

- 28thSeptember marks the anniversary of **Louis Pasteur"s** death, the French chemist and microbiologist, **who developed the first rabies vaccine.**
- In 2007, the **first World Rabies Day (WRD)** was organised by the two founding partners namely:
1. Alliance for Rabies Control (ARC)
2. Centre for Disease Control and Prevention, Atlanta (CDC)
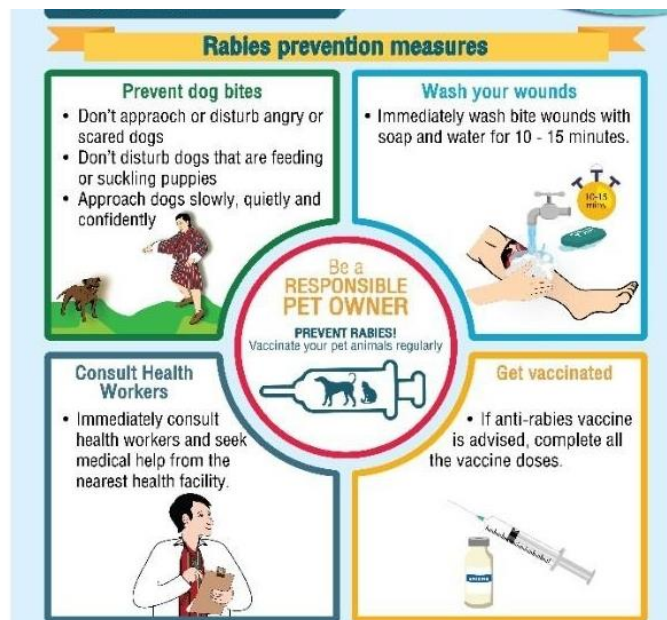
Rabies:

- Rabies is a vaccine-preventable, zoonotic, viral disease.
- It is caused by a **Ribonucleic Acid (RNA)** virus that is **present in the saliva** of a rabid animal (dog, cat, monkey, etc).
- It is **invariably transmitted** following a **bite of an infected animal** that leads to **deposition of the saliva and the virus in the wound.**
- Once clinical symptoms appear, rabies is virtually 100% fatal. The death invariably **occurs in four days to two weeks** due to **cardio-respiratory failure.**
- In up to 99% of cases, domestic dogs are responsible for rabies virus transmission to humans.

- The incubation period varies from 2–3 months but may vary from 1 week to 1 year, or rarely even more.

Symptoms:

- The **first symptoms of rabies may be similar to flu** and may last for a few days, which includes:
- Fever, Headache, Nausea, Vomiting, Anxiety, Confusion, Hyperactivity, Difficulty swallowing, Excessive salivation, Hallucinations, Insomnia.

Treatment:

- It is important to remove the virus from the wound as early as possible by immediately washing the wound with water and soap followed by application of antiseptics that reduce/eliminate chances of nerve infection.
- Rabies can be prevented by vaccinating pets, staying away from wildlife, and

seeking medical care after potential exposures before symptoms start.

Rabies Cases in India

- India is endemic for rabies and accounts for 36% of the world's rabies deaths.
- According to the report published by the **World Health Organization (WHO)**, an **estimated 20,000 people die** from rabies **each year in India**, wherein dog bite is the primary cause of rabies.
- Most of the cases of rabies are reported in **rural areas,** where access to **post-exposure prophylaxis (PEP) is limited.**

India's Initiatives for Cure Against Rabies:

National Action Plan for Dog Mediated Rabies Elimination by 2030:

- It is a multi-pronged strategy based on **One Health Approach.**
- The concept of One Health recognizes that the health of people is **closely related** with the health of animals, plants and their shared environment.
- In One Health approach, **multiple sectors communicate and work together** at the local, regional, national, and global levels with the goal of achieving optimal health outcomes.
- **Mission:** To **achieve zero human deaths** due to dog-mediated Rabies by 2030.

Principles:

- **Prevention:** Introduce **cost-effective public health intervention techniques** to improve accessibility, affordability, and availability of post-exposure prophylaxis to all people in need.
- **Promotion:** Improve **understanding of rabies** through advocacy, awareness, education and operational research.
- **Partnership:** Provide **coordinated support for the anti-rabies drive** with the involvement of community, urban and rural civil society, government, private sectors and international partners.

Milestone Achieved Rajasthan Atomic Power Project- Unit-7 Reaches Criticality

Milestone Achievement

- **Criticality Reached**: On September 19, 2024, at 9:42 PM, RAPP Unit-7 achieved criticality, initiating a **controlled nuclear fission chain reaction.**

- **Significance of Criticality**: This marks the transition from construction to operational status, allowing the reactor to start generating heat necessary for electricity production.

Overview of RAPP-7

- **Location**: Situated in Rawatbhata, Rajasthan, as part of a strategic energy initiative.

- **Type**: A Pressurized Heavy Water Reactor (PHWR) with a capacity of 700 MWe.

- **Project Context**: RAPP-7 is the third unit in a series of sixteen indigenous reactors, showcasing India's growing expertise in nuclear technology.

- **Total Capacity**: The RAPP-7&8 project aims for a total capacity of 1400 MW, supplementing the existing six operational units at Rawatbhata, which provide 1180 MW to the national grid.

Future Steps for RAPP-7

- **Transition to Operational Phase**: After achieving criticality, RAPP-7 will proceed with a series of tests and experiments to ensure its systems are functioning optimally.

- **Power Level Increment**: The power levels will be gradually increased in line with AERB guidelines until the unit reaches full operational capacity.

Strategic Importance of Nuclear Energy

- **Alignment with National Goals**: The project supports India's aim of achieving 500 GW of non-fossil fuel energy by 2030, reinforcing the role of nuclear power as a clean energy source.

- **Reduction of Carbon Emissions**: Nuclear energy offers a zero-emission

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alternative, helping to decrease reliance on coal and other fossil fuels, thus contributing to India''s commitment to climate change mitigation.

- **Energy Security**: RAPP-7 enhances India''s energy independence and security, diversifying the energy mix and reducing vulnerability to global fossil fuel market fluctuations.

Broader Implications

- **Nuclear Technology Advancement**: The successful operation of RAPP-7 demonstrates the maturity and reliability of India's indigenous nuclear technology, paving the way for future projects.

- **Contribution to Grid Stability**: Once fully operational, Unit-7 will significantly bolster the national grid, providing reliable and efficient energy to meet increasing demands from industries and households.

Conclusion

- The criticality of RAPP Unit-7 signifies not just the readiness of a nuclear reactor but also reflects India''s commitment to advancing its nuclear capabilities while ensuring sustainable energy development.

- This milestone enhances India''s position as a leader in nuclear technology and strengthens the country''s strategic energy framework as it pursues its long-term environmental goals.

Current and Future Projects

- **NPCIL Operations**: The Nuclear Power Corporation of India Limited (NPCIL) currently operates 24 reactors with a total capacity of 8180 MW, with an additional eight units, including RAPP-7, under construction, totaling 6800 MW.

- **Future Expansion Plans**: An additional ten reactors, representing 7000 MW, are in the pre-project stage, with completion projected progressively by 2031-32, indicating ongoing growth in India''s nuclear energy sector.

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Can Kerala's policy to limit antibiotics misuse reduce AMR?

Overview of Kerala's Operation Amrith and its implications for antimicrobial resistance (AMR):

Overview of Operation Amrith

- **Objective**: To eliminate the over-the-counter sale of antibiotics without prescriptions in Kerala by the end of 2024.
- **Impact**: The operation has led to a notable decline in antibiotic sales, with reports indicating a Rs. 1,000 crores drop in sales through hospitals and pharmacies over the past year.

Background

- **Initial Regulation**: Kerala became the first Indian state to enforce a ban on **over-the-counter** (OTC) antibiotic sales in January 2024, adhering to the Indian government''s 2011 H1 rule, which prohibits the sale of all classes of antibiotics without prescriptions.
- **Modifications**: In 2013, the Indian government allowed first-line antibiotics to be sold OTC, but Kerala opted to stick to the original 2011 regulations, citing better healthcare access in the state.

Significance of the Ban

- **Healthcare Context**: Kerala''s higher doctor-patient ratio and the availability of healthcare facilities enabled the enforcement of stricter regulations without significantly hindering access to essential medications.
- **Regional Challenges**: Other southern states struggle with doctor shortages, which complicates the enforcement of similar measures.

Issues with Imported Products

- **Dependence on Neighbors**: Kerala relies heavily on neighboring states for essential food items like broiler chicken, eggs, and vegetables, which may

contain antibiotic residues and resistant bacteria.

- **Cycle of Resistance**: The import of antibiotic-laden products perpetuates AMR, undermining local efforts in Kerala to combat the issue.

Recommended Actions

- **Self-Sufficiency**: To reduce vulnerability, Kerala could aim for self-sufficiency in poultry, eggs, and vegetables.
- **Collaboration with Neighbors**: Alternatively, engaging neighboring states to implement stringent AMR action plans could help mitigate the spread of resistance.

Steps Forward

- **Implementing the Modified H1 Rule**: Kerala might consider reverting to the modified 2013 H1 rule, which could be more feasible for other states to adopt, promoting a collaborative approach to reducing antibiotic usage across the region.
- **Long-Term Goals**: A phased implementation could inspire other states to adopt similar regulations, ultimately working towards a more comprehensive ban on OTC antibiotic sales.

What is Antimicrobial Resistance (AMR)?

- Antimicrobials - including antibiotics, antivirals, antifungals and anti-parasitics - are medicines used to **prevent and treat infections in humans, animals and plants**.
- AMR occurs when bacteria, viruses, fungi and parasites change **over time and no longer respond to medicines** (develops drug resistance).
- This makes infections increasingly difficult or impossible to treat, increasing the risk of disease spread, severe illness and death.
- They can spread from person to person or between people and animals,

including from food of animal origin.

- The rapid global spread of multi and pan-drug resistant bacteria - **"superbugs,"** is particularly concerning.
- As a result, WHO recently identified **AMR as a major public health threat**.

The main drivers of AMR include:

- The misuse and overuse of antimicrobials;
- Lack of access to clean water, sanitation and hygiene (WASH) for both humans and animals;
- Poor infection and disease prevention and control in health-care facilities and farms;
- Poor access to quality, affordable medicines, vaccines and diagnostics;
- Lack of awareness and knowledge; and
- Lack of enforcement of legislation.

SOCIETY

Union Minister Smt Annpurna Devi launches 7th Rashtriya Poshan Maah 2024

7th Rashtriya Poshan Maah 2024:

- **Plantation Drive**: "Ek Ped Maa Ke Naam" at Anganwadi Centre, Gandhinagar.
- **Initiatives**: Exhibition included **Poshan Tracker, Poshan Bhi Padhai Bhi,** and other state programs.
- **Vision**: Mission Poshan 2.0 aims to combat malnutrition and enhance health among vulnerable groups.

Themes for 2024:

1. Anaemia
2. Growth Monitoring
3. Complementary Feeding
4. Poshan Bhi Padhai Bhi
5. Technology for Better Governance
6. Ek Ped Maa Ke Naam

Rashtriya Poshan Maah

- Rashtriya Poshan Maah, or **National Nutrition Month** in India, is an initiative under the **POSHAN Abhiyaan** aimed at enhancing nutritional outcomes for vulnerable populations. Celebrated in September, it marks the **7th Rashtriya Poshan Maah** this year.

POSHAN Abhiyaan

- Also called as the National Nutrition Mission, it is Government of India's flagship programme to improve nutritional outcomes for children, pregnant women and lactating mothers. Poshan implies **'Prime Minister's Overarching Scheme for Holistic Nutrition'**.

- **Launch:** It was launched by the Prime Minister on the occasion of the International Women's Day on 8th March, 2018 from Jhunjhunu in Rajasthan.

- **Implemented By:** Ministry of Women and Child Development

Aim:

- This integration aims to create an integrated nutrition support program that enhances the content, delivery, outreach, and overall outcomes of nutritional services.

- The primary focus is on promoting practices that improve health, wellness, and immunity against diseases and malnutrition.

Target Audience:

- It targets pregnant women, lactating mothers, adolescent girls, and children under 6 years of age.

Saksham Anganwadi and Poshan 2.0

About:

- In FY 2021-22, the government restructured some schemes into **Saksham Anganwadi and POSHAN 2.0**.

It includes the following sub-schemes:

1. Integrated Child Development Services (ICDS)
2. POSHAN Abhiyaan
3. Scheme for Adolescent Girls (SAG)
4. National Creche Scheme

eShram achieved over 30 crore registrations in the span of just 3 years

Key Highlights:

- In the short span of three years since its launch, eShram has registered more than 30 crore unorganised workers**,**showcasing its rapid and widespread adoption among the unorganised workers.

Integration with Other Schemes:

- The portal is being integrated with major schemes such as:
1. Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)
2. Pradhan Mantri Suraksha Bima Yojana (PMSBY)
3. Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)
4. Pradhan Mantri Street Vendor's Atmanirbhar Nidhi (PM-SVANidhi)
5. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
6. Pradhan Mantri Awas Yojana Gramin (PMAY-G)
7. Ration Card scheme

- **Skill India Digital Hub (SIDH)**: The eShram portal is also integrating with SIDH to streamline registration and service access for users on both platforms.
- **Grassroots Engagement**: The MoLE is focusing on including all unorganised workers, including health workers, construction workers, and rural workers.

eShram Portal

- eShram is a groundbreaking national database launched by the Ministry of Labour and Employment.
- It is to empower India''s vast unorganized workforce exceeding 40 crore individuals.

- This central platform allows construction workers, street vendors, domestic workers, and others to register seamlessly using their Aadhaar cards.
- It grants them access to social security schemes, skill development programs, and financial inclusion opportunities.

Features of the eShram Portal

- It aims to build a comprehensive **National Database of Unorganized Workers (NDUW)** in the country.
- It facilitates the online registration of workers in the unorganized sectors. Any worker can self-register through Common Service Centres (CSCs), State Seva Kendras, **NRLM community cadres**, etc.
- The registration is free of cost and simple. Workers need not go through any documents for registration. They just need to provide basic details such as name, occupation, mobile number, Aadhar, etc.
- Aadhar based authentication is used to ensure no duplication. After registration, an eShram card is issued having a unique Universal Account Number (UAN).
- The card serves the purpose of proof of registration. It helps workers avail different social security schemes of the government whenever needed.
- Convergence with other platforms, such as PM-SYM, PMJJBY, PMSBY, AAWAS, etc., is planned for extending the benefits of various welfare schemes to workers.
- The portal is helpful in the assessment of the demands of the unorganized workforce and planning for the development of schemes for their welfare.

Benefits of e-SHRAM

- eSHRAM Card to be acceptable across the country
- Accidental Insurance Coverage through PMSBY for a year
- Rs 2 lakh for accidental death and permanent disability and Rs. 1 lakh for partial disability
- Social security benefits to be delivered through this portal
- Helpful for State & Central Governments while providing assistance during calamities/pandemics

Cabinet approves the Digital Agriculture Mission with an outlay of Rs. 2817 Crore, including the central share of Rs. 1940 Crore

Digital Agriculture Mission

- **Historical Context:** Originally planned for the financial year 2021-22 but delayed due to the Covid-19 pandemic. Announced in the Union Budgets of 2023-24 and 2024-25.

Objectives of the Mission:

1. **Digital Public Infrastructure (DPI) for Agriculture**:

- Create a comprehensive digital framework for agriculture, which includes a database of farmer demographics, land holdings, and crop details.

- Enhance integration with existing digital infrastructure from Central and State Governments.

2. **Digital General Crop Estimation Survey (DGCES)**:

- Implement scientifically designed crop-cutting experiments to provide accurate yield estimates.

3. **IT Initiatives**:

- Facilitate digital transformation in agriculture through various IT projects and collaborations.

Key Components:

1. **AgriStack**:

- **Farmer ID**: A unique digital identity for each farmer, akin to Aadhaar, to streamline access to services and benefits.

- **Farmers" Registry**: Maintained by State Governments, capturing detailed farmer information.

- **Geo-referenced Village Maps**: Detailed maps indicating land use and geographical features.

- **Crop Sown Registry**: Record of crops sown by farmers, updated through mobile-based surveys.

   Pilots and Targets:

- Pilots for Farmer ID creation have been conducted in six districts across Uttar Pradesh, Gujarat, Maharashtra, Haryana, Punjab, and Tamil Nadu.

- **Target**: Create digital identities for 11 crore farmers: 6 crore by FY 2024-25, 3 crore by FY 2025-26, and 2 crore by FY 2026-27.

- **Digital Crop Survey**: Initial pilots in 11 states; nationwide rollout planned with 400 districts covered in FY 2024-25 and all districts by FY 2025-26.

2. **Krishi Decision Support System (DSS)**:

- Develop a **geospatial system** integrating remote sensing data related to crops, soil, weather, and water resources.
- **Functionality**: Supports crop map generation, drought/flood monitoring, and yield assessments.
3. **Soil Profile Mapping**:
- **Scope**: Detailed mapping of soil profiles at a 1:10,000 scale for approximately 142 million hectares.
- **Current Status**: Soil profile inventory completed for 29 million hectares.

Impact and Employment:

Employment Creation:

- The mission is expected to generate direct and indirect employment, notably for about 2.5 lakh trained local youth and **Krishi Sakhis.**

Efficiency and Transparency:

- **Farmer Services**: Simplified access to benefits and services such as government schemes, crop loans, and advisories.
- **Government Efficiency**: Enhanced efficiency in MSP-based procurement, crop insurance, and balanced fertilizer use through accurate data and streamlined processes.

Data Utilization:

- **Crop Production Estimates**: Accurate yield estimates through the Digital General Crop Estimation Survey and remote sensing data.
- **Crop Diversification**: Better decision-making on crop selection and irrigation needs based on detailed data.
- **Advisory Services**: Personalized and timely guidance on crop planning, pest management, and irrigation.

Anemia: A key focus area during Rashtriya Poshan Maah 2024

Highlights:

- Anemia has always been one of the key focus areas under Jan Andolans so far.

Beneficiary Coverage:

- Pregnant Women (PW): 6.9 million

- Lactating Mothers (LM): 4.3 million

- Adolescent Girls (14-18 years): 2.2 million (under Scheme for Adolescent Girls - SAG)

National Outreach:

- Direct presence of over 100 million beneficiaries.

- Biannual nationwide "Jan Andolans" for nutrition awareness.

Anaemia

- According to the World Health Organization (WHO), anaemia is a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal.

- Haemoglobin is needed to carry oxygen.

- If there are too few red blood cells, or not enough haemoglobin, there will be a decreased capacity of the blood to carry oxygen to the body's tissues.

