

Civils Shot 2025

" Current Affairs Simplified, Concepts Amplified "



DECEMBER 2024 CURRENT AFFAIRS NOTES

"Your One-Stop Destination for
Comprehensive **UPSC Current Affairs** !



<https://t.me/civilshubias10>
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KEY FEATURES

1. **All Sources, One PDF - The Hindu, The Indian Express, Live Mint, PIB + Top Coaching Magazines - Everything at One Place**
2. **Static Linkage Masterstroke** - Every Topic is linked with **Forward + Backward with Static Concepts**, Real Gamechanger for preparation
3. **Smart Prioritisation** - Articles are categorised into High, Moderate & Least Priority - "**Study What Matters, Skip What Doesn't**".
4. **Crisp + Filtered Content** - Only **35-45 pages/month** by extracting what's truly Relevant from Newspapers, Magazines, and Reports
5. **Table Format for Quick Revision** - No long Paragraphs, Just, "**What + Why in News + Static Linkage + Priority Tag**".
6. **Only Smart Learning, No Daily Note-Making**, - No Running After Any Other Magazine, PDF, or Source, Just **Civils Shot 2025**.

Revise Your Current Affairs Notes 10x Faster!

- Focuses only on What can be Asked.
- Saves time by eliminating Low-Relevance News.
- Enhances Retention through Smart Prioritisation.
- Provides a ready-to-use roadmap for Current-Affairs

NOTE :

- Civils Shot 2025 adopts Comprehensive **Prelims Trend Analysis** to optimise current affairs preparation.
- **Data-Driven Insights: Past 10+ years' papers analysed for subject-wise trends, allowing aspirants to focus on high-priority subjects first.**
- With **360° Dynamic + Static Integration**, each topic is linked to forward and backward static concepts, ensuring in-depth understanding.
- **Notes-making:** Not recommended, as the magazine is already very concise.

About Topic Prioritization

By analysing 10+ years of UPSC Prelims papers, topics are categorised into High, Moderate, and Low Priority.

High Priority Topics

- These are the most crucial topics with a high likelihood of being directly questioned in the UPSC CSE Prelims 2025.
- A thorough and comprehensive preparation of these topics is highly recommended.

Moderate Priority Topics

- These topics are also important and may appear in the UPSC Prelims 2025.
- It is essential to allocate focused attention to these areas as well.

Less Priority Topics

- These topics hold relatively lesser importance but may still be referenced indirectly in answers or appear in indirect questions.
- Some attention to these topics will be beneficial for comprehensive preparation.

HOW TO USE THIS MAGAZINE ?

Revise the Magazine at least 5 times before the Prelims to ensure maximum retention and Conceptual Clarity.

STAGE	FOCUS AREA	APPROACH
1st Reading & 1st Revision	Read the entire magazine thoroughly.	Gain a Comprehensive Understanding of all Topics.
2nd to 4th Revision	Prioritize high and moderate-priority topics.	Revise key concepts, strengthen retention, and practice MCQ's.
5th Revision (Final Week Before Prelims)	Focus solely on high-priority topics.	Quick and focused revision to reinforce important areas.

TABLE OF CONTENTS

Polity & Governance 1-5

Economy 5 - 9

Environment 10 - 17

Science & Tech 17 - 22

International Relations 22- 26

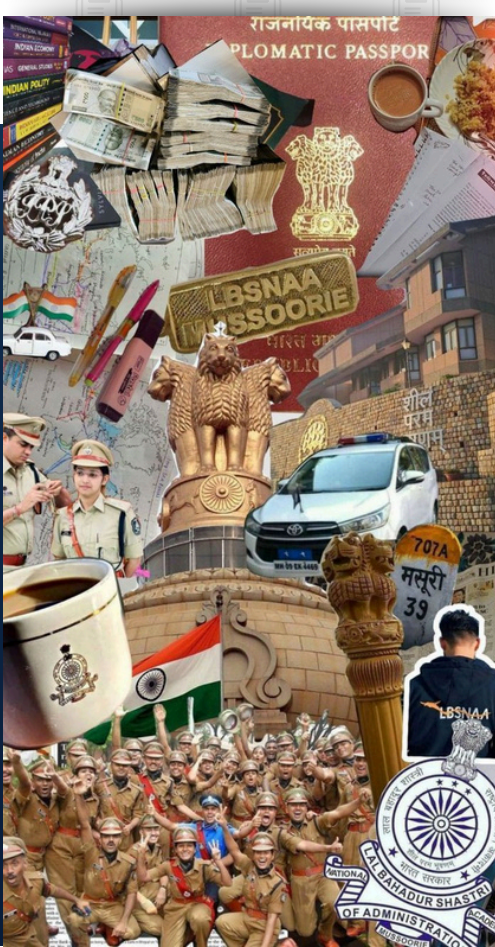
Art & Culture 26- 30

Schemes 30 - 34

Indices and Reports 35 - 37

Defence 37-38

Health 38-39





Topic	Description
Mercy Petition	<p>Constitutional Provisions:</p> <ul style="list-style-type: none"> • Article 72: The President has the power to grant pardons, commute sentences, remit, suspend, or relieve punishments in cases related to the Union list. • Article 161: The Governor has similar powers for cases under the State list. <p>Legal Framework:</p> <ul style="list-style-type: none"> • The Indian Penal Code (IPC) and Code of Criminal Procedure (CrPC) outline provisions related to sentence commutation and remission. • Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023, Section 472(1), governs mercy petitions and sentence commutations. <p>Key Judicial Decisions:</p> <ul style="list-style-type: none"> • Maru Ram vs. Union of India (1981): The President must act on the advice of the Council of Ministers, and the power is not discretionary. • Kehar Singh vs. Union of India (1989): The President has the authority to review mercy petitions even after a court's final verdict. • Epuru Sudhakar Case (2006): The Supreme Court ruled that the President's clemency power is subject to judicial review if exercised arbitrarily.
Scheduled Caste Norms	<ul style="list-style-type: none"> • The term "Scheduled Caste" was introduced during the Simon Commission (1927) and later formalized in the Government of India Act, 1935. • Defined under Article 366(24) of the Indian Constitution. • Article 341: The President, in consultation with the Governor, notifies Scheduled Castes for each state and union territory. • National Commission for Scheduled Castes (NCSC): Established under Article 338, given constitutional status in 2004. <p>Reservations & Protection:</p> <ul style="list-style-type: none"> • Article 334: Provides for SC reservations in legislatures. • Article 335: Ensures consideration of SC representation in government services. • Directive Principles (Article 46): Directs the state to promote educational and economic interests of SCs. <p>Terminology:</p> <ul style="list-style-type: none"> • Mahatma Gandhi referred to them as "Harijans". • Dr. B.R. Ambedkar used the term "Depressed Classes".
'No Detention' Policy	<ul style="list-style-type: none"> • Introduced under the Right to Education (RTE) Act, 2009, which prohibited failing students in Classes 1-8. • Abolished in 2019 due to concerns over declining learning outcomes. • National Curriculum Framework (NCF) 2023 delayed full implementation. • RTE Amendment Rules 2024: Allow states to fail students in Classes 5 & 8, subject to re-examinations. • Education is a State subject, leading to variations in implementation (e.g., Delhi has completely scrapped the policy).
Right to Education (RTE) Act, 2009	<ul style="list-style-type: none"> • Free and Compulsory Education: <ul style="list-style-type: none"> ○ No child can be denied admission or charged fees in government and aided schools. ○ Private schools must reserve 25% of seats for Economically Weaker Sections (EWS) and Disadvantaged Groups (DG) (Section 12(1)(c)). • Infrastructure & Teacher Norms: <ul style="list-style-type: none"> ○ Minimum teacher-student ratio as per National Council for Teacher Education (NCTE) norms. ○ Schools must have drinking water, toilets, and playgrounds. • Curriculum and Learning Outcomes: <ul style="list-style-type: none"> ○ No board exams up to Class 8 (abolished No Detention Policy in 2019). ○ Continuous and Comprehensive Evaluation (CCE) to assess students. • Prohibition of Discrimination: <ul style="list-style-type: none"> ○ No physical punishment or mental harassment. ○ No screening tests for admissions.