- This results in symptoms such as fatigue, weakness, dizziness and shortness of breath among others.
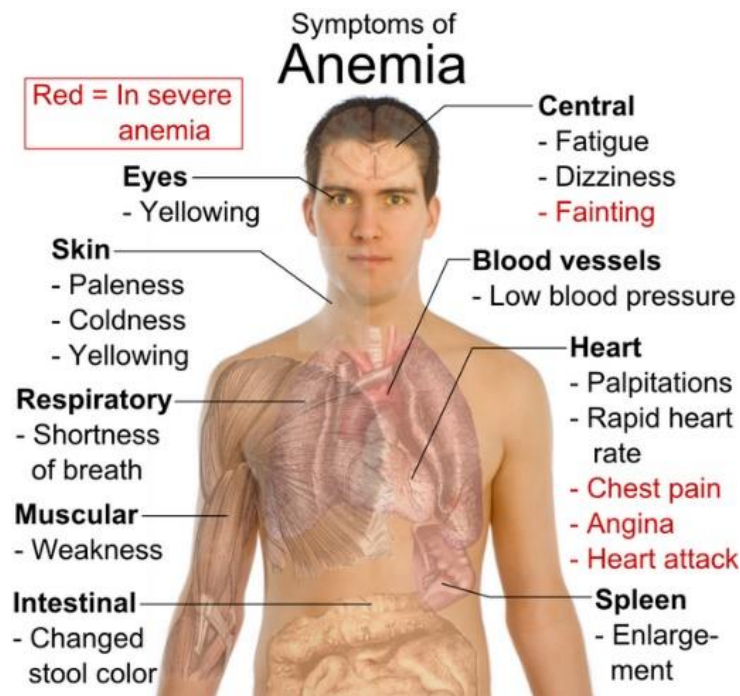
Factors

- The most common nutritional cause of anaemia is iron deficiency although deficiencies in folate, vitamins B12 and A are also important causes.

- Certain chronic diseases, such as kidney disease, liver disease, cancer, or autoimmune disorders, can interfere with the production of red blood cells.

- Inherited conditions, such as sickle cell anemia or thalassemia, affect the structure or function of red blood cells, leading to chronic anemia.

Statistics

- **National Family Health Survey (NFHS-5) 2019-21**: According to NFHS-5, approximately 67% of children under 5 years, 57% of women aged 15-49, and 25% of men aged 15-49 were found to be anemic. These figures highlight the high prevalence rates across different demographics.

- **Anemia in Children**: The prevalence of anemia among children under five years old was about 67%, which is a serious concern as it impacts their growth and development.

- **Anemia in Women**: Around **57% of women aged 15-49** were reported to be anemic, with higher prevalence in rural areas compared to urban areas.

- **Anemia in Adolescents**: Adolescent girls, in particular, face high rates of anemia, which can affect their health and educational outcomes.

Symptoms of Anemia

Red = In severe anemia

Eyes
- Yellowing

Skin
- Paleness
- Coldness
- Yellowing

Respiratory
- Shortness of breath

Muscular
- Weakness

Intestinal
- Changed stool color

Central
- Fatigue
- Dizziness
- Fainting

Blood vessels
- Low blood pressure

Heart
- Palpitations
- Rapid heart rate
- Chest pain
- Angina
- Heart attack

Spleen
- Enlargement

Government Initiatives to Tackle Anemia

- **Anaemia Mukt Bharat(AMB):** It was launched in 2018 as part of the **Intensified National Iron Plus Initiative (NIPI) Program** for accelerating the annual rate of decline of anaemia from one to three percentage points.

- The target groups for AMB are Children 6-59 months, 5-9 years, Adolescent Girls & Boys of 10-19 years, Women of Reproductive Age (15-49 years), Pregnant Women and Lactating Mothers.

- **Weekly Iron and Folic Acid Supplementation (WIFS):**

- This Programme is being implemented to meet the challenge of high prevalence and incidence of anaemia amongst adolescent girls and boys.

- The intervention under WIFS includes supervised weekly ingestion of Iron Folic Acid (IFA) tablet.

- **Operationalization of Blood Bank:** In District Hospitals and Blood Storage Unit in subdistrict facilities such as Sub-Divisional Hospital/ Community Health Centers is being taken to tackle complications due to severe anaemia.

- **Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA):** It has been launched to focus on conducting special ANC check up on 9th of every month with the help of medical officers/ OBGYN to detect and treat cases of anaemia.

Other Steps Taken:

- To control worm infestation **biannual deworming with Albendazole is provided.**

- Health management information system & Mother Child tracking system is being implemented for reporting and tracking the cases of anaemic and severely anaemic pregnant women.

- Universal **screening of pregnant women for anaemia** is a part of ante-natal care and all pregnant women are provided iron and folic acid tablets during

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their ante-natal visits through the existing network of sub-centres and primary health centres and other health facilities as well as through outreach activities at **Village Health & Nutrition Days (VHNDs).**

Ministry of Labour and Employment Pushes for Inclusion of Marginalised Workers Under Housing Scheme

Highlights:

- The new initiative aims to include migrant workers, building workers, beedi workers, cine workers, non-coal mine workers, contract laborers, and other unorganized workers under PMAY.
- The Union Cabinet has approved extending PMAY"s implementation for an additional five years, from FY 2024-25 to 2028-29, with a target of providing 2 Crore (20 million) additional houses.

Focus on Marginalized Workers:

- **Target Groups**: The decision specifically targets economically vulnerable workers who have been historically marginalized.
- **Social Justice**: The inclusion under PMAY addresses their critical housing needs, aiming to improve their living conditions and support social equity.
- **Operational MIS Portal**: The portal is designed to collect and analyze data on fund utilization and workers" coverage under various social security schemes, including insurance, health benefits, and housing.

Pradhan Mantri Awas Yojana:

- Pradhan Mantri Awas Yojana (PMAY) is a credit-linked subsidy scheme initiated to provide affordable housing to low and moderate-income residents across the country.
- The newly formed government has approved the proposal to provide 3 crore additional rural and urban houses under PMAY.
- The scheme has **two components:** PMAY-U for the urban poor and PMAY-G and PMAY-R for the rural poor.

PMAY-U (Urban):

- **Objective:** To provide housing for all in urban areas.
- **Beneficiaries:** Economically Weaker Section (**EWS**), Low-Income Group (**LIG**), and Middle-Income Group (**MIG**).

Subsidy Schemes:

- **Credit Linked Subsidy Scheme:** Offers interest subsidy on home loans for EWS, LIG, and MIG categories.
- **In-Situ Slum Redevelopment:** Utilizes land as a resource to provide houses to eligible slum dwellers.
- **Affordable Housing in Partnership:** Promotes partnerships with public and private sectors to provide affordable housing.
- **Beneficiary-Led Construction:** Provides financial assistance to individuals to construct or enhance their own houses.

PMAY-G (Gramin):

- **Objective:** To provide a pucca house with basic amenities to all rural families who are homeless or living in kutcha or dilapidated houses.

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- **Beneficiaries:** Identified using the **Socio-Economic and Caste Census (SECC) 2011.**

Features:

- **Financial Assistance:** 1.2 lakh in plain areas and Rs. 1.3 lakh in hilly, difficult, and Integrated Action Plan (IAP) areas.
- **Construction:** Houses are to be constructed by beneficiaries with technical assistance from the government.
- **Convergence with other schemes:** Encourages convergence with other schemes like Swachh Bharat Mission (**SBM**) for toilet construction, and **MGNREGA** for wage employment.

Challenges to Pradhan Mantri Awas Yojana

- **Delay in Implementation:** The government initially set a deadline of constructing 29.5 million housing units under PMAY-G and 12 million under PMAY-U programmes by March 2022. However, the government missed this target and in August 2022 extended the deadline to ensure "housing for all" to December 2024.
- **Improper Execution:** Some states delay their contributions which drastically affects progress. In 2020, nine states had delayed the payment of 2,915.21 crores to the beneficiaries.
- **Access to Finance:** The disbursed amount of 1.2/1.3 lakh subsidy is not enough to build a house in rural areas therefore households need more funds from financial institutions to cover the shortfall.
- **Quality of Housing:** The CAG report found poor quality housing in PMAY-G due to lack of supervision, with beneficiaries unaware of construction standards and no mechanism ensuring the effectiveness of provided prototypes.

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- **Convergence:** The PMAY scheme aims to coordinate with other government initiatives like Swachh Bharat Mission, MGNREGA, Jal Jeevan Mission, and Ujjwala Yojana for providing basic amenities during house construction, but reports highlight shortcomings in scheme coordination, such as incomplete toilets in Rajasthan leading to false claims of "Open Defecation Free" status.

- **Lack of Awareness:** Many rural residents are unaware of PMAY or lack the needed documents, with illiteracy, poor awareness campaigns, and complex documentation hindering access to housing subsidies and loans.

Steps Needed to strengthen PMAY

- **Timely Release of Funds:** Some states face delays in receiving central government funds, with a reported deficit of 200 crores in 2020, prompting the need for timely release of state contributions and direct benefit transfers akin to MGNREGA.

- **Formal Credit Facility:** Progress of credit disbursal is slow as major banks like SBI don''t have Economically weaker Section (EWS)-specific products due to high risk and low profits, needing government intervention for stable financing for "Housing for All".

- **More Inclusive:** The need of the hour is to acknowledge the limitations of the existing scheme and to devise an intervention solely intended to solve the housing problem of the landless rural population.

- **Quality Assurance:** It is recommended that the government strengthen the quality monitoring mechanisms. Measures like social audits can be considered.

- **Awas Bandhu:** Awas Bandhu (PMAY-G Local Motivators) are effectively speeding up progress in places like West Bengal and Odisha. With proper training, they can be an important instrument to enhance convergence possibilities.

"VISHANU YUDDH ABHYAS": A Mock Drill on Pandemic Preparedness conducted under National One Health Mission

Highlights:

- **Objective**: The exercise aimed to evaluate pandemic preparedness by simulating a zoonotic disease outbreak.
- **Scope**: It involved assessing the readiness and response of the **National Joint Outbreak Response Team (NJORT),** comprising experts from human health, animal husbandry, and wildlife sectors.

National One Health Mission

- It is a comprehensive initiative endorsed by Prime Minister''s Science, Technology, and Innovation Advisory Council (PM-STIAC) in July 2022.
- This mission involves 13 ministries and departments,including the Department of Science and Technology, the Department of Biotechnology (DBT), the Council of Scientific and Industrial Research (CSIR), and others, to take a holistic approach to One Health and pandemic preparedness.
- The establishment of a National Institute for One Health in Nagpur is a key milestone in the mission.
- The institute will act as the coordinating body for national and international activities in the field of One Health.
- The foundation stoneof this institute was laid by the Prime Minister on December 11, 2022.
- The mission aims to coordinate across ministries in achieving overall pandemic preparedness and integrated disease control against priority diseases of both human and animal sectors.

Goals and Strategies of The National One Health Mission

Integrated Disease Surveillance

- The mission aims to establish a seamless and cohesive surveillance system that monitors health indicators across human, animal, and environmental sectors.
- By integrating data from these areas, the mission can detect potential health threats earlyand respond more effectively.

Joint Outbreak Response

- A coordinated approach to outbreak response is essential for managing and controlling diseases that can affect humans, animals, and the environment.
- The mission seeks to establish protocols and frameworks that enable different sectors to work together during outbreaks, sharing resources and information to minimize the impact.

Coordinated Research and Development (R&D)

- The mission promotes collaboration across various scientific research institutions and government departments to foster the development of innovative solutions for emerging health threats.
- This includes the creation of vaccines, therapeutics, and diagnostics that are essential for pandemic preparedness and response.

Information Sharing and Communication

- Effective communication and information sharing are crucial for a coordinated One Health approach.
- The mission aims to facilitate seamless data exchange between different sectors and stakeholders, ensuring that all parties are well-informed and can take timely action when necessary.

Preparedness for Future Pandemics

- Building on the lessons learned from past pandemics, the mission strives to develop strategies and frameworks that will enable the country to be better

preparedfor future health crises.

- This includes planning for potential pandemics and emerging diseases such as avian influenza or Nipah virus.

Resource Optimisation

- By leveraging the resources and expertise of multiple sectors and stakeholders, the mission aims to optimise the use of available resources, including laboratory infrastructure, healthcare facilities, and scientific research capabilities.
- This collaboration helps in addressing health threats more efficiently and cost-effectively.

Public Health Education and Awareness

- The mission includes educating the public about the interconnectedness of human, animal, and environmental health.
- Raising awareness about One Health principles can promote healthier behaviours and better preparedness for health emergencies.

President of India addresses a gathering of beneficiaries of 'Shasan Aplya Dari' and 'Mukhyamantri Majhi Ladki Bahin Yojna' of Government of Maharashtra

Ladki Bahin Yojana

- The Ladki Bahin Yojana, also known as the **Mukhyamantri Majhi Ladki Bahin Yojana**, is a flagship welfare scheme launched by the Government of Maharashtra.
- This initiative aims to provide financial assistance to women from economically weaker sections of the state, promoting their self-reliance and socio-economic

development.

Objectives

- The primary objective of the Ladki Bahin Yojana is to empower women by providing them with a monthly financial stipend.
- This support is intended to help women meet their basic needs, enhance their quality of life, and promote gender equality.
- The scheme is also designed to encourage women's participation in various socio-economic activities, thereby fostering their overall development.

Eligibility Criteria

- **Residency**: The applicant must be a permanent resident of Maharashtra.
- **Income**: The annual family income should be less than ₹2.5 lakh.
- **Employment**: Women who are employed in government jobs or who pay income tax are not eligible for this scheme.

Benefits

- **Monthly Financial Assistance**: Eligible women receive ₹1,500 every month.
- **Free LPG Cylinders**: Three free LPG gas cylinders are provided annually.
- **Educational Support**: Fee waivers for poor girls belonging to Other Backward Classes (OBC) and Economically Weaker Sections (EWS) for higher education admissions in colleges.
- **Eligibility**: The scheme is available to women aged 21 to 65, including married, widowed, divorced, abandoned, and destitute women.

Shasan Aplya Dari Initiative

- **Objective:** The initiative aims to bring government services closer to citizens, enhancing accessibility and efficiency in service delivery.

- **Vision:** To decentralize the provision of government services and make them more readily available at the local level, thus improving citizen engagement and satisfaction.

Key Features:

Decentralized Service Delivery:

- **Local Centers:** Establishes local service centers where citizens can access government services without traveling to central offices.
- **On-the-Ground Services:** Provides direct access to various services such as certificates, permits, and information at the doorstep of the citizen.

Technology Integration:

- **Digital Platforms:** Utilizes digital tools and platforms to facilitate service delivery, including mobile applications and web portals.
- **Automation:** Implements automated systems to streamline processes and reduce bureaucratic delays.

Citizen Empowerment:

- **Ease of Access:** Improves convenience for citizens by reducing the need to visit government offices in person.
- **Enhanced Transparency:** Provides clear information and updates on service delivery status, thereby increasing transparency.

Impact:

- **Efficiency:** Reduces time and effort required by citizens to access government services, leading to more efficient service delivery.
- **Accessibility:** Makes services more accessible to remote and underserved areas, bridging the gap between the government and the public.

'90% projects under Smart Cities Mission completed'

- Of the 100 smart cities,17 have completed 100% of projects.

- While 75% of projects have been completed in 75 smart cities, 34 cities have completed more than 90% of the projects.

- Of the total outlay of ₹48,000 crore for the mission, the Centre has released ₹46,787 crore, of which over 90% has been utilised.

Smart Cities Mission (SCM)

About:

- It is a **Centrally Sponsored Scheme**, launched in June 2015to transform 100 cities to provide the necessary core infrastructure and clean and sustainable environment to enable a decent quality of life to their citizens through the application of "Smart Solutions".

- It aimed to improve the quality of life for citizens through sustainable and inclusive development.

Components of the SCM:

Area-based Development:

1. **Redevelopment:**Renewal of existing urban areas to improve infrastructure and amenities. **e.g. Bhendi Bazar, Mumbai.**

2. **Retrofitting:** Upgrading infrastructure in existing areas to make them more efficient and sustainable. **e.g. Local Area Development (Ahmedabad).**

3. **Greenfield Projects:**Development of new urban areas with a focus on sustainability and smart technologies. **e.g. New Town, Kolkotta, Naya Raipur, GIFT City.**

Pan-City Solutions:

1. Implementation of Information and Communication Technology (ICT) solutions across various sectors such as e-governance, waste management, water management, energy management, urban mobility, and skill development.

Objectives

- In the approach to the Smart Cities Mission, the objective is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions.

- The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a light house to other aspiring cities.

- The Smart Cities Mission is meant to set examples that can be replicated both within and outside the Smart City, catalysing the creation of similar Smart Cities in various regions and parts of the country.

Challenges Faced by the Smart Cities Mission

- **Lack of Clarity in Definition:** The SCM has acknowledged the lack of a universal definition for the term "smart city." This recognition reflects the understanding that each city''s vision for a smart city is shaped by its unique local contexts and aspirations. However, this ambiguity in the conceptualisation of a smart city poses a challenge in effectively allocating resources and prioritizing projects.

- **Lack of Coordination:** Effective coordination between the central, state, and local governments has been a challenge due to differences in priorities, bureaucratic hurdles, and lack of clarity in roles and responsibilities that have hindered the seamless implementation of the mission.

- **Sustainability Concerns:** There are doubts about the long-term sustainability of the smart city projects, as many of them focus on technology-driven solutions rather than addressing the fundamental issues of urban planning and governance.

- **Displacement and Social Impact:** According to the World Bank, in urban areas of India more than49% of the population live in slums. The execution of smart city projects has led to the displacement of residents in poorer areas, such as street vendors, disrupting the fabric of urban communities. Infrastructure development in certain towns has contributed to increased urban flooding due to disruptions in water channels and contours.

Steps Taken to Strengthen Smart Cities Mission

- **Effective Governance and Implementation:** Appointing CEOs with fixed tenures ensures continuity and attracts qualified professionals. Stakeholder representation, including experts and Member of Parliaments (MPs), fosters inclusive decision-making.

- **Strategic Project Focus:** The SCM digital infrastructure is expected to generate and utilise vast amounts of data from diverse sources. Therefore, it is necessary that a robust system should be implemented to protect these platforms from cyberattacks and guarantee adequate protection for sensitive public and private data.

- **Building Capacity and Funding:** Strengthen Urban Local Bodies (ULBs) in smaller cities through capacity building programs. Central government assistance can be crucial for organisational restructuring and skill development.

Prime Minister Shri Narendra Modi shares scientific report highlighting impact of Swachh Bharat Mission in reducing infant and child mortality

- The report said toilet construction increased dramatically across India following the implementation of the Swachh Bharat Mission (SBM) in 2014. The post-SBM period in India exhibited accelerated reductions in infant and child mortality compared to the pre-SBM years, it said.

- The study covered the period from 2014 to 2020 in which the government constructed over 100 million household toilets and said that in 2003 the majority of districts in the country had an **infant mortality rate (IMR)** exceeding 60 per 1000 live births. However, by 2020, most districts had achieved an IMR below 30.

Swachh Bharat Mission (SBM)

About:

- It is a massive mass movement that seeks to create a **Clean India** by 2019. The father of our nation Mahatma Gandhi always puts the emphasis on swachhta as swachhta leads to healthy and prosperous life.

- Keeping this in mind, the Indian government launch the swachh bharat mission on October 2, 2014.The mission cover all rural and urban areas.

- The urban component of the mission will be implemented by the Ministry of Housing and Urban Affairs, and the rural component by the Ministry of Jal Shakti.

Objectives of Swachh Bharat Mission

- **Eliminate Open Defecation**: Construction of household-owned and community-owned toilets to reduce and eventually eliminate open defecation.

- **Eradicate Manual Scavenging**: Implement measures to completely eradicate the inhumane practice of manual scavenging.
- **Solid Waste Management**: Establish modern and scientific methods for the collection, segregation, and disposal of municipal solid waste.
- **Behavioral Change**: Motivate communities to adopt sustainable sanitation practices and promote cleanliness.
- **Raise Awareness**: Create widespread awareness about sanitation and its critical link to public health.

Sub-Missions of the Swachh Bharat Abhiyan:

Swachh Bharat Mission (Urban)

- Swachh Bharat Mission (Urban) primarily aims to address the sanitation and

waste management challenges in India"s rapidly expanding urban areas.

- Launched on October 2, 2014, SBM (Urban) focuses on eliminating open defecation through the construction of household, community, and public toilets.

- It also prioritizes establishing modern solid waste management systems tailored to urban contexts.

- Key components include door-to-door waste collection, segregation at source, and both composting and recycling facilities. Public awareness campaigns play a crucial role in fostering behavioral change among urban residents.

Swachh Bharat Mission (Rural)

- Swachh Bharat Mission (Rural), also referred to as SBM (Rural), focuses on improving sanitation and hygiene in India"s rural areas.

- Launched alongside its urban counterpart on October 2, 2014, SBM (Rural) aims to end open defecation across all villages by constructing individual household latrines (IHHL).

- It also provides financial incentives to encourage their use.

- It emphasizes community-led initiatives, involving village-level workers and Gram Panchayats to ensure effective implementation and sustainability.

- Key initiatives include promoting behavioral change through Information, Education, and Communication (IEC) campaigns that highlight the importance of sanitation.

Key challenges related to Swachh Bharat Mission

- **Poor Quality of Infrastructure:** Reports suggest inadequate construction quality of toilets under the Swachh Bharat Mission (SBM), raising questions about the effectiveness of the initiative.

- **Inadequate Access to Sanitation Facilities**: Despite government claims, communities in slums and peri-urban areas still lack access to public toilets, contributing to sanitation challenges.

- **Lack of Waste Treatment:** Toilet construction in rural areas is not linked to waste treatment, leading to improper disposal of faecal sludge and environmental contamination.

- **Ineffective Waste Management Technologies:** Large, capital-intensive waste management technologies have failed to meet expectations, resulting in health crises and the need for additional resources to fix them.

- **Privatization of Public Health Services:** The outsourcing of sanitation work to private contractors, often employing subjugated communities, has led to the privatization of public health services and perpetuated caste discrimination.

- **Insufficient Human Resources:** Shortage of sanitation inspectors and inadequacy in recruitment efforts hinder effective monitoring and management of sanitation programs at the local level.

Way forward

- **Enhanced Quality Assurance:** Implement stricter quality control measures to ensure the construction of toilets meets prescribed standards. Regular inspections and audits can help identify and rectify any construction deficiencies.

- **Targeted Infrastructure Development:** Prioritize the construction of public toilets in slums and peri-urban areas to improve access to sanitation facilities for marginalized communities.

- **Integrated Waste Management:** Integrate toilet construction with waste treatment facilities in rural areas to ensure proper disposal of faecal sludge.

PM to address the programme marking the launch of 'Jal Sanchay Jan Bhagidari initiative' on 6th September

- The initiative aims to construct approximately 24,800 rainwater harvesting structures across Gujarat

- **Aim:** To promote community participation in water conservation as part of the **Jal Shakti Abhiyan: Catch the Rain campaign**

Jal Shakti Abhiyan

- The Jal Shakti Abhiyan launched by the Government of India.

- It is a significant initiative aimed at addressing water conservation and water security in the country.

- This comprehensive campaign encompasses various measures to promote efficient water management and enhance water availability.

Salient features of the Jal Shakti Abhiyan:

- **Integrated Approach:** The Jal Shakti Abhiyan adopts an integrated and holistic approach by bringing together various ministries, departments, and stakeholders to work collaboratively towards water conservation and management.

- **Water Conservation Campaigns:** The program emphasizes creating awareness and conducting water conservation campaigns at the grassroots level. It aims to educate and engage communities, schools, and institutions to adopt water-saving practices and techniques.

- **Water Resource Assessment:** The Abhiyan includes a comprehensive assessment of water resources, including groundwater levels, availability, and quality. It helps in identifying regions facing water stress and facilitates

planning for sustainable water management.

- **Rainwater Harvesting:** Promotion of rainwater harvesting techniques is a key component of the Jal Shakti Abhiyan. It encourages the construction and maintenance of structures like rooftop rainwater harvesting systems, check dams, and percolation tanks to recharge groundwater levels.

- **Water Budgeting and Crop Planning:** The program emphasizes the implementation of efficient water budgeting and crop planning techniques. It aims to promote practices such as micro-irrigation, crop diversification, and optimal use of water resources in agriculture to enhance water productivity.

- **Renovation of Traditional Water Bodies:** The Abhiyan focuses on the renovation and restoration of traditional water bodies, such as ponds, lakes, and tanks. This helps in augmenting water storage capacities, recharging groundwater, and improving overall water availability in rural areas.

- **Revival of Rivers:** To ensure the rejuvenation of rivers, the Jal Shakti Abhiyan emphasizes river basin planning, interlinking of rivers, and ecological restoration. It aims to maintain minimum environmental flows and promote sustainable river management practices.

- **Policy Reforms:** The program advocates for policy reforms and regulatory mechanisms to enhance water governance. It aims to strengthen water-related laws, institutional frameworks, and mechanisms for effective implementation and monitoring of water conservation initiatives.

Jal Shakti Abhiyan
Making Water Conservation a Jan Andolan

Focus Areas

Water conservation & rainwater harvesting

Reuse borewell recharge structures

Renovation of traditional & other water bodies/tanks

Intensive afforestation

Watershed Developmen

High level teams constituted in 256 districts & Technical staff placed in 1,592 blocks to take stock of ground water levels, state of aquifers, ponds & water bodies

Campaign to cover both rural and urban areas

"Jal Shakti Abhiyan: Catch the Rain"

- It is an initiative under the larger Jal Shakti Abhiyan (JSA) framework, specifically focused on enhancing rainwater harvesting across India.
- Launched in March 2021, this campaign aims to address the issue of water scarcity by promoting rainwater harvesting techniques and encouraging communities to capture and store rainwater effectively.

Components of the Campaign

1. **Promotion of Rainwater Harvesting Techniques:**
   a. **Rooftop Rainwater Harvesting:** Encouraging households and institutions to install systems that capture and store rainwater from rooftops.
   b. **Recharge Pits:** Constructing recharge pits and wells to facilitate groundwater recharge.
   c. **Check Dams and Nala (Stream) Desilting:** Building check dams and desilting streams to enhance the storage and flow of rainwater.

2. **Community Participation:**
   a. **Training and Capacity Building:** Providing training and resources to local communities and stakeholders on rainwater harvesting practices.
   b. **Incentives:** Offering incentives or support to encourage the adoption of rainwater harvesting systems.

3. **Monitoring and Evaluation:**
   a. **Assessment:** Regularly assessing the impact of rainwater harvesting practices and making necessary adjustments.
   b. **Reporting:** Maintaining transparency and reporting progress through various platforms.

Union Minister Shri Ram Mohan Naidu Inaugurates Digi Yatra Facility at 9 More Airports

- **Digi Yatra Facility** Launched at Bhubaneswar, Coimbatore, Dabolim (Goa), Indore, Bagdogra, Ranchi, Patna, Raipur, and Visakhapatnam
- The Total Number of Digi Yatra-Enabled Airports Increases to 24
- 5 Lakh Users Downloaded Digi Yatra App; 3 Crore Passengers Have Used the Digi Yatra.

DIGI YATRA

- It is a project conceived to achieve contactless, seamless processing of passengers at Airports, based on **Facial Recognition Technology (FRT).**
- The project envisages that any traveller may pass through various checkpoints at the airport through a paperless and contactless processing, using facial features to establish the identity which would be linked to the boarding pass.
- It provides a decentralized mobile wallet-based identity management platform

which is cost effective and addresses privacy/data protection issues in implementation of Digi Yatra.

- The Digi Yatra Foundation, a joint venture with stakeholders including the Airports Authority of India and major Indian airports, is implementing the project.

Key Pillars

Digi Yatra platform will be built on 4 key pillars, like **Connected Passengers, Connected Airports, Connected Flying and Connected Systems** which can make it possible over a period of time for passengers to:

- Plan their trips efficiently by identifying price trends and estimate future airfares at the time of ticket booking,

- Optionally link their Aadhaar to airlines and other ecosystem players at the time of booking for faster airport entry and automated check-ins without requiring any paper-based interventions,

- Walk-through security scanners swiftly owing to advanced biometric security solutions,

- Receive relevant information pertaining to various facilities, protocols, airline timings, queue lengths at airports etc.,

- Engage in customized digital offerings at experience zones,

- Get real time notifications about congestion and delays to have greater visibility on the next step of journey,

- Conveniently navigate through the airport using digital guidance systems, interactive kiosks and augmented reality apps,

- Stay connected during flights and indulge in immersive experiences. Also book in-flight services and destination-based offerings digitally,

- Get a prompt when their luggage reaches the baggage claim belt, and

- Submit grievances, share experiences and provide feedback.

Concerns and Issues Related to Digi Yatra

- **Privacy Infringement:** There are few incidents which suggest biometric data collection without clear and informed consent are raising concerns about passenger privacy.

- **Data Security:** When Data is the new oil, Digi yatra heightened worries regarding personal data protection, fueled by previous instances of data breaches in the aviation industry.

- **Narrow adoption:** Many people are in the habit of following the traditional format of paper work verification to keep themselves aloof from technical complications in application.

- **Technology Reliability:** The facial recognition system may face potential challenges, including errors or biases, requiring ongoing scrutiny to ensure reliability.

Way Forward

- **Expansion of Digi Yatra:** Due to the high volume of people at the airport there is a need to diversify the scope of Digi Yatra. Digi Yatra facility should be available at all major airports and offered by all airlines operating in India.

- **Integration with Service Providers:** Linking Digi Yatra portal with other travel platforms like booking portals and ride-hailing apps can further give a more holistic experience to passengers.

- **Enhancing Security Features:** Regular improvement of biometric authentication and data security measures is vital.

- **Protection of Data of Passengers:** Encouraging more airlines, airports, and passengers to participate is crucial for wider acceptance.

Shri Sanjay Kumar chairs International Conference on 'Spectrum of Literacy' on the eve of International Literacy Day 2024

- International Literacy Day is celebrated globally on September 8th every year to raise awareness about the importance of literacy and education for individuals and communities.

- Initiated by UNESCO in 1967, this day highlights the significance of literacy as a matter of dignity and human rights and the need for efforts to create a more literate and sustainable society.

- **International Literacy Day 2024** brings attention to ongoing challenges in global literacy and emphasizes the importance of achieving literacy goals for sustainable development.

Theme of International Literacy Day 2024

- The theme for International Literacy Day 2024 is **"Promoting multilingual education: Literacy for mutual understanding and peace"**.

- This theme emphasizes the importance of using multilingual education to foster mutual understanding, social cohesion, and peace.

- It highlights the cognitive, pedagogical, and socio-economic benefits of adopting a first language-based, multilingual approach to literacy development and education.

International Literacy Day 2024 Importance:

International Literacy Day 2024 holds immense significance as it underscores the critical role literacy plays in personal empowerment, community development, and national progress.

- In 2024, the focus is on enhancing literacy rates to bridge educational gaps, promote gender equality, and support sustainable development goals.

- By highlighting the transformative power of reading and writing, International

Literacy Day 2024 emphasizes the need for accessible education, the elimination of barriers to learning, and the implementation of effective literacy programs worldwide.

- This observance not only celebrates the achievements in literacy but also calls for renewed commitment and collaborative efforts to ensure that every individual has the opportunity to acquire essential literacy skills, thereby fostering a more informed, equitable, and prosperous society.

Significance of International Literacy Day

- **Highlights Literacy's Role in Empowerment**: International Literacy Day emphasizes the crucial part literacy plays in empowering individuals, enabling them to gain knowledge, develop skills, and enhance their personal growth.

- **Encourages Societal Development**: Literacy is a key driver of societal development, helping to foster economic growth, reduce poverty, and promote social inclusion.

- **Beyond Reading and Writing**: Literacy is not limited to reading and writing; it also involves understanding and interpreting information, which is essential for making informed decisions and improving one's quality of life.

- **Advocates for Inclusive Education**: This day encourages governments, civil society, and educational institutions to support policies and practices that ensure access to literacy and education for everyone, regardless of their background.

- **Promotes Global Awareness**: By celebrating International Literacy Day, global awareness is raised about the importance of literacy, pushing for efforts to improve literacy rates worldwide.

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Samagra Shiksha fund delay punishes role-model States

- Over the past year, the Centre has withheld funds of the Samagra Shiksha scheme (SSA) to at least five Opposition-ruled States — Tamil Nadu , Kerala, Punjab, West Bengal, and Delhi.

- Among the States which got the funds, Gujarat is in the top half for only eight of the 20 objectives.

- Uttar Pradesh and Madhya Pradesh are in the top half for three objectives each, and Bihar for two.

Samagra Shiksha Scheme

- The Samagra Shiksha Scheme was launched in the year 2018 by the Ministry of Education.

- The scheme aims to ensure the equitable, inclusive, and cost-effective delivery of school education to many children in India.

- Under the Samagra Shiksha Scheme umbrella, three schemes are included:

1. Sarva Shiksha Abhiyan,

2. Rashtriya Madhyamik Shiksha Abhiyan,

3. Teacher Education Program.

- The scheme covers over 1.16 million schools, catering to approximately 15.6 crore children and around 57 lakh teachers in government and government-aided schools.

- It encompasses classes from pre-primary to senior secondary levels.

- Implemented as a centrally sponsored scheme, the central government provides 60% of the funds, while the state governments contribute 40%.

Objectives:

- Implementing the recommendation of NEP 2020;

- Supporting States & UTs in implementing RTE Act, 2009;

- Focus on Early Childhood Care and Education;

- Emphasis on Foundational Literacy and Numeracy;

- Thrust on Holistic, Integrated, Inclusive and activity based Curriculum and Pedagogy;

- Provision of quality education and enhancing learning outcomes of students;

- Bridging Social and Gender Gaps in School Education;

- Ensuring equity and inclusion at all levels of school education;

- Strengthening and up-gradation of SCERTs/SIE and DIETs;

- Ensuring safe, secure and conducive learning environment and minimum standards in schooling provisions;

Samagra Shiksha supports new pedagogical and curricular structure of school education (5+3+3+4):

- 3 years in Anganwadi/pre-school and 12 years in school

1. **Foundational stage (5):** multilevel, play/activity-based learning

2. **Preparatory Stage (3):** play, discovery, and activity-based and interactive classroom learning

3. **Middle Stage (3): experiential** learning in the sciences, mathematics, arts, social sciences, and humanities

4. **Secondary Stage (4): multidisciplinary** study, greater critical thinking, flexibility and student choice of subjects
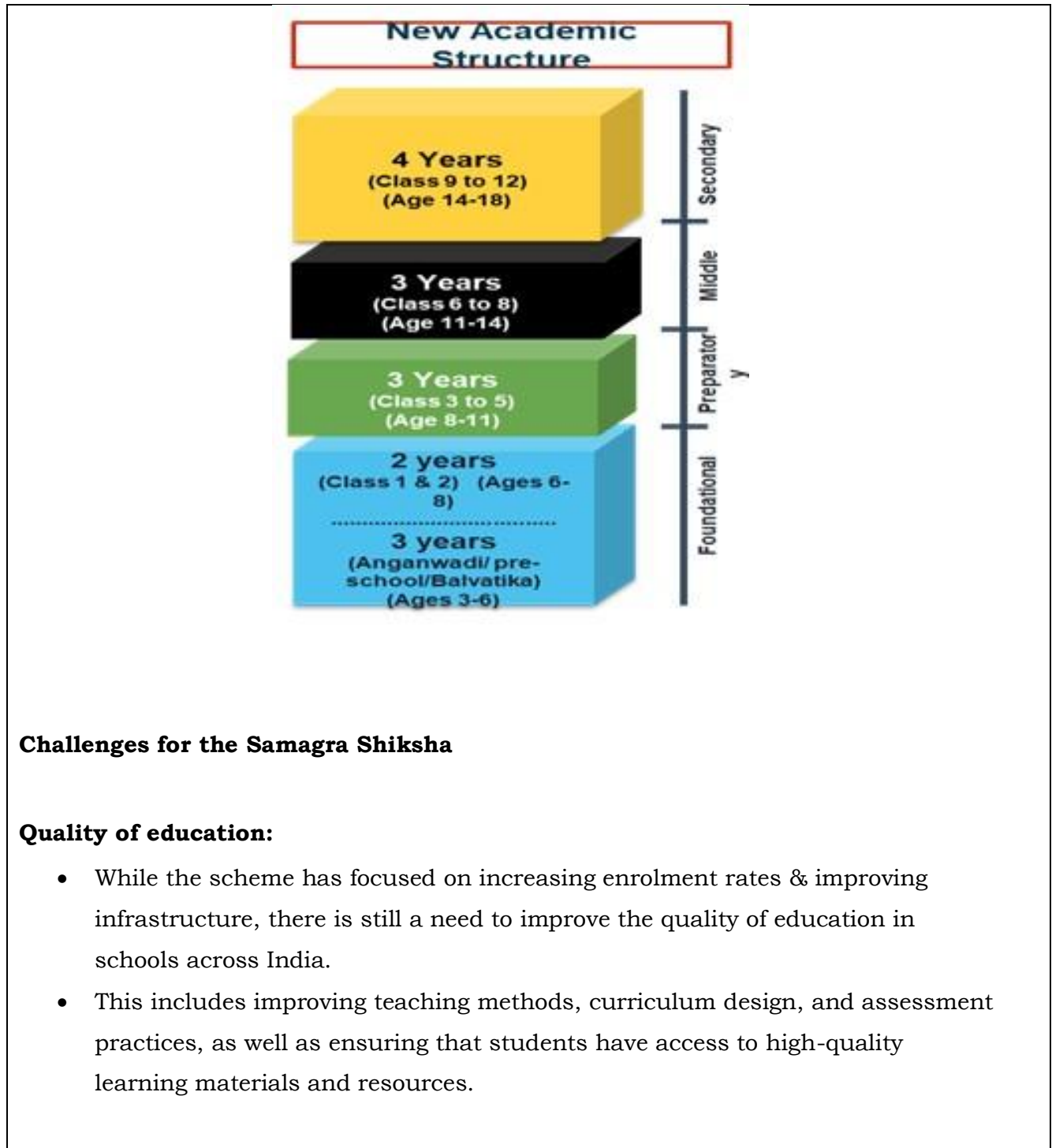
Challenges for the Samagra Shiksha

Quality of education:

- While the scheme has focused on increasing enrolment rates & improving infrastructure, there is still a need to improve the quality of education in schools across India.
- This includes improving teaching methods, curriculum design, and assessment practices, as well as ensuring that students have access to high-quality learning materials and resources.