	<ul style="list-style-type: none"> • Amendments & Developments: • RTE (Amendment) Act, 2019: <ul style="list-style-type: none"> ○ Removed the "No Detention Policy", allowing states to fail students in Classes 5 & 8 after a re-exam. • RTE (Amendment) Rules, 2024: <ul style="list-style-type: none"> ○ Strengthens assessment criteria and grants states flexibility in implementation.
Oilfields (Regulation and Development) Amendment Bill, 2024	<ul style="list-style-type: none"> • Passed in Rajya Sabha, amends the Oilfields (Regulation and Development) Act, 1948. • Expands the definition of "mineral oils" to include hydrocarbons, coal bed methane, shale gas, and shale oil. <p>Key changes:</p> <ul style="list-style-type: none"> • Replaces the term "mining lease" with "petroleum lease". • Petroleum and Natural Gas Regulatory Board (PNGRB) Tribunal will handle appeals. • Excludes coal, lignite, and helium, which are governed under the Mines and Minerals (Development and Regulation) Act, 1957.
Article 67(b) or Removal of Rajya Sabha Chairman (Vice President)	<ul style="list-style-type: none"> • Vice President of India is the ex-officio Chairman of Rajya Sabha. <p>Removal process (Article 67(b)):</p> <ul style="list-style-type: none"> • Majority resolution in Rajya Sabha. • Must be agreed upon by Lok Sabha. • Requires 14 days' prior notice before moving the resolution. • No specific grounds for removal mentioned in the Constitution. <p>Comparative analysis:</p> <ul style="list-style-type: none"> • Unlike the President (Article 61), who is removed through impeachment for violation of the Constitution, the Vice President can be removed through a simpler majority process.
Food Safety and Standards Authority of India (FSSAI)	<ul style="list-style-type: none"> • Established under: Food Safety and Standards Act, 2006. • Objective: Unifies various food safety laws under one framework. <p>Regulatory Body:</p> <ul style="list-style-type: none"> • Chairperson: Rank equivalent to Secretary, Government of India. • Functions under the Ministry of Health & Family Welfare. • Headquarters: New Delhi. <p>Key Functions:</p> <ul style="list-style-type: none"> • Lays down scientific food safety standards. • Regulates food manufacturing, storage, distribution, sale, and import. • Ensures consumer awareness and safety. <p>Major Initiatives:</p> <ul style="list-style-type: none"> • Eat Right India – Promotes healthy food habits. • RUCO (Repurpose Used Cooking Oil) – Converts used oil into biodiesel. • Food Safety Mitra – Trains food handlers for better compliance. • State Food Safety Index (SFSI) – Ranks states based on food safety performance. <p>Recent Developments:</p> <ul style="list-style-type: none"> • Fortification of staple foods (e.g., rice, wheat, salt) to tackle malnutrition. • Stricter food labeling and advertisement regulations.
Advisory for e-Commerce Food Business Operators	<ul style="list-style-type: none"> • Issued by Food Safety and Standards Authority of India (FSSAI) for online food safety compliance. <p>Key provisions:</p> <ul style="list-style-type: none"> • Mandatory compliance with Food Safety and Standards (Labelling and Display) Regulations, 2020. • Minimum 30% shelf life must be available at the time of delivery. • For imported food items: At least 45 days before expiry during delivery. • Ensures consumer safety and prevents expired/low-quality food sales online.
High Risk Food Category	<ul style="list-style-type: none"> • Defined under FSSAI regulations for strict safety protocols. • Includes perishable and microbiologically sensitive food items: <ul style="list-style-type: none"> • Dairy products, meat, seafood, eggs. • Infant food, ready-to-eat food, and raw vegetables/fruits. • Mandatory risk-based inspections for public health protection
Overseas Citizen of India (OCI)	<ul style="list-style-type: none"> • Introduced in 2005, later merged with Person of Indian Origin (PIO) in 2015. <p>Eligibility Criteria:</p> <ul style="list-style-type: none"> • Person of Indian origin after 1950. • Born in territories that became part of India after 1947. • Descendants of Indian citizens (except Pakistan & Bangladesh). • Foreign spouses of Indian citizens/OCI cardholders (must be married for 2+ years). <p>Benefits:</p>

	<ul style="list-style-type: none"> • Lifelong visa-free travel to India. • Par with NRIs in economic/financial sectors (except agricultural land ownership and adoption rights). <p>Restrictions:</p> <ul style="list-style-type: none"> • No voting rights or constitutional posts (President, VP, Governor, etc.). • Cannot work in government jobs or defense services. • No representation in Legislature (MP, MLA, MLC, etc.).
Ministry of Ayush	<ul style="list-style-type: none"> • Founded in 2014 (earlier the Department of Indian Medicine and Homeopathy, 1995). • AYUSH Systems: Ayurveda, Yoga, Unani, Siddha, Homeopathy, and Naturopathy. <p>Key objectives:</p> <ul style="list-style-type: none"> • Promotes traditional medicine and holistic healthcare. • Supports Universal Health Coverage (UHC) and Sustainable Development Goals (SDGs). • Integrates AYUSH with modern medicine for primary healthcare. <p>Major Initiatives:</p> <ul style="list-style-type: none"> • National AYUSH Mission (NAM) – Strengthening AYUSH healthcare. • WHO Global Centre for Traditional Medicine (GCTM) in Jamnagar, Gujarat (established in 2022). • Ayushman Bharat Digital Mission (ABDM) Integration for digital health records. • International Yoga Day (June 21) – Recognized by the UN in 2014.

★★ Moderate Priority Topics

Topic	Details
National Investigation Agency (NIA)	<ul style="list-style-type: none"> • Established: Post 26/11 Mumbai attacks under the NIA Act, 2008. • Objective: Dedicated counter-terrorism agency under the Ministry of Home Affairs (MHA). • Headquarters: New Delhi. • Jurisdiction: Operates across India and has powers to investigate international terrorism cases with central government approval. <p>Key Functions:</p> <ul style="list-style-type: none"> ○ Investigates terrorism, terror financing, fake currency (FICN), cyber crimes, and organized crime linked to national security. ○ Works with Financial Intelligence Unit (FIU-IND) and NTRO for data surveillance. ○ Nodal agency for terror funding cases in India. <p>Key Initiative:</p> <ul style="list-style-type: none"> ○ National Terrorism Data Fusion & Analytics Centre (NTDFAC): Uses big data analytics for tracking terror activities. <p>Recent Expansion (NIA Act Amendment, 2019):</p> <ul style="list-style-type: none"> ○ Jurisdiction extended beyond India for investigating crimes committed against Indian interests globally. ○ Can probe human trafficking, cyber-terrorism, counterfeit currency, and organized crime.
Railways (Amendment) Bill, 2024	<ul style="list-style-type: none"> • Passed in Lok Sabha to modernize railway governance. • Repeals: The Indian Railway Board Act, 1905. • Integration: Merges Railway Board functions into The Railways Act, 1989 for a streamlined framework. <p>Key Changes:</p> <ul style="list-style-type: none"> • Enhances Central Government's power over railway administration. • Removes colonial-era regulatory inefficiencies. • Improves decision-making for railway modernization.
Boilers Bill, 2024	<ul style="list-style-type: none"> • Passed in Rajya Sabha (December 2024). • Replaces: The Boilers Act, 1923 to align with modern safety standards. • Linked to: Jan Vishwas Act, 2023, which aims to decriminalize minor offenses. <p>Key Features:</p> <ul style="list-style-type: none"> • Establishes Central Boilers Board for uniform safety standards. • Allows third-party inspections apart from state authorities. • Boilers under the Concurrent List, ensuring both Central and State regulation.

<p>National Rainfed Area Authority (NRAA)</p>	<ul style="list-style-type: none"> • Established: 2006 under the Ministry of Agriculture & Farmers' Welfare. <p>Objective:</p> <ul style="list-style-type: none"> ○ Sustainable development of rainfed agriculture in India. ○ Enhances water-use efficiency, soil conservation, and climate resilience in non-irrigated regions. <ul style="list-style-type: none"> • Chairperson: Union Minister of Agriculture. • Headquarters: New Delhi. <p>Key Functions:</p> <ul style="list-style-type: none"> ○ Provides technical support for watershed development programs. ○ Works with NITI Aayog & states to promote agroforestry, mixed cropping, and drought-resistant crops. ○ Supports MGNREGA, PMKSY (Per Drop More Crop), & National Mission for Sustainable Agriculture (NMSA). <p>Significance:</p> <ul style="list-style-type: none"> ○ Covers 55% of India's net sown area under rainfed conditions. ○ Reduces dependency on monsoon by promoting water conservation techniques.
<p>The Banking Laws (Amendment) Bill, 2024</p>	<ul style="list-style-type: none"> • Passed in Lok Sabha to modernize India's banking sector. <p>Amends:</p> <ul style="list-style-type: none"> • Reserve Bank of India (RBI) Act, 1934. • Banking Regulation Act, 1949. • State Bank of India (SBI) Act, 1955. <p>Key Changes:</p> <ul style="list-style-type: none"> • Strengthens RBI's regulatory powers over private and public sector banks. • Improves corporate governance in banks to reduce fraud risks. • Facilitates bank mergers & recapitalization. • Aligns banking laws with digital banking & fintech innovations.
<p>Amendment to Approved Models and Manufacturers of Solar Photovoltaic Modules (ALMM) Order, 2019</p>	<ul style="list-style-type: none"> • Issued by: Ministry of New & Renewable Energy (MNRE). • Effective from: June 2026. • Objective: Strengthen domestic solar PV manufacturing and reduce import dependence. <p>Key Changes:</p> <ul style="list-style-type: none"> • ALMM List-II introduced: <ul style="list-style-type: none"> ○ Mandatory for government-backed projects, net-metering, & open-access solar installations. • Boosts Make in India Initiative: Supports domestic solar panel manufacturers. • Ensures quality control for solar modules used in India.
<p>Bharatiya Vayuyan Vidheyak (BVV), 2024</p>	<ul style="list-style-type: none"> • (Indian Aviation Bill, 2024) • Replaces: Aircraft Act, 1934 to modernize India's civil aviation laws. • Passed in: Lok Sabha & Rajya Sabha, awaiting presidential assent. <p>Key Provisions:</p> <ul style="list-style-type: none"> • Regulatory Authorities Established: <ul style="list-style-type: none"> ○ Directorate General of Civil Aviation (DGCA): Regulates aviation safety & licensing. ○ Bureau of Civil Aviation Security (BCAS): Handles airport & airline security. ○ Aircraft Accident Investigation Bureau (AAIB): Investigates air accidents & safety lapses. • New Regulatory Powers: <ul style="list-style-type: none"> ○ Simplifies aircraft registration, licensing, and safety compliance. ○ Expands jurisdiction to cover drones, UAVs, air taxis, and future air mobility solutions. • Transfer of Wireless Licensing: <ul style="list-style-type: none"> ○ Radio Telephony Restricted (RTR) certification shifted from Department of Telecommunications (DoT) to DGCA. ○ Eases communication licensing for pilots & air traffic controllers.

 **Least Priority Topics**

Topic	Details
<p>Merchant Shipping Bill, 2024</p>	<ul style="list-style-type: none"> • Introduced by: Ministry of Ports, Shipping, and Waterways in Lok Sabha. • Repeals & Replaces: Merchant Shipping Act, 1958 for modernized maritime regulations. • Establishes: National Shipping Board as a regulatory and advisory body. <p>Ensures Compliance With:</p>

	<ul style="list-style-type: none"> • MARPOL (Marine Pollution Convention) – Pollution control measures. • Anti-Fouling Convention – Prevents toxic coatings on ship hulls. • ILO Maritime Labour Convention – Seafarer rights & working conditions.
Coastal Shipping Bill, 2024	<ul style="list-style-type: none"> • Introduced by: Ministry of Ports, Shipping, and Waterways. • Objective: To promote coastal trade along India's 7500 km coastline. <p>Key Provisions:</p> <ul style="list-style-type: none"> • Prohibits foreign vessels from engaging in Indian coastal trade without a license. • Introduces a National Coastal and Inland Shipping Plan for infrastructure development. • Encourages green shipping and fuel-efficient vessels.
Right to Disconnect	<ul style="list-style-type: none"> • Concept: Employees are not legally obligated to respond to employers after work hours. • Protection from: Disciplinary action, penalties, or forced availability beyond office hours. <p>Global Precedents:</p> <ul style="list-style-type: none"> • France (2017), Italy, Spain, Belgium – Legalized the right to disconnect. • India: No dedicated law yet, but discussions continue in labor reforms
National Council for Vocational Education and Training (NCVET)	<ul style="list-style-type: none"> • Established: 2018 (Operational from 2020) • Under: Ministry of Skill Development and Entrepreneurship (MSDE) • Objective: Regulates vocational education and training standards in India. <p>Functions:</p> <ul style="list-style-type: none"> • Recognizes Awarding Bodies (institutions providing vocational certifications). • Recognizes Assessment Agencies (conducting skill assessments & certification). • Ensures quality standards & uniformity in vocational training. • Aligns skill development with National Skill Qualification Framework (NSQF).
Corporate Average Fuel Efficiency (I) Norms	<ul style="list-style-type: none"> • Introduced: 2017 under Energy Conservation Act, 2001. • Objective: Reduce CO₂ emissions & fuel consumption by vehicles. • Regulates: Fuel consumption based on vehicle kerb weight (average weight of a vehicle without passengers/cargo). • Implemented by: Bureau of Energy Efficiency (BEE) & Ministry of Power. <p>Phase-wise Targets:</p> <ul style="list-style-type: none"> • Phase-I (2017-2022): Fuel efficiency targets for passenger vehicles. • Phase-II (2022-2027): Stricter CO₂ emission limits (as per BS-VI norms). • Linked to: Bharat Stage (BS-VI) norms, Electric Vehicle (EV) promotion.

ECONOMICS & AGRICULTURE



Topic	Details
MFN Clause in Double Taxation Avoidance Agreement (DTAA)	<ul style="list-style-type: none"> • Most Favored Nation (MFN) Principle: A World Trade Organization (WTO) principle ensuring that trade partners receive equal benefits, including lowest tariffs and highest quotas. • Legal Basis: Codified in General Agreement on Tariffs and Trade (GATT), General Agreement on Trade in Services (GATS), and TRIPS (Trade-Related Aspects of Intellectual Property Rights). <p>India's MFN Status:</p> <ul style="list-style-type: none"> • India grants MFN status to 164 WTO members since 1995. • Suspended for Pakistan in 2019 after Pulwama attack. • No formal process exists in WTO to suspend MFN unilaterally. <p>MFN in DTAA:</p> <ul style="list-style-type: none"> • Applied to tax treaties, ensuring equal tax treatment for countries. • MFN clauses in India's DTAA with France, Netherlands, Switzerland, etc. provide automatic extension of favorable tax rates. • India's 2021 clarification: Benefits under MFN clause require separate notification
UPI-Based Credit Lines of SFBs	<ul style="list-style-type: none"> • Regulated by: Reserve Bank of India (RBI). • Permits: Small Finance Banks (SFBs) to offer pre-sanctioned credit lines via UPI (Unified Payments Interface). <p>How It Works:</p> <ul style="list-style-type: none"> • Customers can make UPI payments from pre-approved credit lines instead of bank balances.