Inadequate funding:

- One of the biggest challenges facing the education sector in India is the lack of adequate funding.
- While the government has increased spending on education, there is still a need for more investment to ensure that schools have necessary resources they need to provide quality education.

Inequitable access:

- Despite efforts to improve access to education, there are still significant disparities in enrolment rates and learning outcomes between different regions, socio-economic groups, and gender.
- Addressing these inequities requires a more targeted approach, with a focus on providing support to marginalized communities and ensuring that all students have equal access to educational opportunities.

Teacher shortage:

- There is a shortage of trained and qualified teachers in many parts of India, particularly in rural areas.
- This shortage makes it difficult to provide quality education to all students and highlights the need for more investment in teacher training and recruitment.

Out-of-school children:

- Despite efforts to increase enrolment rates, there are still millions of children in India who are out of school.
- This includes children who are forced to work to support their families, as well as those who face barriers to accessing education due to poverty, disability, or other factors.

Over 70% child deaths in India are linked to malnutrition

Key Highlights on Child Malnutrition and Mortality:

Child Mortality Statistics (2021):

- **India**: 0.7 million children under five died; 0.5 million deaths were linked to child and maternal malnutrition (over 70%).
- **Global**: 4.7 million children under five died; 2.4 million deaths were linked to malnutrition (about 50%).

Progress Over Time:

Global Decline:

- **1990**: 6.6 million child deaths related to malnutrition.
- **2021**: Reduced to 2.4 million, a 63% decrease.

India's Improvement:

- **1990**: 2.4 million deaths related to malnutrition.
- **2021**: Reduced to 0.5 million, an 80% decrease.

Malnutrition

- As per World Health Organization (WHO), malnutrition refers to *deficiencies, excesses or imbalances in a person's intake of energy and nutrients.*
- It is a condition that arises from **inadequate intake of vital nutrients essential** for optimal health, growth, and development within an individual's diet.

Status of Malnutrition in India

- **Stunting:** 5% of children under five years of age are stunted (National Family Health Survey - NFHS 5, 2019-21).
- **Wasting:** 3% of children under five years of age are wasted (NFHS 5).
- **Underweight:** 1% of children under five years of age are underweight (NFHS 5).

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- **Global Hunger Index (GHI) 2023:** India ranks 107th out of 121 countries, with a score categorized as "serious" hunger. India has the highest child wasting rate according to the GHI 2023 (18.7%).
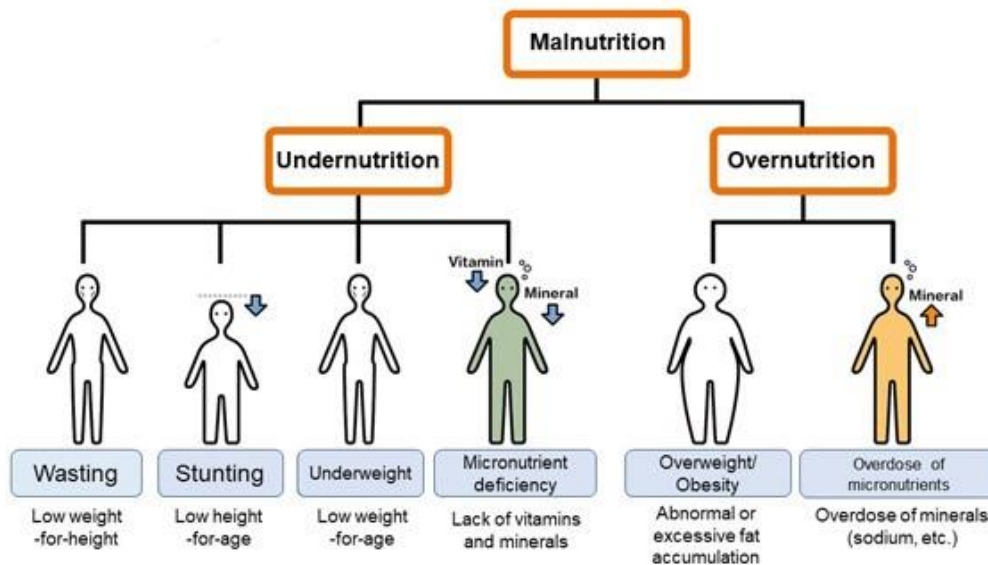
Causes of malnutrition in India

- **Poverty:** Poverty is a significant factor contributing to malnutrition. Poor families often can't afford nutritious foods like fruits, vegetables, and dairy products. A 2021 report by the World Bank found that 21.9% of the Indian population lives below the poverty line.

- **Poor Maternal Health:** Malnutrition in mothers leads to low birth-weight babies, starting a cycle of malnutrition. The same NFHS data reveals that 22% of Indian children are born underweight.

- **Inadequate Breastfeeding Practices:** Many infants aren't exclusively breastfed for the first six months, which is crucial for obtaining essential nutrients. The

NFHS states that only 58% of children under 6 months are exclusively breastfed.

- **Limited Dietary Diversity:** Many Indian diets lack diversity and heavily depend on cereals, contributing to deficiencies in essential nutrients. The Comprehensive National Nutrition Survey found that only 6% of children aged 6-23 months receive a minimum acceptable diet.

Steps Taken by the Government of India Against Malnutrition

1. Mission Poshan 2.0
2. Integrated Child Development Services (ICDS) Scheme
3. Pradhan Mantri Matru Vandana Yojana (PMMVY
4. Mid-Day Meal Scheme
5. Scheme for Adolescent Girls (SAG)
6. Mother's Absolute Affection (MAA)
7. Poshan Vatikas

Challenges in Handling Malnutrition in India

- **Poverty and Inequality:** Widespread poverty and income inequalities contribute to limited access to nutritious food. This makes it challenging to combat malnutrition effectively.

- **Inadequate Dietary Intake:** Many individuals, especially in rural areas, have limited access to a diverse and nutritious diet. This is due to factors like low agricultural productivity, food price inflation, and lack of awareness about balanced nutrition.

- **Poor Sanitation and Hygiene: Inadequate** access to clean water, sanitation facilities, and hygiene practices increase the risk of infections and diseases. This further exacerbates malnutrition.

- **Healthcare Infrastructure:** Insufficient healthcare infrastructure, especially in rural areas, hampers early detection, prevention, and treatment of malnutrition.
- **Gender Disparities:** Gender inequalities contribute to higher malnutrition rates among women and children.

Way Forward

- **Targeted Nutrition Programs:** Implementing comprehensive and targeted nutrition programs, such as the Integrated Child Development Services (ICDS) and the National Nutrition Mission (Poshan Abhiyaan), to address the nutritional needs of vulnerable populations.
- **Promoting Exclusive Breastfeeding:** Encouraging exclusive breastfeeding for the first six months of an infant''s life and promoting appropriate complementary feeding practices.
- **Nutritional Awareness and Education:** Conducting awareness campaigns and educational programs to promote the importance of balanced nutrition, dietary diversity, and healthy eating habits.
- **Improving Agriculture and Food Systems:** Enhancing agricultural productivity, promoting sustainable farming practices, and strengthening food supply chains to ensure the availability and affordability of nutritious food.
- **Strengthening Healthcare Infrastructure:** Enhancing access to quality healthcare services. This includes regular growth monitoring, early detection of malnutrition, and timely intervention.
- **Sanitation and Hygiene Promotion:** Promoting access to clean water, sanitation facilities, and hygiene practices to reduce the risk of waterborne diseases and improve overall health.

PM chairs First meeting of Governing Body of Anusandhan National Research Foundation

Key highlights

Focus Areas:

- **Science and Technology Landscape:** Discussion on redesigning research and development programs.
- **Removing Obstacles:** Identifying and eliminating barriers in the research ecosystem.
- **Setting Targets:** Emphasizing ambitious goals and path-breaking research focusing on solving existing problems with localized solutions.

Key Decisions and Proposals:

- **Institutional Upgradation:** Need for upgradation and standardization of research institutions.
- **Expert List and Dashboard:** Creation of a list of domain experts and a dashboard to track research and development activities.
- **Resource Utilization:** Scientific monitoring of resource use for research and innovation.

Anusandhan National Research Foundation

- Anusandhan National Research Foundation (ANRF) has been established to promote research and development and foster a culture of research and innovation throughout India's Universities, Colleges, Research Institutions, and R&D laboratories.
- ANRF acts as an apex body to provide high-level strategic direction of scientific research in the country as per recommendations of the **National Education Policy.**

- ANRF forges collaborations among the industry, academia, and government departments and research institutions.

Functions of ANRF include:

- Preparing the roadmap for short, medium, and long-term research and development.
- Facilitating and funding the expansion of Research and Development and related infrastructure in universities, colleges, and research institutions.
- Funding competitive **peer-reviewed gran**t proposals to eligible individuals.
- Assisting in the transformation of research into capital-intensive technology.
- Enhancing India"s role and engagement in significant national and global areas.
- Encouraging private and public sector entities to invest in the foundation.
- Carry out annual surveys of scientific research, outcomes, and spending.

Governing Board:

- NRF will have a Governing Board headed by the Prime Minister of India. The Board will provide strategic direction to the Foundation and monitor the implementation.

Other members of the Board are:

- the Union Ministers of Science and Technology, Education as Vice Presidents,
- the Principal Scientific Advisor as Member Secretary, and
- Secretaries to the Departments of Science and Technology, Biotechnology, and Scientific and Industrial Research.
- The President of the Board may appoint or nominate additional members to the Board.

These may include:

- up to five members from business organisations or industries,
- one member from the fields of social sciences and humanities, and

- up to six experts from natural sciences, engineering, and technology.
- The President may appoint a **Chief Executive Officer**, who should be of the rank of an Additional Secretary, or above.

Limitations of the National Research Foundation

- **Less funding by government:** An amount of Rs 50,000 crore has been earmarked for priority areas in research over 2023-2028. It is stated that approximately 70% will be raised from the private sector. There is no mechanism in the NRF Act to ensure this support.
- **Enhance Centralisation:** It does not follow the principle of cooperative federalism and has no place for the representatives of state governments in the decision-making structure.
- **Exclusion of important stakeholders:** It does not enunciate the role and contribution of the relevant actors operating under the economic and social ministriesin the NRF decision-making structures.
- **No role of the Central Public Sector Enterprises (CPSEs) in decision making:** The CPSEs should play a pivotal role in being vehicles for the transfer of R&D benefits from **academic** institutions to application to strategic areas of manufacturing.

Anusandhan National Research Foundation Act, 2023

- The Anusandhan National Research Foundation Act of 2023 provides for the establishment of the Anusandhan National Research Foundation (NRF).
- It also **repealed the Science and Engineering Research Board (SERB)** established by an act of Parliament in 2008 and subsumed it into NRF**.**

Union Minister of Youth Affairs & Sports and Labour & Employment Calls on Retired Sportspersons to Apply for RESET programme

- RESET Programme is an important step towards recognising and empowering our retired athletes who have made the nation proud with their achievements: Union Minister

RESET Programme:

- The **Retired Sportsperson Empowerment Training Programme** is aimed at empowering our retired sportspersons who have played for the country and brought immense laurels to the nation.
- It will support retired athletes on their career development journey by empowering them with the necessary knowledge and skills and making them more employable.
- It represents a significant step towards recognizing and utilizing the invaluable experience and expertise of our retired athletes.

Eligibility and Structure

- The programme targets athletes aged between 20 and 50 years who have competed at international or national levels.
- This includes those who have won international medals or participated in events recognized by national sports federations or the Indian Olympic Association.

Educational Qualification Levels:

- Class 12th and above Advanced training modules.
- Class 11th and below Basic training modules.
- The RESET Programme will be conducted in a hybrid format:
- Self-Paced Learning: Available through a dedicated online portal.
- On-Ground Training: Includes hands-on experience through internships and

practical training.

Internship Opportunities:

- Participants will have the chance to work with sports organisations, training camps, and leagues.

- This real-world experience is designed to enhance their skills and improve their employment prospects.

Objectives:

- To support these athletes in their career development by equipping them with new knowledge and skills to enhance their employability.

- To connect experienced retired athletes with younger, aspiring sports people.

- By leveraging the vast experience of former athletes, the programme will help mentor the next generation, contributing to the growth of sports in India and supporting national development.

Implementation and Support

- The Lakshmibai National Institute of Physical Education (**LNIPE**) will lead the pilot phase of the RESET Programme.

- **Additional Support:** Upon successful completion of the course, participants will receive:

- **Placement Assistance:** Help in finding suitable job opportunities.

- **Guidance for Entrepreneurial Ventures:** Support for those interested in starting their businesses.

Govt to Issue New AB PMJAY Cards for All Senior Citizens Aged 70+

- This initiative will cover approximately 4.5 crore families in the country and include about 6 crore senior citizens.
- Anyone aged 70 or above, as per their Aadhaar card, will be eligible to apply for the scheme

Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)

- PM-JAY is the world's largest health insurance scheme fully financed by the government.
- Launched in 2018, it offers a sum insured of 5 lakh per family for secondary care and tertiary care.
- Health Benefit Packages covers surgery, medical and day care treatments, cost of medicines and diagnostics.

Eligibility
- The scheme is targeted to cover 10.74 crore poor, deprived rural families and identified occupational category of urban worker's families.
- The beneficiaries as identified by latest **Socio-Economic Caste Census (SECC)** data.

Components
- **Health and wellness Centres (HWC)**– It cover primary care hospitalisation by providing comprehensive health care, including for non-communicable diseases and maternal and child health services.
- **Pradhan Mantri Jan Arogya Yojana (PM-JAY)**– To provide a health cover of

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Rs. 5 lakhs per family per year for secondary and tertiary care hospitalization.

Benefits

- With a huge scope, the Ayushman Bharat PMJAY is considered to be the largest health assurance/insurance scheme in the world.

- The scheme is funded completely by the Government and it provides financial protection to several secondary and tertiary care hospitalisations.

- Nearly 10.74 crore families (40% of the bottom population of the country) are covered under this health care scheme. Out of that, around 8 crore families are from the rural areas and the remaining from the urban areas.

- The beneficiaries of this scheme are entitled to receive cashless access to the health care services across the various public as well as private hospitals in India which are empanelled under the scheme. The benefits can be availed across the country.

- Primary, secondary, and tertiary healthcare services are provided to the beneficiaries of the scheme.

- The scheme covers the medical expenses up to 3 days of pre-hospitalization and 15 days of post-hospitalization. The pre-existing health conditions are also covered under the insurance scheme.

- Around 1,393 procedures are included under the scheme. The beneficiaries can avail these treatments including medicines, physician's fees, room and ICU charges, etc free of cost.

Challenges

- Ensuring that all eligible beneficiaries are aware of the scheme and can avail its benefits remains a challenge. Many eligible individuals in remote areas may lack knowledge about the scheme.

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- The scheme''s success relies on the availability and capacity of healthcare infrastructure. In certain regions, the shortage of healthcare facilities and skilled healthcare professionals poses a challenge to service delivery.
- Ensuring the delivery of quality healthcare services across a vast network of empanelled hospitals is crucial. Quality control mechanisms are necessary to prevent fraud and ensure that beneficiaries receive effective treatment.

Way Forward

- Strengthening awareness campaigns and utilizing multiple communication channels to reach remote areas. This will help ensure that all eligible beneficiaries are aware of the scheme.
- Continued investment in healthcare infrastructure, particularly in underserved areas, will improve access to quality healthcare services.
- Strengthening quality assurance mechanisms will enhance the overall quality of healthcare services and ensure beneficiary satisfaction. This includes robust monitoring, evaluation, and accreditation processes.
- Collaborating closely with state governments and healthcare providers will foster effective implementation and address local challenges. It will also promote ownership and accountability at the regional level.
- Using digital platforms to streamline processes will optimize the delivery of services and facilitate seamless implementation of the scheme.

50 Jan Aushadhi Kendras inaugurated in Madhya Pradesh today

- More than 2000 quality generic medicines and 300 surgical, nutraceuticals and devices will be made available at rates 50% to 90% cheaper than those of branded medicines.

Jan Aushadhi Kendras

- Jan Aushadhi Kendras (JAKs) is a government initiative launched to provide affordable and quality medicines to the public.
- They operate under the **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)** scheme of the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers.

Establishment:

- The scheme was launched by the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, in 2008 under the brand name **Jan Aushadhi Scheme.**
- The initiative was rebranded as Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) in 2015 to enhance its reach and impact.

Benefits of Jan Aushadhi Kendras:

- **Increased affordability of medicines**: JAKs have significantly reduced healthcare costs for many people and reduced out-of-pocket expenditure.
- Indian citizens have collectivelysaved over Rs. 28,000 crores over the last decade by purchasing medicines from Jan Aushadhi Kendras.
- **Improved access to medicines:** JAKs has made essential medicines more readily available in underserved areas.
- Around 10 to 12 lakh people visit JAKs daily.

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- **Promotion of rational medicine use:** JAKs provide information and counselling on the appropriate use of medicines, which can help to reduce misuse and overuse.

Expansion of Jan Aushadhi Kendras:

- PMBJP has expanded significantly in recent years, from only 80 Jan Aushadhi Kendras in 2014, to around 11,000 units operating across the country today.
- The government aims to further increase the number of Jan Aushadhi Kendras to 25,000 in the next two years.

Who is eligible to open a Jan Aushadhi Kendra?

- State Governments or any organization / reputed **NGOs** / Trusts / **Private hospitals**/ charitable institutions / Doctors / Unemployed pharmacists/ individual entrepreneurs are eligible to apply for the new Jan Aushadhi Kendra.
- The applicants shall have to employ one B Pharma / D Pharma degree holder as Pharmacist in their proposed store.
- Primary Agricultural Credit Societies.