	<ul style="list-style-type: none"> • Transactions occur only with customer consent. • Facilitates instant access to short-term credit for MSMEs, individuals. 										
UPI Lite	<ul style="list-style-type: none"> • Launched by: National Payments Corporation of India (NPCI). • Purpose: Enables low-value transactions without involving real-time core banking systems. Features: <ul style="list-style-type: none"> • Works offline for small payments (up to ₹500 per transaction). • Faster, more secure, and reduces banking network load. • No need for PIN authentication for UPI Lite transactions. 										
First Offshore Mining Auction	<ul style="list-style-type: none"> • Launched for: 13 mineral blocks in India's Exclusive Economic Zone (EEZ) (up to 200 nautical miles). • Potential Area: 6 lakh sq. km identified by the Geological Survey of India (GSI). Key Initiatives & Framework: <ul style="list-style-type: none"> • Offshore Areas Mineral (Development & Regulation) Act, 2002 – Governs seabed mining. • Deep Ocean Mission – Focus on deep-sea resource exploration. • Samudrayaan Mission & Matsya 6000 Submersible – India's first deep-sea manned mission. • International Seabed Authority (ISA) & India's 2016 ISA Allotment – India has rights over 75,000 sq. km in the Central Indian Ocean for polymetallic nodules 										
GDP Base Year Revision	<ul style="list-style-type: none"> • Led by: 26-member Advisory Committee on National Accounts Statistics (NAS). • New Base Year: 2022-23 (Current: 2011-12). Process: <ul style="list-style-type: none"> • Updates GDP calculations to reflect current economic structure. • Aligns with inflation indices, industrial & service sector data. • Uses data from Periodic Labour Force Survey (PLFS), MCA-21, Economic Census. Previous Revisions: <ul style="list-style-type: none"> • 2015: Changed from 2004-05 to 2011-12. • Earlier base years: 1999-2000, 1993-94, 1980-81, 1970-71. 										
Micro Insurance	<ul style="list-style-type: none"> • Objective: Provides low-cost insurance for economically vulnerable groups. • Coverage: Sum assured ≤ ₹2 lakh. Types of Micro Insurance: <ul style="list-style-type: none"> • Life Insurance: <ul style="list-style-type: none"> ○ PM Jeevan Jyoti Bima Yojana (PMJJBY) – Covers death risk. • Accident & Disability Insurance: <ul style="list-style-type: none"> ○ PM Suraksha Bima Yojana (PMSBY) – Covers accidental death/disability. • Health Insurance: <ul style="list-style-type: none"> ○ Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (PMJAY) – ₹5 lakh coverage for poor families. • Crop Insurance: <ul style="list-style-type: none"> ○ PM Fasal Bima Yojana (PMFBY) – Protects farmers against crop loss. 										
Insurance Regulatory and Development Authority India (IRDAI)	<ul style="list-style-type: none"> • Established: 1999 (under IRDA Act, 1999). • Regulates: Life, general, and health insurance sectors. • Objective: Protect policyholders' interests, promote insurance penetration. • HQ: Hyderabad. • Nodal Ministry: Ministry of Finance. Structure <table border="1" data-bbox="363 1534 1246 1758"> <thead> <tr> <th>Position</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Chairman</td> <td>1</td> </tr> <tr> <td>Whole-time Members</td> <td>5</td> </tr> <tr> <td>Part-time Members</td> <td>4</td> </tr> <tr> <td>Total Members</td> <td>10</td> </tr> </tbody> </table> Key Functions: <ul style="list-style-type: none"> • Regulating premium rates and insurance product approvals. • Licensing and monitoring insurance companies. • Ensuring policyholder protection through grievance redressal. • Regulating Foreign Direct Investment (FDI): <ul style="list-style-type: none"> ○ 74% FDI allowed (up from 49% in 2021). ○ Encouraging digital insurance and InsurTech innovations. 	Position	Number	Chairman	1	Whole-time Members	5	Part-time Members	4	Total Members	10
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<p>Cess and Surcharge</p>	<p>Cess</p> <ul style="list-style-type: none"> ○ Cess is a tax levied for a specific purpose, over and above the regular tax liability. ○ It is not a part of the divisible pool, meaning states do not get a share of cess collections. ○ Collected in the Consolidated Fund of India (CFI), but can only be used for the earmarked purpose. ○ Can be levied on both direct and indirect taxes. <p>Surcharge</p> <ul style="list-style-type: none"> ○ Surcharge is an additional charge on tax, levied on top of the existing tax liability. ○ Unlike cess, surcharge is NOT collected for a specific purpose—it becomes part of general government revenue. ○ It is not shared with states, as it remains with the Centre. ○ Applied on high-income individuals and corporates to ensure progressive taxation. 																								
<p>‘Tax Drag’ and ‘Marginal Tax Rate’</p>	<p>Tax Drag</p> <ul style="list-style-type: none"> ○ Definition: The reduction in investment returns due to taxation over time. ○ Occurs in: Capital gains, interest income, and dividends. <p>Factors affecting tax drag:</p> <ul style="list-style-type: none"> ○ Higher tax rates (e.g., 30% tax rate reduces returns more than 20%) ○ Longer investment duration (compounding effect of taxation) ○ Pre-tax return (higher returns = higher tax impact) <p>Example:</p> <ul style="list-style-type: none"> ○ ₹10,000 investment at 10% return per year for 10 years. ○ If taxed annually at 20%, the post-tax return is lower compared to tax-deferred growth. ○ Lesson: Tax-efficient investments (e.g., PPF, ELSS) minimize tax drag. <p>Marginal Tax Rate</p> <ul style="list-style-type: none"> ○ Definition: The tax rate applicable to the last rupee of taxable income. ○ Used in: Progressive taxation systems. ○ India’s Income Tax Slabs (for individuals, FY 2023-24) <table border="1" data-bbox="363 1003 1273 1279"> <thead> <tr> <th>Income Slab (₹)</th> <th>New Regime MTR</th> <th>Old Regime MTR</th> </tr> </thead> <tbody> <tr> <td>0 - 2.5L</td> <td>0%</td> <td>0%</td> </tr> <tr> <td>2.5L - 5L</td> <td>5%</td> <td>5%</td> </tr> <tr> <td>5L - 7.5L</td> <td>10%</td> <td>20%</td> </tr> <tr> <td>7.5L - 10L</td> <td>15%</td> <td>20%</td> </tr> <tr> <td>10L - 12.5L</td> <td>20%</td> <td>30%</td> </tr> <tr> <td>12.5L - 15L</td> <td>25%</td> <td>30%</td> </tr> <tr> <td>15L+</td> <td>30%</td> <td>30%</td> </tr> </tbody> </table>	Income Slab (₹)	New Regime MTR	Old Regime MTR	0 - 2.5L	0%	0%	2.5L - 5L	5%	5%	5L - 7.5L	10%	20%	7.5L - 10L	15%	20%	10L - 12.5L	20%	30%	12.5L - 15L	25%	30%	15L+	30%	30%
Income Slab (₹)	New Regime MTR	Old Regime MTR																							
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5L - 7.5L	10%	20%																							
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10L - 12.5L	20%	30%																							
12.5L - 15L	25%	30%																							
15L+	30%	30%																							
<p>Windfall Tax</p>	<ul style="list-style-type: none"> ○ A special tax on companies earning unexpectedly high profits due to external factors (e.g., war, supply chain shocks). <p>India’s Case (2022):</p> <ul style="list-style-type: none"> ○ Imposed on crude oil producers and refiners due to high oil prices. ○ First introduced July 1, 2022, revised periodically. ○ Purpose: Fund social welfare, control inflation. 																								
<p>Manganese</p>	<ul style="list-style-type: none"> • 5th most abundant metal on Earth. • Essential for: <ul style="list-style-type: none"> ○ Steel production (strengthens iron) ○ Renewable energy (solar panels, wind turbines) ○ EV batteries (Lithium-manganese oxide) <p>Top Global Producers (2023)</p> <table border="1" data-bbox="363 1682 1401 1982"> <thead> <tr> <th>Country</th> <th>% of World Output</th> </tr> </thead> <tbody> <tr> <td>South Africa</td> <td>30%</td> </tr> <tr> <td>Australia</td> <td>15%</td> </tr> </tbody> </table>	Country	% of World Output	South Africa	30%	Australia	15%																		
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South Africa	30%																								
Australia	15%																								

	China	12%												
	India's Scenario <ul style="list-style-type: none"> ○ Leading Producer: Odisha (44%) ○ Other states: Madhya Pradesh, Karnataka, Maharashtra ○ Major PSU: MOIL (Manganese Ore India Ltd.) 													
Secured Overnight Rupee Rate (SORR)	<ul style="list-style-type: none"> ● What is it? <ul style="list-style-type: none"> ○ RBI's new benchmark rate for overnight interbank lending, replacing MIBOR (Mumbai Interbank Offered Rate). ○ Based on government securities-backed borrowing/lending. ● Why is SORR important? <ul style="list-style-type: none"> ○ More transparent & market-driven. ○ Reduces manipulation risks seen in MIBOR. ○ Used in interest rate derivatives, loans, and bonds. <p>Comparison: MIBOR vs. SORR</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #0070C0; color: white;"> <th style="width: 30%;">Feature</th> <th style="width: 35%;">MIBOR (1998-2024)</th> <th style="width: 35%;">SORR (2024 - present)</th> </tr> </thead> <tbody> <tr> <td style="background-color: #D9E1F2;">Based on</td> <td style="background-color: #D9E1F2;">Unsecured interbank loans</td> <td style="background-color: #D9E1F2;">Secured repo transactions</td> </tr> <tr> <td style="background-color: #D9E1F2;">Regulated by</td> <td style="background-color: #D9E1F2;">FBIL</td> <td style="background-color: #D9E1F2;">RBI</td> </tr> <tr> <td style="background-color: #D9E1F2;">Transparency</td> <td style="background-color: #D9E1F2;">Less</td> <td style="background-color: #D9E1F2;">More</td> </tr> </tbody> </table>		Feature	MIBOR (1998-2024)	SORR (2024 - present)	Based on	Unsecured interbank loans	Secured repo transactions	Regulated by	FBIL	RBI	Transparency	Less	More
Feature	MIBOR (1998-2024)	SORR (2024 - present)												
Based on	Unsecured interbank loans	Secured repo transactions												
Regulated by	FBIL	RBI												
Transparency	Less	More												

★★ Moderate Priority Topics

Topic	Details								
C-PACE (Centre for Processing Accelerated Corporate Exit)	<ul style="list-style-type: none"> ● Established under: Companies Act, 2013 Purpose: <ul style="list-style-type: none"> ● Fast-track closure of inactive companies ● Reduce compliance burden ● Streamline exit process from MCA (Ministry of Corporate Affairs) register ● Processing Time: <6 months ● Supervised by: Director General of Corporate Affairs (DGCoA) ● HQ: Indian Institute of Corporate Affairs (IICA), Gurgaon ● Nodal Ministry: Ministry of Corporate Affairs (MCA) 								
Investment Facilitation for Development Agreement (IFDA)	<ul style="list-style-type: none"> ● Proposed: 2017 at WTO's 11th Ministerial Conference (MC11) ● Initiated by: China + developing & LDC members Purpose: <ul style="list-style-type: none"> ● Legally binding agreement to attract FDI into developing economies ● Simplifies investment approval processes ● Ensures transparency & predictability in regulations 								
FCNR(B) Account	<ul style="list-style-type: none"> ● Fixed deposit account for NRIs (Non-Resident Indians) ● Held in foreign currency (not INR) → Eliminates exchange rate risk ● Eligible Currencies: As per RBI's approved list (e.g., USD, EUR, GBP, JPY) Key Features: <ul style="list-style-type: none"> ● Fully repatriable (Principal + Interest) ● Interest earned is tax-free in India ● Min Tenure: 1 year, Max Tenure: 5 years ● Offered by: Authorized banks in India Comparison with Other NRI Accounts <table border="1" style="width: 100%; border-collapse: collapse; background-color: #E67E22; color: white;"> <thead> <tr> <th style="width: 25%;">Feature</th> <th style="width: 25%;">FCNR(B) Account</th> <th style="width: 25%;">NRE Account</th> <th style="width: 25%;">NRO Account</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Feature	FCNR(B) Account	NRE Account	NRO Account				
Feature	FCNR(B) Account	NRE Account	NRO Account						

	Currency	Foreign (USD, EUR, etc.)	Indian Rupees	Indian Rupees
	Tax on Interest	No tax in India	No tax in India	Taxable in India
	Repatriability	Fully	Fully	Partially (up to \$1M per year)
	Exchange Rate Risk	No	Yes	Yes
Project mBridge	<ul style="list-style-type: none"> • Launched: 2021 • Purpose: Multi-CBDC platform for cross-border payments • Technology: mBridge Ledger blockchain Key Focus: <ul style="list-style-type: none"> • Real-time, peer-to-peer transactions • Foreign exchange (FX) settlements • Reduces cost & time for international payments Founding Members: <ul style="list-style-type: none"> • Bank for International Settlements (BIS) Innovation Hub • Central Banks of China, Hong Kong, Thailand, UAE • India's Status: Not a participant yet 			
'FREE-AI' Committee	<ul style="list-style-type: none"> • Established by: RBI (Reserve Bank of India) • Year: 2024 • Purpose: Develop guidelines for ethical AI in banking & finance Focus Areas: <ul style="list-style-type: none"> ○ Bias detection in AI models ○ Consumer protection & data privacy ○ AI governance & compliance Members: <ul style="list-style-type: none"> • RBI Representatives • NITI Aayog • HDFC Bank (Private sector representation) • IIT Madras (Academic expertise) • MeitY (Digital governance) • Microsoft India (Tech industry) • Trilegal (Legal expertise) 			
Wealth Tax	<ul style="list-style-type: none"> • Introduced: 1957 (Based on Kaldor Committee recommendations) • Rate: 1% on net wealth exceeding ₹30 lakh • Objective: Reduce wealth concentration & fund public welfare • Abolished: 2015 (Union Budget by Arun Jaitley) • Reason: Low revenue, high litigation/admin costs • Replaced by surcharge on the super-rich 			



Topic	Details
Revision in Collateral Free Agricultural Loan Limit	<ul style="list-style-type: none"> • Issued by: RBI • Effective Date: January 1, 2025 • Objective: Ensure swift financial aid to farmers • Previous Limit: ₹1.6 lakh • Revised Limit: Expected to be increased (Exact figure awaited) Governing Framework: <ul style="list-style-type: none"> • Priority Sector Lending (PSL) Guidelines • Kisan Credit Card (KCC) Scheme
Initiative for 'Reshaping Supply Chains of Fashion and Construction Sectors'	<ul style="list-style-type: none"> • Launched by: India + 7 other countries • Funding: Global Environment Facility (GEF) • Duration: 6 years • Objective: Eliminate hazardous chemicals from textile & construction supply chains Focus Sectors: <ul style="list-style-type: none"> • Fashion (Textiles, Dyeing, Processing)

ENVIRONMENT

Fauna

Species	Description	Habitat/Distribution	Status
Sambar Deer	<ul style="list-style-type: none"> Large deer, elusive, most active at dusk/night. 	<ul style="list-style-type: none"> Indian subcontinent, Southeast Asia; dry deciduous forests, rainforests, mixed forests. 	Vulnerable (IUCN)
Cape Buffalo	<ul style="list-style-type: none"> One of 4 African Buffalo subspecies, social, herbivorous, excellent swimmers, active day/night. 	<ul style="list-style-type: none"> Savannas of east and southern Africa (sub-Saharan Africa). 	Not specified
Pangolin	<ul style="list-style-type: none"> Mammals with protective keratin scales, nocturnal, eat ants/termites, solitary, most trafficked globally. 	<ul style="list-style-type: none"> Hollow trees/burrows; 8 species (4 Asia, 4 Africa); Indian & Chinese Pangolins in India. 	Endangered (IUCN)
Chinese Pangolin	<ul style="list-style-type: none"> Subspecies of Pangolin, nocturnal, eats ants/termites. 	<ul style="list-style-type: none"> Northern Indian subcontinent, northern Southeast Asia, southern China. 	Critically Endangered (IUCN)
Wroughton's Free-tailed Bat	<ul style="list-style-type: none"> Rare molossid bat, powerful flier, roosts in caves/damp/warm places, moderate colonies. 	<ul style="list-style-type: none"> Western Ghats (only known breeding colony). 	Not specified
Indian Rock Python	<ul style="list-style-type: none"> Large nonvenomous python, nocturnal, terrestrial, good climber/swimmer. Aka Black-tailed/Asian Rock Python. 	<ul style="list-style-type: none"> Tropical/subtropical Indian subcontinent, Southeast Asia; grasslands, swamps, forests, river valleys. 	Not specified
Red-Breasted Flycatcher	<ul style="list-style-type: none"> Small passerine bird, feeds on figs (banyan/peepal), toe arrangement aids clinging. 	<ul style="list-style-type: none"> Urban gardens, Old World flycatcher family range (not fully specified). 	Not specified
Little Bunting	<ul style="list-style-type: none"> Small passerine bird, migratory, in bunting/sparrow family. 	<ul style="list-style-type: none"> Migrates to southern China, northeast India in winter. 	Not specified
Little Gull	<ul style="list-style-type: none"> Smallest gull species, breeds in northern Europe/Palaearctic. 	<ul style="list-style-type: none"> Eurasian region. 	Not specified
Laysan Albatross	<ul style="list-style-type: none"> Pelagic bird, 99.7% population in Northwestern Hawaiian Islands. 	<ul style="list-style-type: none"> North Pacific Ocean. 	Not specified
Malayan Night Heron	<ul style="list-style-type: none"> Medium-sized heron, migratory, nocturnal but active daytime, prefers forests/streams/marshy areas. 	<ul style="list-style-type: none"> Southern/Eastern Asia; migrates to India in winter. 	Not specified
Red Jungle Fowl	<ul style="list-style-type: none"> Tropical pheasant, wild ancestor of domestic chicken, aka Jungli Murga. 	<ul style="list-style-type: none"> India, Indo-China, Malaysia; mainly Deccan Peninsula, Gujarat, Madhya Pradesh, southern Rajasthan. 	Not specified
Marbled Duck	<ul style="list-style-type: none"> Aka Marbled Teal, medium-sized duck. 	<ul style="list-style-type: none"> Europe, Central Asia, northwest Africa, Iberian Peninsula. 	Not specified
White-Winged Wood Duck	<ul style="list-style-type: none"> Large duck, crepuscular, omnivorous, ghostly call (Deo Hans), State bird of Assam. 	<ul style="list-style-type: none"> India, Bangladesh, Myanmar; Nameri, Dehing Patkai, Namdapha sanctuaries. 	Critically Endangered (IUCN)