Challenges

- **Awareness and Accessibility:** Despite the expansion, there are still areas with limited awareness and accessibility to Jan Aushadhi Kendras. Efforts are ongoing to address these gaps.
- **Supply Chain Issues:** Maintaining a consistent supply of medicines and ensuring the availability of all required drugs can be challenging, particularly in remote areas.
- **Competition with Branded Medicines:** Increasing competition from branded medicines and other pharmaceutical retail outlets can affect the uptake of Jan Aushadhi medicines.

Cabinet approves Pradhan Mantri Janjatiya Unnat Gram Abhiyan

- **Total Outlay**: ₹79,156 crore (Central Share: ₹56,333 crore, State Share: ₹22,823 crore).
- **Target Beneficiaries**: Over 5 crore tribal people across approximately 63,000 villages.
- **Coverage**: 549 districts, 2,740 blocks across 30 States/UTs.

Goals and Objectives

1. **Developing Enabling Infrastructure**:
- **Housing**: Provide pucca houses and essential services (water, electricity) to eligible Scheduled Tribe (ST) households under **PMAY (Gramin).**
- **Village Infrastructure**: Improve road connectivity, mobile access, and health/nutrition/education facilities.

2. **Promotion of Economic Empowerment**:
- **Skill Development**: Training for ST youth, entrepreneurship promotion, and access to long-term skill courses.
- **Livelihood Support**: Marketing support via **Tribal Multipurpose Marketing Centres** (TMMCs) and assistance for agriculture, animal husbandry, and fisheries.

3. **Universalization of Access to Good Education**:
- **Quality Education**: Increase Gross Enrollment Ratio (GER) and set up tribal hostels for better access to education.

4. **Healthy Lives and Dignified Ageing**:
- **Healthcare Access**: Enhance healthcare services to meet national standards, particularly in maternal and infant health, using Mobile Medical Units in remote areas.

Implementation and Monitoring

- **Mapping and Monitoring**: Tribal villages mapped on **PM Gati Shakti Portal** for identifying gaps and monitoring progress.
- **Award System**: Best-performing districts will receive recognition based on physical and financial progress.

Innovative Schemes

- **Tribal Home Stay Initiative**: Promote tourism through 1,000 home stays in tribal areas, funding provided for construction and renovation.
- **Support for FRA Patta Holders**: Focus on sustainable livelihoods for 22 lakh Forest Rights Act (FRA) patta holders, with convergence of multiple government schemes.
- **Infrastructure Development for Schools**: Upgrade facilities for tribal residential schools and hostels.

Health Initiatives

- **Sickle Cell Disease Management**: Establish **Centers of Competence (CoC)** for diagnosis and management of Sickle Cell Disease, with advanced facilities and prenatal diagnosis.

Marketing and Economic Support

- **Tribal Multipurpose Marketing Centres (TMMCs)**: Set up 100 TMMCs to enhance marketing infrastructure, branding, and direct sales for tribal products.

Pradhan Mantri Janjatiya Unnat Gram Abhiyan (PMJUGA)

- Pradhan Mantri Janjatiya Unnat Gram Abhiyan (PMJUGA) is an initiative launched by the Government of India aimed at bringing socio-economic development to tribal communities residing in rural areas.
- The scheme will adopt saturation coverage for tribal families in tribal-majority

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villages and aspirational districts.

- The **Ministry of Tribal Affairs** will act as the nodal ministry for the overall monitoring and implementation of the scheme.

1000 Tribal Home Stays to be promoted under Swadesh Darsan to Boost Local Tourism and Livelihood in Tribal Areas

- In villages which have tourist potential, funding will be provided to the tribal Household and the village for construction of 5-10 Homestays in one village.
- Each household will be eligible for Rs. 5.00 lakhs for the construction of two new rooms and upto Rs. 3.00 lakhs for renovation of existing rooms and Rs 5 lakh for village community requirement.

Swadesh Darshan Scheme

- It was launched in 2015 by the Ministry of Tourism, Government of India, to develop sustainable and responsible tourism destinations in the country.

- It is **100% centrally funded scheme**.

- Under the scheme, the Ministry of Tourism provides financial assistance to State governments, Union Territory Administrations or Central Agencies for development of tourism infrastructure in the country.

- Operation & Maintenance (O&M) of the projects sanctioned under Swadesh Darshan Scheme is the responsibility of the respective State Government/UT Administration.

Objectives:

- To position tourism as a major engine of economic growth and job creation;

- Develop circuits having tourist potential in a planned and prioritized manner;

- Promote cultural and heritage value of the country to generate livelihoods in the identified regions;

- Enhancing the tourist attractiveness in a sustainable mannerby developing world class infrastructure in the circuit/destinations;

- Follow community-based development and pro-poor tourism approach;

- Creating awareness among the local communities about the importance of tourism for them in terms of increased sources of income, improved living standards and overall development of the area.

- To make full use of the potential and advantages in terms of available infrastructure, national culture and characteristic strong points of each and every region throughout the country by development of theme-based circuits.

- Development of tourist facilitation services to enhance visitor experience/satisfaction.

Swadesh Darshan Scheme 2.0

- With the mantra of '**vocal for local**'**,** the revamped scheme namely Swadesh Darshan 2.0 seeks to attain "Aatmanirbhar Bharat" by realizing India's full potential as a tourism destination.

- Swadesh Darshan 2.0 is not an incremental change but a generational shift to evolve Swadesh Darshan Scheme as a holistic mission to develop sustainable and responsible tourism destinations.

- It will encourage the development of benchmarks and standards for generic and theme-specific development of tourism destinationsand the States will follow the benchmarks and standards while planning and developing the projects.

Transforming Healthcare: Six Years of Ayushman Bharat PM-JAY

- **Launch Date**: September 23, 2018, by Prime Minister Narendra Modi.

- **Objective**: To achieve **Universal Health Coverage (UHC)** by providing health insurance to the underprivileged.

- **Target Population**: Aimed at over 12 crore families (approximately 55 crore individuals) identified as vulnerable, focusing on the poorest 40% of the population based on the **Socio-Economic Caste Census 2011.**

Key Features

1. **World's Largest Health Assurance Scheme**:
- Fully financed by the Government of India.
- Aims to provide broad healthcare access to economically disadvantaged groups.
2. **Health Coverage**: Offers an annual coverage of ₹5 lakh per family for secondary

and tertiary care hospitalization across public and private empanelled hospitals.

3. **Cashless Healthcare**: Beneficiaries receive cashless services at the point of care, eliminating out-of-pocket payments at the time of treatment.

4. **No Restrictions**: No limits on family size, age, or gender, ensuring inclusivity and equal access for all beneficiaries.

5. **Pre- and Post-Hospitalization Coverage**: Covers expenses incurred up to 3 days before and 15 days after hospitalization, including diagnostics and medications.

6. **Coverage from Day One**: All pre-existing medical conditions are covered from the first day of enrollment, ensuring immediate access to necessary treatments.

7. **Nationwide Portability**: Beneficiaries can avail of cashless treatment at any empanelled public or private hospital across India, enhancing flexibility and ease of access.

8. **Comprehensive Service Package**: Covers 1,949 medical procedures across 27 specialties, including General Medicine, Surgery, Oncology, and Cardiology. Services include free drugs, diagnostics, food, and lodging.

9. **Equal Reimbursement for Public and Private Hospitals**: Ensures public hospitals receive reimbursements equivalent to private hospitals, promoting equitable care delivery.

Recent Expansion (September 11, 2024)

- **Senior Citizens Coverage**:
- Introduction of free health coverage for senior citizens aged 70 and above, benefiting around 6 crore individuals across 4.5 crore families.
- Each eligible senior citizen receives a distinct AB PM-JAY card.
- Those already under the scheme receive an additional ₹5 lakh top-up, separate from their family coverage.

Achievements

- **Ayushman Cards Issued**: Over 35.4 crore Ayushman cards have been issued, empowering millions of families with health coverage.

- **Hospital Admissions**: 7.79 crore hospital admissions authorized, providing ₹1,07,125 crores in financial coverage.

- **Gender Equity**: 49% of Ayushman cards issued to women, and 3.61 crore hospital admissions utilized by women, reflecting the scheme's support for gender equity.

- **Wide Network of Hospitals**: 30,529 empanelled hospitals across India, including 17,063 public and 13,466 private facilities, ensuring extensive healthcare access.

- **Portability Feature**: Notably, 11.9 lakh hospitalizations worth ₹3,100 crores have been authorized under the portability feature.

Impact

- **Reduction in Out-of-Pocket Expenditure**: The scheme has led to a 21% reduction in out-of-pocket healthcare expenses, allowing families to focus on well-being without financial stress.

- **Access to Affordable Life-Saving Treatments**: Essential treatments, such as dialysis (costing ₹10,000-15,000 per session), have become significantly more accessible for low-income families.

- **Financial Gains for Hospitals**: District hospitals report substantial annual net benefits, enhancing their capacity to serve local communities.

- **Transformational Financial Impact**: Without PM-JAY, treatment costs would be 1.5 to 2 times higher, resulting in savings exceeding ₹1.25 lakh crore in out-of-pocket expenses and facilitating 7.37 crore free hospital admissions.

- **Increase in Eye Care Procedures**: Significant uptick in eye care procedures, demonstrating the scheme's focus on comprehensive healthcare coverage.

Union MoS for Health and Family Welfare, Shri Prataprao Jadhav Launches Tobacco Free Youth Campaign 2.0 to Protect the Health and Well-Being of India's Youth

Key Highlights of Tobacco Free Youth Campaign 2.0

- **Objective:** To protect young people''s health from tobacco''s harmful effects and encourage a tobacco-free lifestyle.
- **Statistics:** Approximately 1.3 million deaths annually in India attributed to tobacco use.

Campaign Focus (60 Days):

- **Public Awareness:** Educate about tobacco dangers, especially targeting youth and rural communities.
- **Tobacco-Free Educational Institutions (ToFEI):** Ensure compliance to keep schools and colleges tobacco-free.
- **Law Enforcement:** Strengthen enforcement of COTPA 2003 and PECA 2019 to restrict youth access to tobacco.
- **Tobacco-Free Villages:** Encourage community efforts to eliminate tobacco.
- **Social Media Outreach:** Utilize digital platforms to spread anti-tobacco messages among youth.

Pledges and Participation:

- Participants took the 'Say No To Tobacco' pledge.
- Involvement of celebrities and influencers to amplify the campaign's message.

Educational Initiatives:

- Launch of WHO educational video for schools on the effects of tobacco.
- Release of three important guidelines:
- Health Workers Guide
- SOPs for Tobacco-Free Villages
- Guidelines for Law Enforcement (2024)

About tobacco cultivation:

- Tobacco cultivation in India was introduced by the Portuguese in 1605.

Area and production:

- In India tobacco is predominantly cultivated in **Andhra Pradesh, Gujarat, Karnataka, UP and Bihar.**
- Gujarat accounts for 45 per cent of the area (0.13 M ha) and 30 percent of production (0.16 M t). Productivity is also highest (1700 kg ha-1) in Gujarat followed by AP.

Types of tobacco:

- Anand area of Gujarat grows wholly **bidi tobacco**.
- Nipani area of Karnataka grows bidi tobacco.
- North Bihar and Bengal area has both **tabacum and rustica types** used in the manufacture of hookah and to a limited extent chewing and snuff types.
- Madurai and Coimbatore area of Tamil Nadu grow cigars, filter, binder and chewing tobacco.

Climate and soil:

- Tobacco is grown when the mean temperature is 20° to 27°C.
- When grown as a rainfed crop, it requires at least about 500 mmof well distributed rainfall during crop growing season.
- It is not usually grown where rainfall exceeds 1200 mm during the season.

Govt Schemes and initiatives for Tobacco Control in India

- **Cigarettes Act 1975-** The Act is largely limited to statutory warnings like 'Cigarette Smoking is Injurious to Health' to be displayed on cigarette packs and advertisements. However, it did not include non-cigarettes.
- **The Cigarettes and Other Tobacco Products (Prohibition of Advertisement**

and Regulation of Trade and Commerce, Production, Supply, and Distribution) Act (COTPA) 2003- The act contains 33 sections governing the production, advertisement, distribution, and consumption of tobacco in India.

- **WHO's framework convention on Tobacco Control-** India is one of the 168 signatories of the **WHO's Framework Convention on Tobacco Control (FCTC).** It was launched in 2005. It aims to reduce tobacco usage worldwide by helping countries develop demand and supply reduction strategies.

- **Food Safety and Standards Act 2006-** Government of India has issued regulations under the Food Safety and Standards Act 2006 which lay down that tobacco or nicotine cannot be used as ingredients in food products.

- **Cable Television Networks Amendment Act of 2000-** It prohibited the transmission of advertisements on tobacco and liquor in India.

- **Prevention and Control of Pollution Act of 1981-** The Act recognized smoking as an air pollutant.

- **The Motor Vehicles Act 1988-** It made smoking illegal in public vehicle.

- **National Tobacco Control Programme (NTCP), 2008-** The objective of the programme was to control tobacco consumption and minimize tobacco consumption related deaths. The activities include- training and capacity building, information, education, and communication (IEC) activities; reporting survey and surveillance and tobacco cessation.

- **Tobacco Cessation-** The program provides targeted support to help people overcome the personal challenge of maintaining efforts to quit tobacco use. Tobacco cessation clinics have been set up across the country.

- **Tobacco Taxation-** According to WHO Report on the **Global Tobacco Epidemic 2017,** cigarette taxes in India are amongst the highest in the world. Cigarettes are subjected to high and discriminatory rates of taxation, as compared to other tobacco products. As of 2014-15 Government collected 87% of its total tobacco revenue from legal cigarettes

Ministry of Tourism to celebrate World Tourism Day with the theme 'Tourism and Peace'

- The theme **'Tourism and Peace'**, highlighting the crucial role of tourism in fostering development and global harmony.
- The programme will include showcasing of following **initiatives of the Ministry of Tourism:**
1. **Paryatan Mitra**
2. Best Tourism Village Winners
3. Industry Partnerships with Hospitality Chains
4. Industry Status to Tourism & Hospitality – A Handbook
5. Incredible India Content Hub

World Tourism Day:

- With the aim of using tourism as a major means for sustainable development and especially poverty alleviation, the **United Nations World Tourism Organization (UNWTO)** decided to celebrate World Tourism Day on **27th September every year**.
- World Tourism Day was celebrated for the **first time in 1980.**
- The date marks the **anniversary of the adoption of the Organization's Statutes in 1970**, which paved the way for the establishment of United Nations Tourism, five years later.
- Every year World Tourism Day is celebrated with a special theme.

Objectives:

- The purpose of this day is to increase awareness and motivate people to travel. Since it believes that tourism helps people all across the world become even

more unified and connected.

Significance:

- The World Tourism Day highlights the **unique role of the tourism sector in preserving cultural and natural heritage** all around the world. It acts as an auxiliary in safeguarding habitat and endangered species.
- It addresses the **importance of the tourism sector in providing jobs** and opportunities, mostly for women and youth, in rural as well as big cities.

Scenario of Tourism in India

- India attracted a lot of travellers in the past due to its fabled wealth. **Visit of Hieun-tsang**, a devout Chinese Buddhist is an example of this.
- Pilgrim Travel got a boost when **Emperors like Ashoka and Harsha started** building rest houses for pilgrims.
- Arthashastra' pointing out the importance of the travel infrastructure for the state, which played an important role in the past.
- Post-Independence, Tourism continuously remained part of the **Five-Year Plans (FYP).**
- Different forms of Tourism like Business Tourism, Health Tourism, and Wildlife Tourism etc. were introduced in India after seventh FYP.

India Tourism Statistics 2024

- The tourism industry in India has shown remarkable growth in recent years.
- The tourism sector is projected to add about **INR 21.15 trillion (around $253 billion)** to India's GDP in 2024, showing a significant increase from previous years.

Annual Report 2023-24 of Ministry of Tourism:

- **Foreign Tourist Arrivals (FTAs):** 24 million, reflecting a growth rate of 43.5% compared to the previous year (2022).

- **Foreign Exchange Earnings (FEEs)**: ₹2,31,927 crore, a substantial increase of 65.74% in 2023.

- **Domestic Tourist Visits (DTVs):** In 2022, India recorded 1,731.01 million domestic tourist visits, which played a crucial role in revitalizing the industry post-pandemic.

What are the Initiatives Related to Tourism?

- **Swadesh Darshan Scheme**
- **National Mission on Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive**
- **Iconic Tourist Sites**
- **Buddhist Conclave**
- **Dekho Apna Desh Initiative**

Empowering Futures: Celebrating International Daughter"s Day with the Sukanya Samriddhi Yojana

- **International Daughter"s Day**: Celebrated on **September 22nd** to honor the vital role daughters play in society and emphasize the importance of their empowerment. This day serves as a platform to advocate for gender equality and celebrate the achievements of girls.

Government Initiatives

1. Sukanya Samriddhi Yojana

- **Launch Date**: January 2015, part of the **Beti Bachao, Beti Padhao**
- **Objective**: To encourage savings for girls' education and marriage, ensuring financial security for their future.

Key Features:

- **Eligibility**: Accounts can be opened for girls under **10 years** of age.
- **Initial Deposit**: Minimum of **₹250** to open an account, with subsequent deposits in multiples of **₹50**.
- **Annual Deposit Limit**: Maximum of **₹1,50,000**; any excess will not earn interest.
- **Interest Rate**: Compounded monthly, credited annually, ensuring consistent growth of savings.
- **Management**: The account is managed by the guardian until the girl turns **18**.
- **Withdrawals**: Permitted for educational purposes after reaching **18**years or completing the **10th grade**, allowing up to **50%** of the balance from the previous financial year.

2. Sukanya Samriddhi Gram

- **Community Impact**: Significant initiative where over **500 villages** in North Gujarat have achieved the status of complete Sukanya Samriddhi Gram.

- **Process**: Upon the birth of a daughter, local postmen assist families in opening accounts, leading to the establishment of over **50 lakh accounts** in North Gujarat and **15.22 lakh** across Gujarat.

- **Community Engagement**: Campaigns in schools and community meetings promote awareness and accessibility.

Additional Government Programs

1. Beti Bachao, Beti Padhao (BBBP)

- **Launch**: January 22, 2015, to combat gender bias and promote the welfare of girls, especially in regions with low child sex ratios.

Focus Areas:

- **Awareness Campaigns**: Educating communities on the value of daughters.
- **Multi-Sectoral Approach**: Collaboration between various ministries to address gender disparities in health, education, and nutrition.
- **#SelfieWithDaughter Movement**: Grassroots movement encouraging families to celebrate their daughters.

2. Scheme for Adolescent Girls (SAG)

- **Target Group**: Aimed at girls aged **14-18**, particularly in the **Northeast** and Aspirational Districts.