Species	Description	Habitat/Distribution	Conservation Status
Sea Otters	<ul style="list-style-type: none"> Smallest marine mammal, social, floats in single-sex rafts, key to kelp forest health. 	<ul style="list-style-type: none"> Coastal shallow waters; Canada, Japan, Mexico, Russia, USA. 	Endangered (IUCN)
Ganges River Dolphin	<ul style="list-style-type: none"> National Aquatic Animal (2009), blind, uses echolocation, freshwater, indicator of river health. 	<ul style="list-style-type: none"> Ganges-Brahmaputra-Meghna, Karnaphuli-Sangu rivers; 	Endangered (IUCN)

		Nepal, India (7 states), Bangladesh.	
Ethiopian Wolf	<ul style="list-style-type: none"> Canine, rodent hunter, Africa's most endangered carnivore, aka red jackal/Simien jackal/fox. 	<ul style="list-style-type: none"> Ethiopian Highlands (3,200m+ altitude), Afroalpine ecosystems. 	Not specified
Calyptocephalle la Gayi	<ul style="list-style-type: none"> Large amphibian frog, aka Chilean Giant Frog/Helmeted Water Toad. 	<ul style="list-style-type: none"> Endemic to South America. 	Not specified
Paphia Malabarica	<ul style="list-style-type: none"> Bivalve mollusk, short neck clam, India's first MSC-certified fishery. 	<ul style="list-style-type: none"> Major fishery resource in India. 	Not specified
Northern Giant Hornet	<ul style="list-style-type: none"> Largest hornet/wasp, invasive, threatens pollinators, aka Murder Hornet. 	<ul style="list-style-type: none"> Temperate China, Korea, Japan, India; lower altitude forests. 	Not specified
Cephalopods	<ul style="list-style-type: none"> Complex mollusks, jet propulsion locomotion, carnivorous, skilled hunters. 	<ul style="list-style-type: none"> Diverse marine environments (not specified geographically). 	Not specified
Damsel fish	<ul style="list-style-type: none"> Small tropical marine fish (250 species), includes anemone fishes. 	<ul style="list-style-type: none"> Atlantic, Indo-Pacific oceans; reefs, sea anemone tentacles. 	Not specified
Moths	<ul style="list-style-type: none"> Insects of Lepidoptera (160,000 species), mostly nocturnal, some diurnal. 	<ul style="list-style-type: none"> Nearly all habitats except polar regions. 	Not specified
Darwin Wasp	<ul style="list-style-type: none"> Parasitic wasp, larvae consume hosts internally, aka Ichneumon/Ichneumonid. 	<ul style="list-style-type: none"> First species found in India (Hymenoptera family). 	Not specified
Archaea	<ul style="list-style-type: none"> Primitive microorganisms, third domain of life, slow-growing, produce antimicrobials/antioxidants. 	<ul style="list-style-type: none"> Diverse environments, including human gut; global distribution. 	Not specified
Trouessartia Thalassina & Proterothrix Sibilla	<ul style="list-style-type: none"> Mites identified on birds. 	<ul style="list-style-type: none"> Meghalaya, India. 	Not specified
Homo Juluensis	<ul style="list-style-type: none"> Ancient human species with large skulls, aka "big head people." 	<ul style="list-style-type: none"> Not specified geographically. 	Not specified
Dulcibella Camanchaca	<ul style="list-style-type: none"> Predatory amphipod, newly discovered at 7,902m depth. 	<ul style="list-style-type: none"> Atacama Trench. 	Not specified

Flora

Species	Description	Distribution
Squirting Cucumber	<ul style="list-style-type: none"> Scientific name: Ecballium elaterium. Known for ballistic seed dispersal via internal pressure. 	-
Subabul Tree	<ul style="list-style-type: none"> Fast-growing perennial leguminous tree, aka Kubabul, Naattu Cauvindal, Kainti, Kantisubabul. 	<ul style="list-style-type: none"> Native to Mexico; thrives in tropical/subtropical regions; Andhra Pradesh, Kerala, Maharashtra, Odisha, Tamil Nadu.
Himalayan Birch Tree	<ul style="list-style-type: none"> Deciduous broadleaved tree, withstands extreme cold, lives up to 400 years, dominant angiosperm at treeline. 	<ul style="list-style-type: none"> Northwestern Himalayas (3100–3800m).
Milkweed Fiber	<ul style="list-style-type: none"> Seed fiber from Milkweed plant (Asclepias syriaca L.), aka stubborn weed, contains milk sap in leaves/stems/pods. 	<ul style="list-style-type: none"> Native to North America; wild in Rajasthan, Karnataka, Tamil Nadu.

PROTECTED AREAS

Protected Area	Location	Key Features	Vegetation	Conservation Significance
Madhav National Park	Madhya Pradesh	<ul style="list-style-type: none"> Northern fringe of Central Highlands, Upper Vindhyan Hills. Includes Sakhya Sagar and Madhav Sagar lakes. Eastern 	<ul style="list-style-type: none"> Northern Tropical Dry Deciduous Mixed Forests, 	

		areas have sedimentary rocks (sandstone, shale, limestone).	Dry Thorn Forests	
Gandhi Sagar Wildlife Sanctuary	Madhya Pradesh-Rajasthan border	<ul style="list-style-type: none"> Chambal River divides it into two parts. Historical/archeological/religious sites: Chaurasigarh, Chaturbhujnath temple, Bhadkaji rock paintings, Narsinghjar Hinglajgarh fort, Taxakeshwar temple. 	<ul style="list-style-type: none"> Northern Tropical Dry Deciduous Forest, Northern Tropical Dry Mixed Deciduous Forest, Dry Deciduous Scrub 	Designated Important Bird and Biodiversity Area (IBA).
Ratapani Wildlife Sanctuary	Madhya Pradesh	<ul style="list-style-type: none"> 8th tiger reserve in MP (others: Kanha, Satpura, Bandhavgarh, Pench, Sanjay Dubri, Panna, Veerangana Durgavati). Kolar River forms western boundary. Sites: Bhimbetka Rock Shelters (World Heritage), Ginnorgarh Fort, POW camp, Keri Mahadeo, Jholiyapur dam. 	<ul style="list-style-type: none"> Not specified 	Tiger reserve status enhances protection for big cats and biodiversity. Bhimbetka is a globally significant site.
Anamalai Tiger Reserve	Tamil Nadu	<ul style="list-style-type: none"> South of Palakkad gap in Southern Western Ghats. Surrounded by Parambikulam TR (East), Chinnar WLS, and Eravikulam NP (Southwest). 	<ul style="list-style-type: none"> Wet Evergreen Forests, Semi-evergreen Forests, Moist Deciduous, Dry Deciduous, Dry Thorn, Shola Forests 	Supports diverse forest types in Western Ghats, a biodiversity hotspot.
D. Ering Memorial Wildlife Sanctuary	Arunachal Pradesh	<ul style="list-style-type: none"> Limited details provided in input. 	<ul style="list-style-type: none"> Not specified 	
Similipal Tiger Reserve (STR)	Odisha (Mayurbhanj District)	<ul style="list-style-type: none"> Only landscape globally with melanistic tigers. Part of UNESCO World Network of Biosphere Reserves (2009) with transitional area. Home to tribes: Kolha, Santhala, Bhumija, Bhatudi, Gondas, Khadia, Mankadia, Sahara. 	<ul style="list-style-type: none"> Northern Tropical Moist Deciduous (dominant), some Semi-evergreen patches 	Unique melanistic tigers, UNESCO Biosphere Reserve status, supports tribal communities and biodiversity.
Coringa Wildlife Sanctuary	Andhra Pradesh (Coringa river-Bay of Bengal confluence)	<ul style="list-style-type: none"> "Hope Island" creates 40% sea-backwaters. Second-largest mangrove stretch in India. Sea coast is a breeding ground for Olive Ridley Turtles. Planned Fishing Cat Collaring Project by WII-Dehradun. 	<ul style="list-style-type: none"> Extensive Mangrove Forests, Dry Deciduous Tropical Forests 	Olive Ridley Turtles (Vulnerable), thriving Fishing Cat population (Vulnerable), key mangrove ecosystem.

Tribes

Tribe/Individual	Description	Location	Significance
Tikhir Tribe	Indigenous Naga tribe.	Nagaland, some across Myanmar border	Represents Naga cultural diversity.