Services Provided:

- Nutritional support to combat malnutrition.
- Health check-ups and education on health and nutrition.
- Life skills training to enhance access to public services.

3. Menstrual Hygiene Management Scheme

- **Objective**: Promote menstrual hygiene among girls aged **10-19** in rural areas.

Implementation:

- Over **3,13,255 Anganwadis** and **3,69,461 schools** involved in educational outreach.
- Distribution of subsidized sanitary napkins (₹6 for six napkins) and free Jan Aushadhi Suvidha Napkins at ₹1 each.
- Role of ASHA workers in facilitating education and distribution.

4. Udaan Program

- **Launch**: Initiated in 2014 by **CBSE** to boost enrollment of girl students in engineering institutions.

Resources Offered:

- Free access to online and offline resources, including tutorials and study materials.
- Virtual classes and workshops to bridge the gap between school and entrance exam preparations.
- Support services such as helplines for academic assistance.

5. National Scheme of Incentives to Girls for Secondary Education (NSIGSE)

- **Launch**: May 2008, targeting girls from SC and ST communities.
- **Financial Incentive**: ₹3,000 deposited in a fixed deposit account for girls enrolling in class IX after completing class VIII.
- **Goal**: Promote school enrollment and reduce dropout rates, particularly among marginalized communities.

Conclusion

- **Significance of September 22**: A crucial reminder to celebrate daughters and advocate for their rights and empowerment.
- **Comprehensive Government Efforts**: Initiatives like the Sukanya Samriddhi Yojana and BBBP illustrate the commitment to creating an enabling environment for girls to thrive.
- **Collective Responsibility**: The need for society to invest in girls' futures to ensure equality, empowerment, and sustainable development.

7th Rashtriya Poshan Maah

Empowering Women through Nutrition

- **POSHAN Maah 2024**: A nationwide initiative promoting nutrition awareness, celebrating its 7th edition, focusing on combating malnutrition in India. The campaign commenced on **September 1, 2024**, with extensive community participation.

Focus Areas of POSHAN Maah 2024

1. **Anaemia Mukt Bharat**:
- Targets anaemia reduction through a **6x6x6 strategy** (six age groups, six interventions, six institutional mechanisms).
- Distribution of **180 IFA tablets** to 95% of pregnant and 65.9% of lactating women as of August 2024.
2. **Tech-Driven Solutions**:
- Utilization of the **POSHAN Tracker** for monitoring nutrition delivery to over **10 crore beneficiaries**.
3. **Complementary Feeding**:
- Emphasizes the importance of nutrition for infants aged 6-24 months, focusing on the initiation and quality of complementary foods.
4. **Jan Andolan**:
- Community-led activities to raise nutrition awareness across households.

Participation and Impact

- **Nationwide Engagement**: Over **22 crore activities** conducted so far, showcasing strong community involvement.

Top-Performing States:

- **Maharashtra**: 1.80 crore activities

- **Bihar**: 1.17 crore activities

- **Madhya Pradesh**: 79.32 lakh activities

- **Uttar Pradesh**: 70.28 lakh activities

- **Gujarat**: 66.76 lakh activities

Thematic Focus

- **Anaemia Prevention**: 1.88 crore activities aimed at raising awareness and intervention.

- **Growth Monitoring**: 1.68 crore activities for timely identification of undernutrition issues.

- **Complementary Feeding**: Addressed through 1.45 crore activities.

- **Education Integration (Poshan Bhi Padhai Bhi)**: 1.59 crore activities linking nutrition with education.

- **Technology in Governance**: 1.08 crore activities utilizing digital tools.

- **Environmental Protection**: 73.20 lakh activities focused on the link between nutrition and a healthy environment.

- **Nutrition-Specific Interventions**: 92.72 lakh activities promoting dietary diversity and healthy eating.

- **Mass Sensitization**: 54.25 lakh activities for broad-based awareness.

POSHAN Abhiyaan: Mission and Goals

- **Launched**: March 2018, aiming for holistic nourishment for children under six, adolescent girls, pregnant women, and lactating mothers.
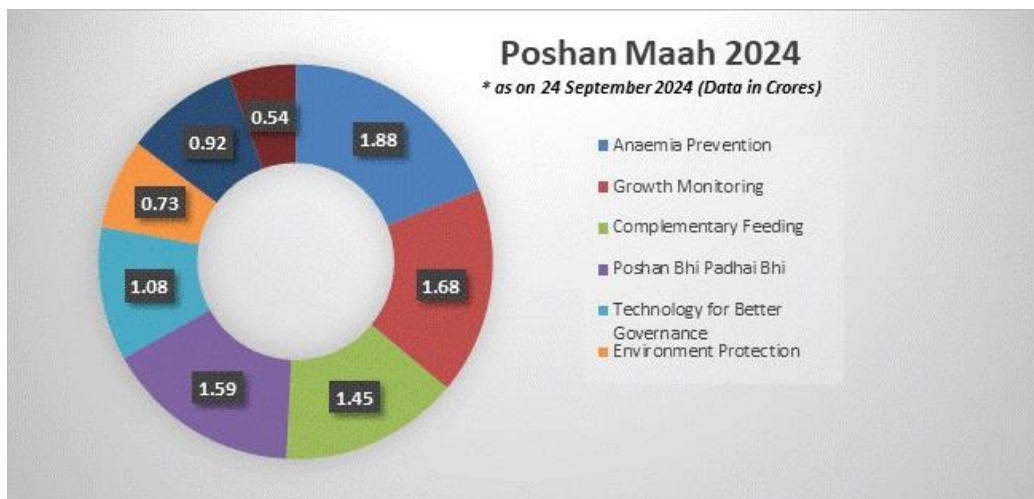
- **Targets**:

- Reduce stunting and under-nutrition by 2% annually.
- Combat anaemia and reduce low birth weight by 3% and 2% annually, respectively.

Strategic Pillars of POSHAN Abhiyaan

- **Access to Quality Services**: Health services through ICDS, NHM, and PMMVY.
- **Cross-Sectoral Convergence**: Collaboration among various ministries for integrated services.
- **Leveraging Technology**: Real-time data collection using tools like the **ICDS-CAS**.
- **Jan Andolan**: Engaging communities for mass awareness and behavioral change.

Technology Integration

- **POSHAN Tracker**: Launched in March 2021, aids Anganwadi workers in real-time monitoring of malnutrition data, accessible in multiple languages.
- **National Award for e-Governance**: Received for the POSHAN Tracker initiative, recognized for digital transformation and government process re-engineering.

Poshan Maah 2024
* as on 24 September 2024 (Data in Crores)

- Anaemia Prevention
- Growth Monitoring
- Complementary Feeding
- Poshan Bhi Padhai Bhi
- Technology for Better Governance
- Environment Protection

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Ayushman Bharat Digital Mission marks a Transformative Three-Year Journey towards enabling Digital Health

- **Launch Date**: September 27, 2021
- **Vision:** Establish a robust digital health infrastructure to enhance accessibility, efficiency, and transparency in India's healthcare ecosystem.

Background

- **National Health Policy (2017)**: Laid the groundwork for a wellness-centric approach and the integration of digital technologies in healthcare.
- **National Health Stack (2018)**: Introduced components like unique health identifiers and verified registries.
- **National Digital Health Blueprint (2019)**: Provided guidance for implementing the ABDM.

Key Features of ABDM

- **Unique Health Identifier (ABHA ID)**: Each citizen receives a unique ID for managing and accessing health records.
- **Healthcare Professionals Registry (HPR)**: A comprehensive database of healthcare professionals across various medical systems.
- **Health Facility Registries (HFR)**: Repository of health facilities, including public and private entities, such as hospitals and pharmacies.
- **Health Information Exchange and Consent Manager (HIE-CM)**: Enables secure access and sharing of health records with informed consent.
- **Unified Health Interface (UHI)**: Streamlines the discovery and delivery of health services, enhancing accessibility.
- **National Health Claims Exchange (NHCX)**: Standardizes insurance payments and expedites claims processing.
- **Data Privacy and Security**: Upholds confidentiality and privacy, adhering to

the Digital Personal Data Protection Act, 2023.

- **Interoperability**: Facilitates secure data exchange among stakeholders, enhancing seamless healthcare delivery.
- **Transparency**: Promotes informed choices regarding health services and ensures pricing transparency.

Key Initiatives

- **Scan and Share**: QR-code based OPD registration minimizes waiting times and reduces data entry errors, recording over **5 crore** OPD tokens.
- **Digital Health Incentive Scheme (DHIS)**: Financial incentives introduced to encourage adoption of ABDM, with potential earnings of up to ₹4 crores.
- **Microsites for Private Sector**: Operationalized **106 microsites** to assist private providers in ABDM adoption.
- **End-to-End ABDM Adoption Pilot**: Aimed at digitizing public and private healthcare facilities across India, with **131 selected facilities**as of September 2024.

Achievements

- Over **67 crore** Ayushman Bharat Health Accounts (ABHA) created.
- More than **42 crore** health records linked to ABHA.
- **236 private entities** integrated into the ABDM ecosystem, including leading healthcare chains and institutions.
- More than **3 lakh** facilities ABDM-enabled, with over **17,000 private facilities** participating.
- Registered **3 lakh health facilities**and **4.7 lakh healthcare professionals** through the National Healthcare Providers Registry (NHPR).

Moving Towards Transformation

- **Partnerships**: Collaborations with organizations like IIT Kanpur for AI in healthcare and Maharashtra University of Health Sciences for digital health education.

- **Training and Sensitization**: Initiatives to educate stakeholders on digital health practices, including a WhatsApp Chatbot for training.

- **Digital Health Standards**: NABH launched its first edition of Digital Health Standards for HIS/EMR Systems to promote technology adoption.

- **eSwasthya Dham Portal**: Integrated with ABDM to benefit Char Dham Yatris.

Future Vision

ABDM aims to create a seamless digital health ecosystem where every citizen can access their health records via a unique ABHA ID. This infrastructure facilitates better healthcare delivery by:

- Reducing registration queues and streamlining appointments.

- Providing **Clinical Decision Support Systems (CDSS)** for healthcare professionals to enhance decision-making and patient outcomes.

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ART & CULTURE

Prime Minister Shri Narendra Modi extends warm wishes on Nuakhai

About:

- Nuakhai Juhar is an **agricultural festival**, also called Nuakhai Parab or Nuakahi Bhetghat.

- It is celebrated to welcome the new crop of the season.

- **Nuakhai** is a combination of **two words** that signifies eating of **new rice** as 'nua' means new and 'khai' means eat.

- This is the festival of Western Odisha, southern Chhattisgarh and adjoining areas of **Simdega (Jharkhand).**

- Its coastal counterpart is **Nabanna,** observed in Coastal Odisha.

- It is observed on panchami tithi (the fifth day) of the lunar fortnight of the month of Bhadrapada (August–September), the day after the Ganesh Chaturthi festival.

- Lagan is the fixed time of the day to celebrate the festival.

Historical Background:

- It is believed to have been adopted from the tribal communities of western Odisha.
- As the preparations reveal elements of both **tribal origins and the Hindu rituals.**
- Nuakhai festival traces its origin to the Vedic period in One among them was *Pralambana yajna* which means the cutting of new crops and offering them to the mother goddess.
- **Oral tradition** of this festival dates back to the **12th century A.D.** when this festival was celebrated by **Chauvan Raja Ramai Deo,** Bolangir district of Odisha.

Rituals and Celebrations

- **Prayers and Offerings:** The day begins with families offering prayers to Maa Samaleswari and seeking her blessings for a good harvest in the upcoming agricultural season.
- **Ritualistic Bath:** People take a ritualistic bath and wear new clothes to mark the auspicious occasion.
- **Nabanna:** The main ritual involves offering the first sheaf of newly harvested paddy to the deity. This is called **"Nabanna" or "Navanna."**
- **Feasting:** After offering Nabanna, families prepare a special feast consisting of various traditional dishes made from the newly harvested rice and other seasonal crops.
- **Music and Dance:** Cultural programs, folk dances, and traditional music are an integral part of the celebrations. People come together to sing and dance, showcasing the rich cultural heritage of the region.

Keralites shrug of Wayanad gloom, celebrate Onam with food, fun and frolic

- In Thiruvananthapuram, the historic Kanakakunnu Palace and its sprawling, leafy grounds emerged as the epicentre of flashy and modern Onam celebrations, marked by music concerts, dances, light and sound shows and folk-art performances.

Onam

- Itis the biggest and the most important **festival of the state of Kerala**.
- It is a harvest festival, celebrated in the **beginning of the month of Chingam**, the first month of the Malayalam Calendar (Kollavarsham).
- The Onam lasts **from four to ten days. First day, Atham and tenth day, Thiruonam**are the most important of all.

What Does the Word Onam Mean?

The word Onam comes from the Sanskrit word shravanam. It is related to the constellations or Nakshatras. In the culture of South India, Thiru is associated with Lord Vishnu. People believe that Nakshatra of Lord Vishnu is the Thiruvonam. He used his foot to push King Mahabali to the underworld.

Story behind Onam celebration:

- **King Mahabali**, a wise ruler of Kerala, was renowned for his prosperous and egalitarian rule. **Lord Vishnu**, concerned about Mahabali's growing popularity**, tested his humility**in the form of a dwarf Brahmin, **Vamana.**
- Despite his immense generosity, Vamana grew to cover the earth and heavens, leading to Mahabali's selfless offer of his head.
- Impressed by Mahabali's devotion, **Lord Vishnu granted him an annual visit to his kingdom, celebrated as Onam.**

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Celebration:

- Onam is celebrated by making Pookkalam(the flower rangolis).

- Other rituals are also performed which includes-Vallam Kali(the boat races), Pulikali (the tiger dances), Kummattikali (mask dances), Onathallu (martial arts), among others.

- The main attraction is the traditional Onam sadhya(grand feast).

Harappan civilisation: enigma remains even after 100 years of exploration

- On September 20, 1924, The Illustrated London News published an article by John Marshall, then Director-General of the Archaeological Survey of India (ASI), announcing the discovery of the Indus Valley Civilization, later known as the Harappan Civilization.

- The discovery filled a historical gap regarding settled life in South Asia, previously believed to have begun around the 6th century BCE. The Harappan Civilization dates back to around **3200 BCE**, pushing back the timeline of urbanization by over 3,000 years.

Indus Valley Civilization

- The history of India begins with the birth of the Indus Valley Civilization (IVC), also known as Harappan Civilization.

- It flourished around 2,500 BC, in the western part of South Asia, in contemporary Pakistan and Western India.

- The Indus Valley was home to the largest of the four ancient urban civilizations of Egypt, Mesopotamia, India and China.

- In 1920s, the Archaeological Department of India carried out excavations in the

Indus valley wherein the ruins of the two old cities, viz. Mohenjodaro and Harappa were unearthed.

- In 1924, John Marshall, Director-General of the ASI, announced the discovery of a new civilisation in the Indus valley to the world.

Phases of IVC

- The **Early Harappan Phase** from 3300 to 2600 BCE,

- The **Mature Harappan Phase** from 2600 to 1900 BCE, and

- The **Late Harappan Phase** from 1900 to 1300 BCE.
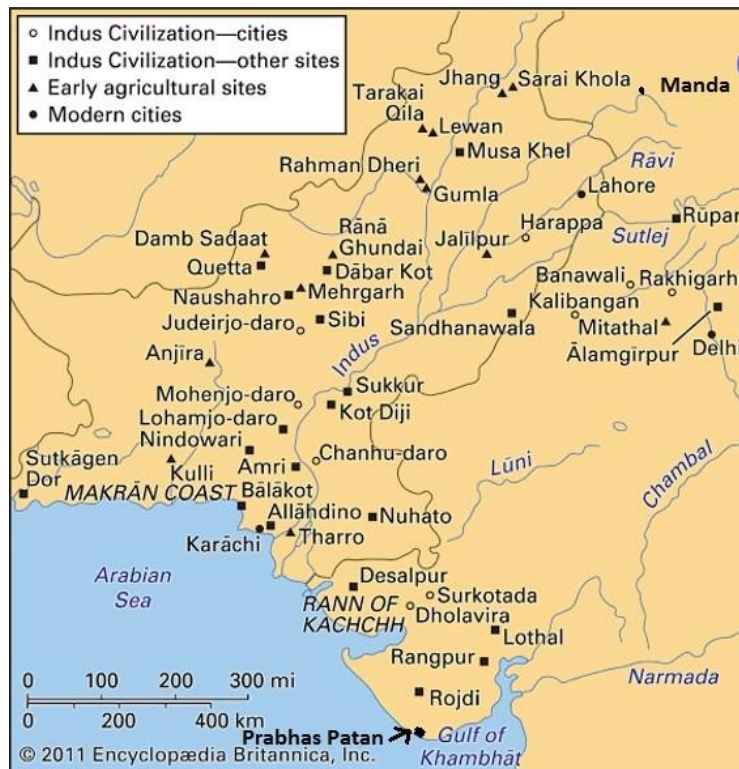
Other Important Sites of IVC

Ropar (on Sutlej river)- evidence of Dog burial with Human

Banwali (Ghaggar river)- evidence of largest Barley grain, radial street, clay model of plough

Kot Diji (Indus)- Pre-Harappan site, largest stone tools

Surkotada- evidence of Pot burial

Alamgirpur (Hindon river)- late Harappan culture

Sutkagendor (Dasht River)

Manda (Chenab river, J&K)

Rangpur (Madar river, Guj)- yellow and grey colour pot of pre-Harappan people found

Alladinho (Indus river)

Amri (Indus River)- Pre-Harappan Site

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TOWN PLANNING AND STRUCTURES

- The towns were in a rectangular grid patternwith roads at right angles.
- Used burnt mud bricksjoined with gypsum mortar (contemporary Egypt dried bricks were used).
- The city was divided in two parts, the city on raised platform, Known as Uppercitadel & the lower town known as lower citadel (working class quarters)
- Most buildings have private wells and properly ventilated bathrooms.
- Do not have large monumental structures such as temples or palacesfor rulers unlike Egyptian and Mesopotamian Civilisation.
- Advanced drainage

Agriculture

- Wheat, barley, rai, peas, sesame, lentil, chickpea and mustard were produced. Millets are also found from sites in Gujarat. While rice uses were relatively rare.
- The Indus people were the earliest people to produce cotton.
- Representations on seals and terracotta sculpture indicate that the bull was known, and archaeologists extrapolate shows oxen were also used for ploughing.
- Traces of canal shave been found at the Harappan site of Shortughai in Afghanistan, but not in Punjab or Sindh.
- Although the Harappans practised agriculture, animals were also reared on a large scale.
- Evidence of the horse comes from a superficial level of Mohenjodaro and from a doubtful terracotta figurine from Lothal. In any case the Harappan culture was not horse centred.

Art:

BRONZE CASTING:

- Practiced on a wide scale using the 'lost wax' technique or **Cire Perdue**.
- They mainly consist of human and animal figures. Example: 'Dancing Girl'.She stands in a 'tribhanga' dancing posture.