Angami Tribe	A major Naga tribe.	Primarily Kohima district, Nagaland	Key community among Naga tribes.
Khamniungan Tribe	One of the major tribes among the Nagas.	Nagaland	Significant within Naga tribal framework.
Birhor Tribe	Traditionally nomadic tribe.	Primarily Jharkhand; also Chhattisgarh, Odisha, West Bengal	Reflects nomadic tribal lifestyle in eastern India.
Baiga Tribe	Known as "sorcerers," a Particularly Vulnerable Tribal Group (PVTG). First community to get habitat rights in India.	Chhattisgarh, Jharkhand, Bihar, Odisha, West Bengal, Madhya Pradesh, Uttar Pradesh	Milestone in tribal habitat rights recognition.
Halakki Tribe	Tribal community.	Karnataka	Associated with notable individual Shri Tulsi Gowda.
Shri Tulsi Gowda	Born 1944 in Halakki tribal family. Known as "Encyclopedia of the Forest" and "tree goddess" for forest knowledge. Honoured with Padma Shri (2021) and Indira Priyadarshini Vriksha Mitra Award.	Karnataka	Celebrated environmentalist and tribal representative; showcases indigenous forest expertise.

CYCLONE

- Cyclone Fengal** = It is a Tropical cyclone originated in the Bay of Bengal
- Cyclone Chido** = Recently, powerful tropical cyclone Chido hit French territory Mayotte in the Indian Ocean

Environmental Projects/Initiatives

Project	Description	Key Features	Scope	Significance
National River Linking Project (NRLP)	<ul style="list-style-type: none"> Program to transfer water from surplus to deficit regions, with National Interlinking of Rivers Authority (NIRA) proposed in 2021 as apex body replacing NWDA. 	<ul style="list-style-type: none"> Aims to irrigate 30M hectares, generate 20,000-25,000 MW power. Includes 30 river interlinking projects under National Perspective Plan (NPP). 	India	Addresses water scarcity, enhances irrigation, and boosts energy production across water-stressed regions.
Ken-Betwa River Linking Project	<ul style="list-style-type: none"> First project under NPP, transfers water from Ken River (MP) to Betwa River (UP), both Yamuna tributaries. Managed by Ken-Betwa Link Project Authority (KBLPA). 	<ul style="list-style-type: none"> Phase I: Daudhan Dam (77m) in Panna Tiger Reserve, 221 km canal. Phase II: Lower Orr Dam, Bina Complex, Kotha Barrage. 	Bundelkhand (MP & UP), India	Mitigates drought in Bundelkhand, provides irrigation/power, but raises ecological concerns (e.g., Panna Tiger Reserve).
Business 4 Land Initiative	<ul style="list-style-type: none"> Launched by UNCCD at COP16 in Riyadh, a legally binding agreement to promote sustainable land/water management via business involvement. 	<ul style="list-style-type: none"> Targets restoration of 1.5B hectares by 2030 for Land Degradation Neutrality (LDN). Supported by WEF, WBCSD, Sustainable Fibre Alliance. 	Global	Engages private sector in UNCCD goals, combats desertification, and

				promotes sustainable land use.
Global Plastic Pollution Treaty	<ul style="list-style-type: none"> Legally binding agreement to combat plastic pollution across its lifecycle. Resolution adopted at UNEA in Nairobi (2022). 	<ul style="list-style-type: none"> Aims for global rules by end of 2024, but 5th session concluded without finalization. 	Global	Seeks to reduce plastic pollution in land/marine environments, though progress is delayed.
Biodiversity Credit Alliance (BCA)	<ul style="list-style-type: none"> Voluntary alliance launched at CBD COP15 (2022) to support Kunming-Montreal Global Biodiversity Framework (KMGBF). 	<ul style="list-style-type: none"> Develops science-based principles for voluntary biocredit market. Secretariat by UNDP & UNEP-FI. 	Global	Enhances biodiversity conservation via market mechanisms, supports KMGBF implementation.
International Solar Alliance (ISA)	<ul style="list-style-type: none"> Intergovernmental body launched by India & France in 2015 at UNFCCC COP-21. Moldova recently joined via Framework Agreement. 	<ul style="list-style-type: none"> 'Towards 1000' strategy: USD 1,000B investment, 1,000M people with energy access, 1,000 GW solar capacity by 2030. 104 members, 16 signatories. HQ: NISE, Gurugram. Initiatives: STAR C, OSOWOG, GSF. 	Global (UN members eligible)	Promotes solar energy globally, enhances energy access, and supports climate goals. UN Observer Status (2021).
Champions of the Earth Award 2024	<ul style="list-style-type: none"> UNEP's highest environmental honor, awarded annually since 2005 in 5 categories: Lifetime Achievement, Policy Leadership, Action & Inspiration, Entrepreneurial Vision, Science & Innovation. 	<ul style="list-style-type: none"> 2018: PM Narendra Modi (Policy Leadership). 2024: Madhav Gadgil (ecologist, Gadgil Committee fame). 	Global	Recognizes outstanding environmental leadership, inspiring global action (e.g., Modi 2018, Gadgil 2024).
Global Strategy for Resilient Drylands (GSRD) 2030	<ul style="list-style-type: none"> Launched by CGIAR at UNCCD COP16 in Riyadh, led by ICARDA & ICRISAT to enhance dryland agriculture and livelihoods. 	<ul style="list-style-type: none"> Targets food security, biodiversity, and resilience for 2.7B dryland residents, focusing on Asia & Africa. 	Drylands (Asia & Africa focus)	Transforms dryland agriculture, addresses climate adaptation, and supports vulnerable populations.
CGIAR	<ul style="list-style-type: none"> Strategic partnership of donors and 15 international centers, established in 1971. 	<ul style="list-style-type: none"> Reduces poverty/hunger, improves health/nutrition, enhances ecosystem resilience via agricultural research. 	Global	Foundation for initiatives like GSRD, drives high-quality research for sustainable agriculture globally.

Lakes

Lake	Location	Key Features	Significance	Conservation
Lonar Lake	Maharashtra	<ul style="list-style-type: none"> Formed by meteorite impact ~50,000 years ago. Only known saline crater lake globally. Seven times saltier than seawater. Color changes (green 	<ul style="list-style-type: none"> Unique as a meteorite-impact crater lake, recognized by Geological Survey of India (GSI) as a National Geo-heritage Monument. 	<ul style="list-style-type: none"> Notified as a National Geo-heritage Monument by GSI.

		to pink) due to microorganisms in saline/alkaline conditions.		<ul style="list-style-type: none"> No UNESCO Global Geopark status (none in India).
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RIVER

➤ Chakki River

- Originates from the Dhauladhar ranges (part of a lesser Himalayan mountains range) in Himachal Pradesh
- Tributary of the Beas River

Environmental law/rules

Law/Rules	Description	Key Provisions	Implementation	Significance
Draft Solid Waste Management (SWM) Rules, 2024	Released by MoEFCC for public consultation under Environment Protection Act (EPA), 1986. Effective from October 1, 2025.	Segregation (biodegradable/non-biodegradable), Extended Producer Responsibility (EPR) via 'polluter pays,' circular economy promotion by Ministry of Housing and Urban Affairs, local bodies (e.g., Gram Panchayats) to prevent agricultural waste burning, on-site waste processing, CPCB online registration/reporting system.	MoEFCC issues rules; CPCB and SPCBs enforce pollution control guidelines under EPA, 1986.	Enhances waste management, promotes sustainability, reduces environmental pollution through structured responsibility and technology.

ENVIRONMENTAL DAYS

Day	Date	Description	Key Features/Themes	Significance
World Wildlife Conservation Day	December 4	Celebrated annually since 2012 by the UN to encourage global wildlife preservation and sustainability. Coincides with 1948 CITES signing anniversary.	2024 Theme: "Connecting People and Planet: Exploring Digital Innovation in Wildlife Conservation." India hosts 4 biodiversity hotspots (Himalayas, Indo-Burma, Western Ghats-Sri Lanka, Sundaland). Constitutional provisions for environmental conservation. Note: UN World Wildlife Day is March 3.	Raises awareness and promotes action for wildlife protection using digital tools; highlights India's biodiversity and legal framework.
International Cheetah Day	December 4	Marked annually since 2010 to emphasize global efforts to prevent cheetah extinction and promote conservation. Cheetah: fastest mammal, keystone species.	IUCN: African Cheetah (Vulnerable), Asiatic Cheetah (Critically Endangered). Extinct in India (1952). 'Project Cheetah' (world's first inter-continental large carnivore translocation) by NTCA, WII, and experts. Gandhi Sagar Wildlife Sanctuary (MP) as 2nd home (Oct 2024).	Focuses on cheetah conservation, supports reintroduction efforts in India, and underscores ecological importance of keystone species.
International Day of Epidemic Preparedness	December 27	Observed annually to emphasize prevention, preparedness, and	Advocates investment in systems for preventing, detecting, and responding to infectious disease outbreaks.	Strengthens global health security by promoting

	partnerships in fighting epidemics.		proactive epidemic management systems.
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ENVIRONMENTAL MISC.