STONE STATUES:

- **Bearded man**– (found in Mohenjo-daro and made of Steatite), interpreted as a priest
- **Red sandstone**– figure of a male torso (found in Harappa and made of Red sandstone).

TERRACOTTA FIGURES

- Found are less in number and crude in shape and form. Examples: **Mother Goddess**, mask of horned deity, toys, etc

Economy

- The importance of trade in the life of the Indus people is witnessed by the presence of numerous seals, uniform script and regulated weights and measuresin a wide area.
- The Harappans carried on considerable trade in stone, metal, shell**,**
- Metal money was not used and trade was carried by barter system.
- They practised navigation on the coast of the Arabian Sea.
- They had set up a trading colony in northern Afghanistanwhich evidently facilitated trade with Central Asia.
- They also carried commerce with those in the land of the Tigris and the Euphrates.

- The Harappans carried on long distance trade in lapis lazuli; which may have contributed to the social prestige of the ruling class.

Decline of the Indus Valley Civilization

- The IVC declined around 1800 BCE but the actual reasons behind its demise are still debated.
- One theory claims that Indo-European tribe i.e. Aryans invaded and conquered the IVC.
- In later cultures various elements of the IVC are found which suggest that civilization did not disappear suddenly due to an invasion.
- On the other hand, many scholars believe natural factors are behind the decline of the IVC.
- The natural factors could be geological and climatic.
- It is believed that the Indus Valley region experienced several tectonic disturbanceswhich causes earthquakes. Which also changed courses of rivers or dried them up.
- Another natural reason might be changes in patterns of rainfall.
- There could be also dramatic shifts in the river courses,which might have brought floods to the food producing areas.
- Due to combinationof these natural causes there was a slow but inevitable collapse of IVC.

Kalari practitioners held a protest by performing 'Kalaripayattu,' a martial art of Kerala, on the streets.

- The protest was held against the alleged discriminatory practices against the practitioners of the martial art by the Kerala Sports Council.

Kalarippayattu:

- The word "Kalari" means "battlefield" in Sanskrit. Kalaripayattu, like most Indian martial systems, incorporates Hindu ceremonies and ideas.
- With a history extending over 3,000 years, it is said to be India''s oldest surviving combat art.
- Kalaripayattu is a martial art based on ancient human body knowledge.
- It began in Kerala in the 3rd century BC and continued till the 2nd century AD. It is presently practiced in portions of Kerala and Tamil Nadu.
- A "**Kalari**" is the location where this martial art is practiced. It is a Malayalam term that refers to a gymnasium of some sort. Kalari means "**threshing floor**" **or** "**battlefield**" in Greek.
- The Tamil Sangam literature first uses the word Kalari to designate both a battlefield and a fighting arena.
- It is also known as the "**Father of Modern Kung Fu**."
- Kalaripayattu incorporates elements from the yoga tradition as well as finger movements from nata dances.

Key features of Kalaripayattu:

- **Emphasis on physical fitness**: Kalaripayattu is a very demanding physical artform that requires a high level of fitness.
- Training includes exercises to improve strength, flexibility, and agility.
- **Use of weapons**: Kalaripayattu training includes the use of a variety of weapons, including swords, daggers, spears, maces, and bows and arrows**.**

- **Spiritual focus**: Kalaripayattu is a highly spiritual art form that emphasizes the development of the mind, body, and spirit.
- Training includes meditation, yoga, and other spiritual practices.

There are mainly two main styles of Kalarippayattu:

1. **Vadakkan (Nothern style)** – The Vadakkan Kalarippayattu is predominantly practised in the Malabar region of Kerala. The Vadakkan style emphasizes more on graceful body movement and weaponry.

2. **Thekken (Southern Style)** – The Thekken Kalarippayattu or Adi Murai is practised mainly in the Travancore region, this style involves more free armed techniques & powerful movements.

Ministry of Tourism Launches Paryatan Mitra and Paryatan Didi – A National Responsible Tourism Initiative

- **Objective**: To promote responsible tourism and enhance the tourist experience by training locals to act as ambassadors and storytellers of their destinations.

Vision and Goals

- **Alignment with PM''s Vision**: The initiative is rooted in the Prime Minister''s vision of using tourism for social inclusion, employment, and economic development.

- **Focus on Local Engagement**: Aims to create a welcoming environment for tourists through well-trained local individuals who can share stories and insights about their destinations.

Pilot Locations

The initiative was piloted in six tourist destinations:

1. **Orchha, Madhya Pradesh**
2. **Gandikota, Andhra Pradesh**

3. **Bodh Gaya, Bihar**

4. **Aizawl, Mizoram**

5. **Jodhpur, Rajasthan**

6. **Sri Vijaya Puram, Andaman & Nicobar Islands**

Training and Capacity Building

- **Target Audience**: Training was provided to a wide range of stakeholders, including:

1. Cab and auto drivers

2. Railway, airport, and bus station staff

3. Hotel and restaurant workers

4. Homestay owners

5. Tour guides and street vendors

6. Local students and shopkeepers

- **Training Content**:

1. Importance of tourism and hospitality

2. General cleanliness and safety protocols

3. Sustainable tourism practices

4. Local history and hidden tourism gems

5. Creation of unique tourism experiences (e.g., heritage walks, food tours).

Special Emphasis on Women and Youth

- **Empowerment Through Training**: A significant focus on training women and youth to foster new tourism products and experiences, enhancing their employability in the tourism sector.

- **Innovative Products**: Encouraging locals to develop experiences that reflect

their culture and environment, such as:

1. Food and cuisine experiences
2. Cultural and nature treks
3. Craft tours and homestays.

Digital Literacy and Marketing

- **Incorporating Technology**: Training also includes digital literacy to ensure that local experiences can be effectively marketed to a national and global audience.

Training Outcomes

- **Participation**: As of now, around **3,000 individuals** have been trained in the pilot destinations.
- **Community Engagement**: Increased enthusiasm among locals to participate in tourism training programs, integrating them into the tourism ecosystem.

Future Plans and Recognition

- **Expansion**: The initiative will be launched across **50 additional tourist destinations**.
- **Recognition System**: Introduction of dedicated badges for Paryatan Mitra and Paryatan Didi to assure tourists of quality experiences when engaging with trained locals.

Significance of the Initiative

- **Tourism Development**: Supports sustainable tourism development and enhances local economies by creating job opportunities.
- **Cultural Preservation**: Empowers communities to preserve and share their cultural heritage.
- **Positive Tourist Experience**: Aims to ensure that every interaction between tourists and locals contributes to a memorable travel experience.

FACTS FOR PRELIMS

President Droupadi Murmu to confer National Teachers Award 2024 to 82 teachers in New Delhi

- The Department of School Education and Literacy has selected 50 teachers for this year's National Teachers' Awards.

- The 50 selected teachers are from 28 States, three Union Territories and six Organizations.

- In addition, 16 teachers from the Department of Higher Education and 16 teachers from the **Ministry of Skill Development and Entrepreneurship** will also be awarded.

- Each award carries a certificate of merit, a cash award of 50 thousand rupees and a silver medal.

Why is Teacher's Day Celebrated in India?

- Teachers' Day is celebrated every year, since 1962, on September 5, to recognise and celebrate the works of educators including teachers, researchers and professors in India.

- After Dr Sarvepalli Radhakrishnan took charge as the President of India in 1962, some students sought permission from him to celebrate his birthday. Dr Radhakrishnan, however, did not approve any fancy celebration but rather requested that the day be observed as Teachers'' Day.

Dr Sarvepalli Radhakrishnan

Early Life and Education

- **Birth and Family**: Born on September 5, 1888, in Tiruttani, Tamil Nadu, into a
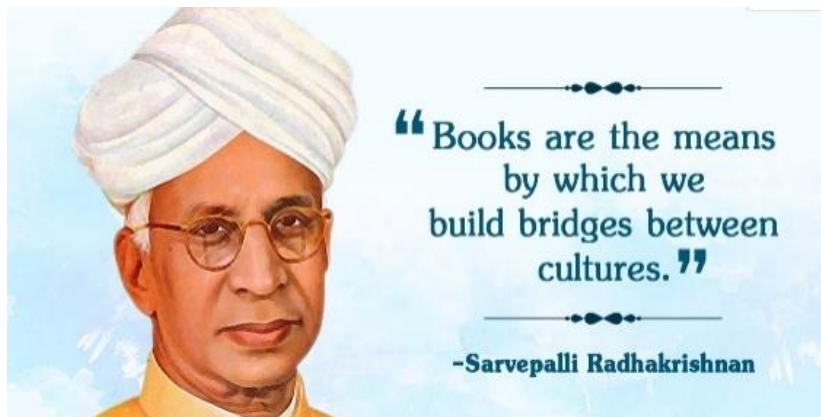
Telugu-speaking family.

- **Education**: Studied at the Voorhees College, Vellore, and later at the Presidency College, Chennai, where he excelled in philosophy. He completed his Master's degree in philosophy in 1909, with a focus on Western and Eastern philosophy.

Academic and Philosophical Contributions

- **Philosophical Works**: Radhakrishnan was known for his profound works in Indian philosophy.

Some of his notable books include:

- "The Philosophy of the Upanishads" (1923): An exposition of the philosophical ideas found in the Upanishads, which are central to Hindu philosophy.
- "Indian Philosophy" (1923 and 1927): This two-volume work is a comprehensive study of Indian philosophical systems.
- "The Hindu View of Life" (1926): This book presents Hindu philosophy in a way that addresses contemporary issues and offers a modern interpretation.
- **Philosophy**: His philosophy bridged Eastern and Western thought. He was known for his interpretation of Vedanta and his emphasis on the unity of religion and philosophy.

" Books are the means by which we build bridges between cultures. "

–Sarvepalli Radhakrishnan

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Political and Administrative Roles

- **Constituent Assembly**: Radhakrishnan was a member of the Constituent Assembly of India, where he contributed to the framing of the Indian Constitution.

- **First Vice-President (1952-1962)**: He was the first Vice-President of India, serving under President Rajendra Prasad. His tenure as Vice-President was notable for his contributions to the Indian parliamentary system.

- **Second President (1962-1967)**: Radhakrishnan became the President of India in 1962, succeeding Dr. Rajendra Prasad. His presidency is remembered for his commitment to social justice and educational reforms. He was known for his scholarly approach to the presidency and his efforts to promote national unity.

Awards and Honors

- Radhakrishnan received several awards during his lifetime, including a knighthood in 1931, the Bharat Ratna (India"s highest civilian award) in 1954, and honorary membership in the British Royal Order of Merit in 1963.

- He was also awarded the Templeton Prize in 1975, shortly before his death.

Last date of submission of nomination for the Pradhan Mantri Rashtriya Bal Puraskar is 15th September, 2024

- The Ministry of Women & Child Development organises Pradhan Mantri Rashtriya Bal Purashkar (PMRBP) every year to celebrate the energy, determination, ability, zeal and enthusiasm of our children.

Pradhan Mantri Rashtriya Bal Puraskar:

- The Pradhan Mantri Rashtriya Bal Puraskar (PMRBP) awards are a prestigious

recognition of exceptional abilities and outstanding achievements in Indian children aged 5-18.

- These awards celebrate the diverse talents and contributions of young minds across the nation, inspiring others and fostering a sense of national pride.

Seven Categories of Excellence

1. **Bravery:** For acts of exceptional courage and selflessness.
2. **Art & Culture:** For outstanding contributions in the fields of music, dance, visual arts, literature, and other cultural pursuits.
3. **Environment:** For remarkable efforts in environmental conservation and sustainability.
4. **Innovation:** For groundbreaking inventions and creative solutions to challenges.
5. **Science & Technology:** For exceptional achievements in scientific research and technological development.
6. **Social Service:** For selfless dedication to social welfare and community development.
7. **Sports:** For exceptional athletic accomplishments and sportsmanship.

Background:

- The Government of India has been conferring awards to children for their exceptional achievements.
- The **awards for child welfare were also conferred, to individuals as well as institutions.**
- These awards were given in the following categories:
- National Child Award for Exceptional Achievements - since 1996.
- National Child Welfare Award (Individual) - since 1979.

- National Child Welfare Award (Institution) - since 1979.

- Rajiv Gandhi Manav Sewa Award - since 1994.

- Since 2017-18, these Awards were given under the following categories:

- **Bal Shakti Puraskar** (Earlier known as National Child Award).

- **Bal Kalyan Puraskar [Individual & Institution]** (Earlier known as National Child Welfare Award).

- From the year 2022 onwards, Bal Kalyan Puraskar (both Individual and Institution) has been closed and Bal Shakti Puraskar has been subsumed under Pradhan Mantri Rashtriya Bal Puraskar.

Eligibility:

- A child who is an Indian Citizen and is a resident of India.

- A Child above the age of 5 years and not exceeding 18 years (as on 31st July of respective year).

- The act/incident/achievement should have been within 2 years of the last date of receipt of application/nomination for the year of consideration.

President of India presents National Florence Nightingale Awards 2024

- A total of 15 awards are given in the category of **Registered Auxiliary Nurses & Midwife**, Registered Nurses and Midwife, and Registered Lady Visitor.

National Florence Nightingale Award:

Establishment:

- The National Florence Nightingale Awards were instituted in the year **1973** by the Indian government.

- Each award consists of a Certificate of Merit, Cash Award of Rs.1,00,000/- and

a medal.

Aim:

- The primary objective of these awards is to acknowledge and appreciate the remarkable work of nurses across India. The awards encourage and motivate nurses to continue their dedicated service and strive for excellence in patient care.

Recognition:

- The National Florence Nightingale Awards are considered one of the highest honors in the nursing profession in India. They highlight the significant role nurses play in the healthcare system and recognize their selfless commitment to saving lives and promoting well-being.

Eligibility

- The award is given to outstanding Nursing personnel employed in Central, State/UTs, Private, Missionary and Voluntary Organizations.
- Apart from the Nursing Personnel working in the State, Central, Autonomous institutions, the Nursing Personnel working in Private, Missionary and Voluntary Organizations are also eligible for the National Florence Nightingale Nurses Award and their application may also be forwarded after considering it in State Level Selection Committee in accordance with the laid down procedure, subject to their fulfilling the requirements.

Florence Nightingale:

- She was a British nurse, statistician, and social reformer who was the foundational philosopher of modern nursing.
- Nightingale was put in charge of nursing British and allied soldiers in Turkey during the **Crimean War.**
- She spent many hours in the wards, and her night rounds giving personal care to the wounded established her image as the **"Lady with the Lamp."**
- Her efforts to formalize nursing education led her to establish the first scientifically based nursing school—the Nightingale School of Nursing, in London.
- International Nurses Day, observed annually on **May 12**, commemorates her birth and celebrates the important role of nurses in health care.

Prime Minister Shri Narendra Modi remembers Swami Vivekanand on 132nd anniversary of Chicago speech

- Shri Modi said that Vivekananda introduced India's ages old message of unity, peace, and brotherhood, which continue to inspire generations.

Swami Vivekananda

- Influenced by **Western esotericism**, he was a key figure in introduction of Indian *darsanas* (teachings, practices) of Vedanta and Yoga to the Western world, and is credited with raising interfaith awareness, bringing Hinduism to the status of a major world religion during the late 19th century.
- In India, Vivekananda is regarded as a patriotic saint, and his birthday, 12th January is celebrated as National Youth Day.
- **Universal Brotherhood Day** is observed on 11 September, on the day when Vivekananda delivered his first speech at the Parliament of the **World"s Religions Chicago in 1893** and addressed the American people and his audience as "Sisters and brothers of America".
- Netaji Subhas Chandra Bose had called Vivekananda the **"maker of modern India."**

Contributions in national movement

- **National consciousness:** Though Vivekananda never gave any political message, through his speeches and writings he infused the youth with a sense of pride in India"s past and faith in India"s future thereby contributing to the concept of nationalism in colonial India.

Societal contributions

- **Represented Hinduism:** In 1893, Swami Vivekananda leapt into fame at the Parliament of Religions held at Chicago and stressed on the need for a healthy balance between spiritualism and materialism.
- **Neo-Hinduism:** He envisaged a new culture for the whole world where the

materialism of the West and the spiritualism of the East would be harmoniously blended to produce happiness for mankind.

- **For vulnerable sections:** He denounced the socials evils prevalent in Hindu society of the time including caste system, rituals and superstition. He attacked the tacit approval to the oppression of the poor by the rich.

- **Ramakrishna Mission (1897):** To achieve its objective, the Mission opened various charitable schools, hospitals, orphanages, libraries, etc., in different parts of the country.

Intellectual contributions

- **Literary works:** Vivekananda blended humour with his teachings, and his language was lucid. His Bengali writings testify to his belief that words (spoken or written) should clarify ideas, rather than demonstrating the speaker (or writer"s) knowledge. Example: **Sangeet Kalpataru (1887), Karma Yoga (1896),** etc
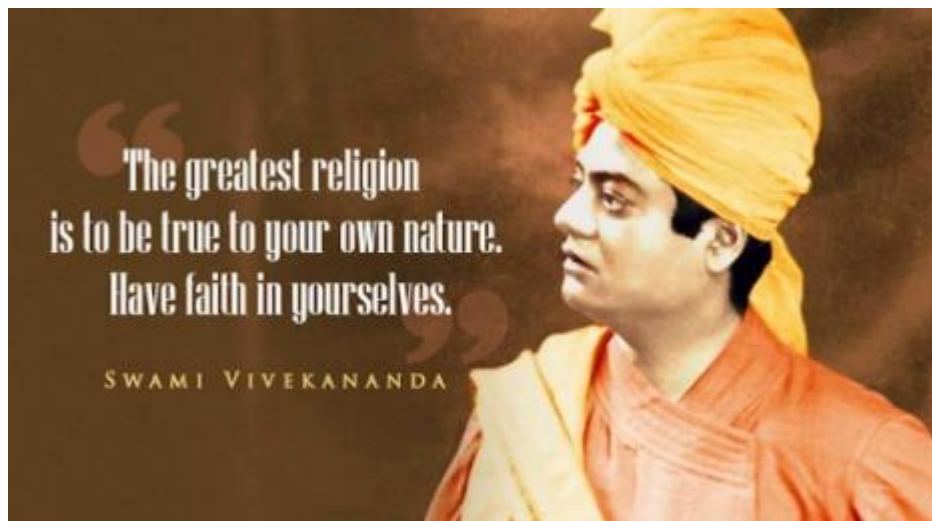
The Chicago Speech

- On **September 11, 1893**, Swami Vivekananda addressed the Parliament of the

World''s Religions.

- **His opening words "Sisters and Brothers of America" received a standing ovation and set the tone for his speech**.

Key points from his address include:

- **Universal Tolerance:** Vivekananda emphasized the importance of tolerance and acceptance of all religions, emphasizing that all paths lead to the same truth.
- **Hinduism''s Acceptance of Diversity:** He spoke about how Hinduism embraces diversity in beliefs and practices and highlighted the Hindu concept of **"Ekam Sat Vipra Bahudha Vadanti,"** which means "Truth is one, the wise call it by various names."
- **Yoga and Meditation:** Vivekananda introduced the Western audience to the concept of yoga and meditation as tools for spiritual growth and self-realization.
- **Interconnectedness of All Religions:** He emphasized that all religions are different paths to the same God and encouraged people to see the commonalities between them.

Impact

- Swami Vivekananda''s Chicago speech had a profound impact on both the Western and Indian worlds:
- It brought attention to Hinduism and Indian spirituality, paving the way for the Western interest in yoga, meditation, and Eastern philosophy.
- Vivekananda''s message of religious tolerance and universal acceptance remains relevant in today''s multicultural world.

His teachings inspired the formation of the Vedanta Society and the Ramakrishna Mission, which continue to promote his ideals and serve humanity.

Union Home Minister Amit Shah greets all technocrats on Engineers' Day

- He also paid homage to visionary engineer Bharat Ratna, Sir M Visvesvaraya, whose enduring legacy will inspire engineers as they forge Bharat's future.

National Engineers Day

- National Engineers Day, celebrated every year on September 15th in India, honors the remarkable contributions of engineers to society.

- This day is a tribute to the legendary engineer Sir Mokshagundam Visvesvaraya, whose birth anniversary is commemorated through this occasion.

- Engineers are instrumental in driving technological advancements, infrastructure development, and innovation, making this day a reminder of their essential role in the nation"s growth and progress.

Theme: "Innovating for a Sustainable Future"

Significance of National Engineer's Day

- **Acknowledgment of Contributions:** It recognizes the vital role engineers play in shaping technology, infrastructure, and progress in society.

- **Inspiration for Future Engineers:** The day serves as a source of inspiration for aspiring engineers, highlighting the impact of innovation and dedication in the field.

- **Promotion of Engineering Excellence:** It emphasizes the importance of engineering excellence and the need for continued advancement and innovation.

- **Commemoration of Visionary Leadership:** By honoring Sir Visvesvaraya, it celebrates visionary leadership and the transformative projects that drive

national development.

- **Awareness and Education:**The day helps in raising awareness about the engineering profession and its contributions to economic and social development.

Mokshagundam Visvesvaraya

- Born in Karnataka in 1861,he studied Bachelor of Arts (BA) from the University of Mysore and then studied civil engineering from the College of Science in Pune and went on to become one of the most eminent engineers in the country.
- He was anengineering pioneer of India whose genius reflected in harnessing of water resources and building and consolidation of dams across the country.
- He served as the Chief Engineer of Mysore State in 1909 and as the Diwan of the princely state of Mysore in 1912, a position he held for seven years.
- He was knighted as a Knight Commanderof the British Indian Empire by King George V for his contributions to the public good in
- He was an Engineer who had planned the Indian Economy in 1934.
- He was awarded an Honorary Membership ofLondon Institution of Civil Engineers for an unbroken 50 years.
- He was conferred India"s highest honour, the Bharat Ratnain 1955.
- Hedied in 1962 in Bengaluru, Karnataka.

Books Written by him:

- Reconstructing India
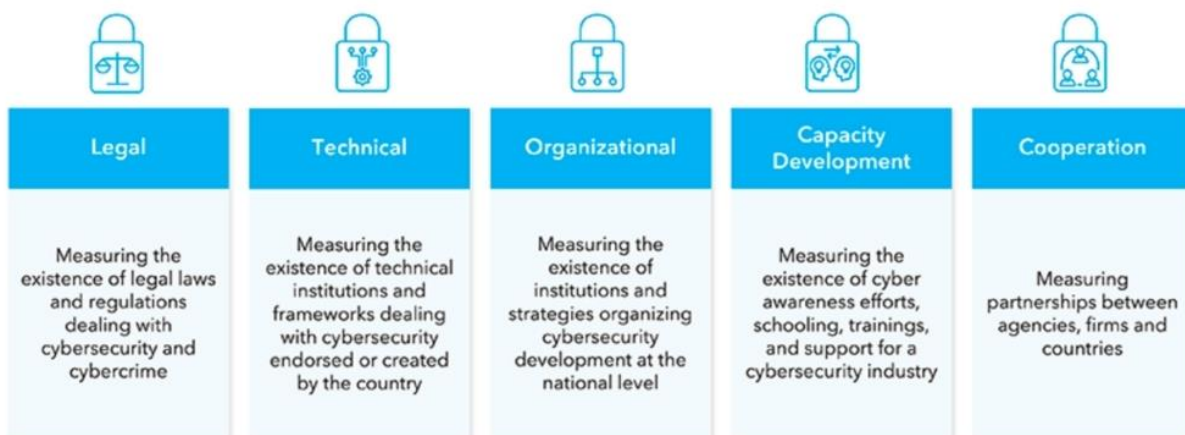- Planned Economy of India

India Achieves Tier 1 Status in Global Cybersecurity Index 2024

- With a remarkable score of 98.49 out of 100, India joins the ranks of 'role-modelling' countries
- India's high score signifies robust legal, technical, and organisational measures, alongside international cooperation and education initiatives promoting cyber resilience.

Measures which boost India's Performance

- According to the GCI 2024 report, India excelled in the legal pillar, establishing a robust framework of laws and regulations to govern cybersecurity.
- The Information Technology Act (2000) and its amendments hold significant weight in this regard, outlining measures to combat cybercrime, protect critical infrastructure, and ensure data privacy.
- Additionally, the passage of the Digital Personal Data Protection Bill (2022) further strengthens India's legal framework, providing enhanced safeguards for citizen data.

5 pillars for measuring the commitment of countries to cybersecurity

Legal	Technical	Organizational	Capacity Development	Cooperation
Measuring the existence of legal laws and regulations dealing with cybersecurity and cybercrime	Measuring the existence of technical institutions and frameworks dealing with cybersecurity endorsed or created by the country	Measuring the existence of institutions and strategies organizing cybersecurity development at the national level	Measuring the existence of cyber awareness efforts, schooling, trainings, and support for a cybersecurity industry	Measuring partnerships between agencies, firms and countries

Global Cyber Security Index

- It was launched by the **International Telecommunication Union** in the year 2015.

- The purpose of this index is to help countries identify areas of improvement in the context of cyber security and to encourage countries to work towards capacity and capability building.

- This index measures the commitment of different countries to raise awareness about the importance of cyber security and its various dimensions at the global level.

45th Chess Olympiad

India's men's and women's teams have made history by winning their first-ever gold medals at the 45th Chess Olympiad in Budapest

- This was the second time a country won gold in both sections since Soviet times (China also achieved this feat in 2018)

Chess Olympiad:

- It is organised by **FIDE(International Chess Federation)**

- 45th Chess Olympiad took place in **Budapest, Hungary**

    o Nations also win trophies: Top Open team winning the **Hamilton-Russell Cup**

    o The top Women's team winning : **Vera Menchik Cup**

    o Best combined classification in the Open and Women's sections: **Nona Gaprindashvili trophy.**

Sign Language Day celebrations in New Delhi

Theme for the Sign Language Day-2024 is 'Sign up for Sign Language Rights'

Key Launches

- **2500 ISL Terms**: Expansion of the ISL dictionary in collaboration with four organizations, covering subjects like mathematics, science, philosophy, and accessibility.

- **100 Concept Videos**: Educational videos in ISL for hearing-impaired children (class 6) across various subjects, focusing on clarity and inclusivity.

- **ISL Dictionary in 10 Languages**: Promotes accessibility and linguistic diversity.

- **Educational Animated Videos**: Designed to instill moral values and enhance learning experiences for hearing-impaired children.

- **Deaf Role Model Videos**: To inspire and motivate hearing-impaired children by showcasing role models from the deaf community.

Competitions

- **7th Indian Sign Language Competition**: A national-level competition showcasing creativity among students with hearing disabilities, with awards presented during the event.

Sign Language Day

- International Day of Sign Languages is an annual event that promotes the linguistic and cultural diversity of deaf communities around the world.

- In 2017, the United Nations General Assembly proclaimed 23rd September as the official day to celebrate the **International Day of Sign Languages.**

- It is an opportunity to raise awareness of the importance of sign languages in the lives of deaf communities and the need to protect them as an essential part of human diversity.

- Millions of people around the world use sign language as their primary means of communication.

- They are complex visual-gestural communication systems with their own grammar and syntax.

Sign Language: A Unique Language of Expression and Inclusion

- Sign language is a natural and visual-gestural language used by Deaf and hard of hearing individuals as well as those with communication disorders to convey messages, thoughts, and emotions.
- It is a rich and complex form of communication that relies on a combination of handshapes, movements, facial expressions, and body language.
- Sign languages are not universal; different countries and regions have their own distinct sign languages.
- According to the **World Federation of the Deaf**, there are over 70 million deaf people in the world. More than 80% of them live in underdeveloped countries. They collectively use more than 300 different sign languages.

The Importance of Sign Languages

- **A Vital Means of Communication:** Sign languages are natural visual-gestural languages used by deaf and hard of hearing people to communicate with each other and with hearing individuals. They are complete and complex languages with their own grammar, vocabulary, and syntax.
- **Promoting Inclusivity:** Sign languages play a crucial role in breaking down communication barriers and promoting inclusivity. They enable deaf individuals to participate fully in society, education, and various aspects of life.
- **Cultural Identity:** Sign languages are not just tools for communication; they also form an integral part of the cultural identity of the deaf community. Celebrating these languages acknowledges and respects the diversity of deaf cultures around the world.

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Haifa Day celebrated in the national capital

- Indian Soldiers, who were part of World War I in 1918 from the British Indian Army fought the battle of Haifa.
- The battle was a decisive victory for the Indian soldiers, who defeated the **Ottoman Empire** and their German allies.

Battle of Hafia (1918):

- Occurred on **23rd September 1918**, it was a crucial part of the **Sinai and Palestine Campaign** of the First World War.
- The Indian 15th (Imperial Service) Cavalry Brigade, consisting of Rajput, Sikh, and other Indian soldiers, played a decisive role, leading to the capture of Haifa and Acre from the Ottoman Empire.

Background:

- The **5th Cavalry Division**, including regiments from **Jodhpur, Mysore, and Hyderabad**, was assigned to capture Haifa and Acre.
- The division was part of the **Desert Mounted Corps** and was crucial for the **Egyptian Expeditionary Force"s advances**.

The Battle:

- The Battle of Haifa was fought between the **allied forces** and the **Ottoman Empire**, with **Indian soldiers** playing a significant role.
- The **Jodhpur Lancers and the Mysore Lancers** executed strategic attacks, capturing **1,350 German and Ottoman prisoners** and several artillery guns and machine guns.
- The regiments incurred casualties, including **eight dead** and **34 wounded**, and several horses were killed or injured.

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Aftermath:

- The subsequent capture of **Acre** solidified the success of the allied forces in the region.

- Major Dalpat Singh of the Jodhpur Lancers was posthumously awarded the Military Cross.

- The battle is a significant chapter in military history, especially for the role of Indian soldiers, and is commemorated as **Haifa Day**.

Significance:

- The Battle of Haifa is a testament to the valour of Indian soldiers, including **Sikhs and Rajputs**, in global conflicts.

- It highlights India''s contributions during the **First World War.**

Prime Minister pays tributes to Pandit Deendayal Upadhyaya on his birth anniversary

Pandit Deendayal Upadhyaya

- Born in Mathura, UP in 1916, Deendayal Upadhyay is an Indian politician.
- He was one of the most important leaders of the **Bharatiya Jana Sangh**, the forerunner of the present day Bharatiya Janata Party.
- He qualified the civil services examination, where he got his nickname as **Panditji** for appearing in the examination hall wearing traditional dhoti-kurta and cap.
- He however did not join the service, but became in 1942, a life-time volunteer of the **Rashtriya Swayamsevak Sangh** (RSS).
- However, Upadhyaya is seen to have played a larger role in India's thought process and political life, transcending party lines.

His key philosophies

Integral humanism

- Deendayal Upadhyay is best remembered for his principle of "**integral humanism**" which is defined as "**a classless, casteless and conflict-free social order**".
- It talks about the integration of indigenous "**Indian culture**" with the social, political and economic fabric of the nation.
- It provides for a holistic idea of human welfare.
- It envisions a synthesis of materialism, spiritualism and cautious desire, as each have a role in achieving happiness.
- And that an economic index cannot be the sole measure of satisfaction or happiness.

Bharat

- He wanted to **decolonise** Indian political thought as he felt that the Indian intellect was getting suffocated by Western theories.

- This, he believed, left a roadblock to the growth and expansion of the original Bharatiya.

- He did welcome modern technology but wanted it to be adapted to suit the Indian requirements.

Polity

- He visualised for India a **decentralised polity and self-reliant economy** with the village as the base.

- He spoke against caste polarisation and identity-based voting.

- He wanted people to do their duty while exercising their franchise **"in a judicious and intelligent manner".**

Welfare

- He strongly argued against the left-right division as being detrimental to the growth of a constructive, transformative pro-people ideology.

- He strongly believed that politics must be controlled by the masses, and not the wealthy.

- He thus cautioned that Neoliberalism could challenge democracy, and emphasized that people''s welfare should not be compromised for corporate interests.

- He was particular that powerful lobbies should not emerge in the country's legislatures and political decisions.

- He pleaded for diversities in economic and social philosophies against a **single meta-narrative** ruling the world or a nation.

- Many of Upadhyay''s principles thus find more relevance today than in his own time.

Major Schemes in his name

- **Deendayal Antyodaya Yojana (DAY)**- integrating the NULM and NRLM for alleviating poverty.

- **Deendayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) Antyodaya Diwas**- to diversify the incomes of rural poor families and to cater to the career aspirations of rural youth.

- **Deendayal Upadhyaya Gram Jyoti Yojana**- to provide electricity to rural homes.

- **Pandit Deendayal Upadhyaya Shramev Jayate Karyakram**- to create a conducive environment for industrial development primarily through skill training.

- **Deendayal Upadhyaya Swaniyojan Yojana (DUSY)**- the rural version of the Start Up India scheme.

Prime Minister Shri Narendra Modi remembers Shaheed Bhagat Singh on his birth anniversary

Bhagat Singh

- **Born**: He was born on 27 September 1907 in the village of **Banga** in the Lyallpur district of today's Pakistan Punjab.

- **Parents**: He was the second son of Kishan Singh Sandhu and Vidya Vati.

- **Education**: He studied at the **Dayanand Anglo-Vedic School** in Lahore and in 1923, joined Lala Lajpat Rai's **National College** in Lahore.

- **Political Exposure**: His father and uncle were active in progressive politics, taking part in the agitation **Canal Colonization Bill agitation** in 1907, and also the **Ghadar Movement**.

- **Influence**: Shaheed Bhagat Singh was deeply influenced by **British atrocities**,

especially the killing of innocents in the **Jallianwala Bagh massacre**.

Role in Freedom Struggle:

- In 1923, Bhagat Singh joined the **National College, Lahore** which was founded and managed by Lala Lajpat Rai and Bhai Parmanand.

- The **College was set up as an alternative to the institutions** run by the Government, bringing to the field of education the idea of Swadeshi.

- In 1924 in Kanpur, he became a member of the **Hindustan Republican Association**, started by **Sachindranath Sanyal** a year earlier. The main organiser of the Association was **Chandra Shekhar Azad** and Bhagat Singh became very close to him.

- It was as a member of the HRA that Bhagat Singh began to take seriously the **Philosophy of the Bomb**.

- Armed revolution was understood to be the only weapon with which to **fight British imperialism.**

- In 1925, **Bhagat Singh returned to Lahore** and within the next year he and his colleagues started a militant youth organisation called the **Naujawan Bharat Sabha.**

- In April 1926,**Bhagat Singh established contact with Sohan Singh Josh** and through him the "**Workers and Peasants Party**" which brought out the monthly magazine **Kirti in Punjabi.**

- For the next year **Bhagat Singh worked with Josh** and joined the editorial board of Kirti.
  - In 1927, he was first arrested on charges of association with the **Kakori Case,** accused for an article written under the pseudonym Vidrohi (Rebel).
  - In 1928, Bhagat Singh changed the name of the Hindustan Republican

Association to the Hindustan Socialist Republican Association (HSRA).

- In 1930, when Azad was shot, the HSRA collapsed.

- **Naujawan Bharat Sabha** replaced **HSRA in Punjab.**

- To take **revenge for the death of Lala Lajpat Rai,** Bhagat Singh and his associates plotted the assassination of **James A. Scott,** the Superintendent of Police. However, the revolutionaries **mistakenly killed J.P. Saunders.** The incident is famously known as **Lahore Conspiracy case (1929).**

- In 1928, Lala Lajpat Rai had led a procession to protest against the arrival of the Simon Commission. The police resorted to a brutal lathi charge, in which Lala Lajpat Rai was severely injured and later succumbed to his injuries.

- Bhagat Singh and B.K. Dutt **threw a bomb** on 8th April, 1929 in the **Central Legislative Assembly,** in protest against the passing of two repressive bills, the Public Safety Bill and the Trade Dispute Bill.

- The aim, as their leaflet explained, was not to kill but to make the deaf hear, and to remind the foreign government of its callous exploitation.

- Both Bhagat Singh and B.K. Dutt surrendered thereafter and faced trial so they could further promote their cause. They were awarded life imprisonment for this incident.

- However, Bhagat Singh was **re-arrested for the murder of J.P. Saunders** and bomb manufacturing in the Lahore Conspiracy case. He was found guilty in this case and was hanged on **23rd March, 1931** in Lahore along with Sukhdev and Rajguru.

- Every year, **23rdMarch is observed as Martyrs' Day** as a tribute to freedom fighters Bhagat Singh, Sukhdev, and Rajguru.

Shaheed Bhagat Singh: Exploring His Literary Legacy and Ethical Insights

- **Literature**: Shaheed Bhagat Singh wrote an essay entitled "**Why I Am an**

Atheist" to address the question of his religious belief, during his time in Lahore jail.

- Some of His writings have been compiled and published as books.

Famous Quotes:

- "Revolution is an inalienable right of mankind. Freedom is an imperishable birthright of all. Labour is the real sustainer of society".

- "Bombs and pistols do not make a revolution. The sword of revolution is sharpened on the whetting stone of ideas".

Quotes from Ethical Perspective:

- "A man's duty is to try and endeavor; success depends upon chance and environment".

- "Merciless criticism and independent thinking are the two necessary traits of revolutionary thinking."

- "The aim of life is no more to control the mind, but to develop it harmoniously; not to achieve salvation hereafter, but to make the best use of it here below."

- "I am a man and all that affects mankind concerns me."