Topic	Details																
Sacred Groves	<ul style="list-style-type: none"> • Definition: Patches of forest protected by local communities due to religious or cultural beliefs. • Legal Protection: Wildlife (Protection) Amendment Act, 2002 – classified as Community Reserves. • Ecological Role: <ul style="list-style-type: none"> ○ Biodiversity hotspots – home to rare flora & fauna ○ Water conservation – sources of perennial streams & sacred ponds ○ Carbon sequestration – help mitigate climate change ○ Medicinal plant repository <p>Regional Names of Sacred Groves:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #2e8b57; color: white;"> <th>State</th> <th>Local Name</th> </tr> </thead> <tbody> <tr style="background-color: #e0ffe0;"> <td>Bihar, Jharkhand</td> <td>Sarna</td> </tr> <tr style="background-color: #e0ffe0;"> <td>Himachal Pradesh</td> <td>Dev Van</td> </tr> <tr style="background-color: #e0ffe0;"> <td>Karnataka</td> <td>Devarakadu</td> </tr> <tr style="background-color: #e0ffe0;"> <td>Kerala</td> <td>Kavu / Sarpa Kavu</td> </tr> <tr style="background-color: #e0ffe0;"> <td>Maharashtra</td> <td>Devrai</td> </tr> <tr style="background-color: #e0ffe0;"> <td>Meghalaya</td> <td>Law Kyntang / Asong Khosi</td> </tr> <tr style="background-color: #e0ffe0;"> <td>Rajasthan</td> <td>Oran</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Maharashtra leads with ~3,000 documented sacred groves. • Living Root Bridges (Jingkieng Jri) – Meghalaya <ul style="list-style-type: none"> ○ Made from Ficus elastica tree roots ○ Part of UNESCO's tentative World Heritage List 	State	Local Name	Bihar, Jharkhand	Sarna	Himachal Pradesh	Dev Van	Karnataka	Devarakadu	Kerala	Kavu / Sarpa Kavu	Maharashtra	Devrai	Meghalaya	Law Kyntang / Asong Khosi	Rajasthan	Oran
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Marine Stewardship Council (MSC) Certification	<ul style="list-style-type: none"> • International non-profit for sustainable seafood • Awards eco-label certification for responsible fisheries • India's First MSC-Certified Fishery (2014) • Short-neck Clam Fishery – Ashtamudi Lake, Kerala <p>Significance:</p> <ul style="list-style-type: none"> • Asia's 3rd MSC-certified fishery • Sustainable harvesting of shellfish • Boosts India's seafood export credibility 																
Marine Carbon Dioxide Removal (mCDR)	<ul style="list-style-type: none"> • Ocean-based techniques for removing CO₂ from the atmosphere and storing it long-term. <p>Types of mCDR Approaches:</p> <p>Biotic Approaches (Limited Potential)</p> <ul style="list-style-type: none"> • Mangroves, seagrasses, and macroalgae (kelp forests) • Capture CO₂ via photosynthesis → Store in biomass & sediments • Also support biodiversity, coastal protection <p>Abiotic Approaches (Higher Potential)</p> <p>Ocean Alkalinity Enhancement (OAE)</p> <ul style="list-style-type: none"> • Adds alkaline materials (e.g., crushed olivine, lime) to increase ocean pH • Neutralizes CO₂ → Converts to stable carbonate/bicarbonate • Estimated potential: 1-15 billion tonnes CO₂ per year <p>Biomass Burial at Sea</p> <ul style="list-style-type: none"> • Growing algae offshore & sinking it into deep oceans • Estimated potential: 7-22 billion tonnes CO₂ per year <p>Ocean Fertilization</p> <ul style="list-style-type: none"> • Adding nutrients (e.g., iron) to boost phytoplankton growth • Phytoplankton consume CO₂ via photosynthesis • Potential risks: Disrupts marine ecosystems, creates hypoxic zones 																
Lake-Effect Snow	<ul style="list-style-type: none"> • When a cold air mass moves over a warmer lake, it picks up water vapor, which then freezes and falls as heavy snow on the leeward shore. 																

	<p>Conditions for Formation:</p> <ul style="list-style-type: none"> • Cold continental air mass • Unfrozen, warm water body • Temperature difference (>13°C between air & water) <p>Where It Occurs?</p> <ul style="list-style-type: none"> • Great Lakes (USA, Canada) • Baltic Sea (Europe) • Japan (Sea of Japan - "Snow Country") • Caspian Sea, Black Sea • Ocean-Effect Snow (over saltwater bodies) 															
Santa Ana Wind	<ul style="list-style-type: none"> • Hot, dry winds blowing from high-pressure deserts (Great Basin) towards the coastal areas of Southern California. <p>Characteristics:</p> <ul style="list-style-type: none"> • Occur in autumn & winter • Compression heating → Warm, dry, strong winds • Increase wildfire risks • Named after Santa Ana Canyon <p>Similar Winds Worldwide:</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Location</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>Chinook</td> <td>Rocky Mountains, USA/Canada</td> <td>Warm & Dry</td> </tr> <tr> <td>Foehn</td> <td>Alps, Europe</td> <td>Warm & Dry</td> </tr> <tr> <td>Sirocco</td> <td>North Africa → Europe</td> <td>Hot & Dusty</td> </tr> <tr> <td>Harmattan</td> <td>West Africa</td> <td>Dry & Dusty</td> </tr> </tbody> </table>	Name	Location	Type	Chinook	Rocky Mountains, USA/Canada	Warm & Dry	Foehn	Alps, Europe	Warm & Dry	Sirocco	North Africa → Europe	Hot & Dusty	Harmattan	West Africa	Dry & Dusty
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Persistent Organic Pollutants (POPs)	<ul style="list-style-type: none"> • Toxic, carbon-based chemicals that persist in the environment for decades and bioaccumulate in fatty tissues. <p>Sources of POPs:</p> <ul style="list-style-type: none"> • Pesticides (DDT, Aldrin) • Industrial Chemicals (PCBs, Dioxins) • Unintentional Byproducts (Furans from waste burning) <p>Properties:</p> <ul style="list-style-type: none"> • Lipophilic (fat-soluble) – Accumulate in fatty tissues • Bioaccumulation – Higher concentration up the food chain • Long-range transport – Found even in the Arctic <p>Stockholm Convention (2001)</p> <ul style="list-style-type: none"> • Global treaty under UNEP • India is a signatory • Aims to eliminate/restrict POPs 															

SCIENCE & TECHNOLOGY

Space News

Celestial Object/Phenomenon	Description	Location	Key Features
WOH G64 Star	<ul style="list-style-type: none"> • Massive star imaged with high clarity by ESO's Very Large Telescope Interferometer (VLTI). 	Large Magellanic Cloud (satellite galaxy of Milky Way)	<ul style="list-style-type: none"> • One of the closest galaxies to Earth, showcasing advanced imaging technology.
Magellanic Clouds	<ul style="list-style-type: none"> • Irregular galaxies sharing a gaseous envelope, consisting of Large (LMC) and Small (SMC) Magellanic Clouds. 	Near south celestial pole	<ul style="list-style-type: none"> • Orbit Milky Way every 1,500M years, each other every 900M years; visible irregular galaxies.
Sombrero Galaxy (M104)	<ul style="list-style-type: none"> • Galaxy with a smooth inner disk and clumpy gas in outer ring, 	Not visible to naked eye, observable in	<ul style="list-style-type: none"> • Prominent core, detailed structure revealed by Hubble.

	named for its hat-like appearance (Hubble image).	May with small telescopes	
Dark Comet	<ul style="list-style-type: none"> Celestial object resembling an asteroid but moving like a comet, identified in 2016. 	Appears as faint points in space	<ul style="list-style-type: none"> No visible gas/dust trails, small size (few meters to hundreds of meters).
Nova	<ul style="list-style-type: none"> Transient event causing a sudden bright star that fades, occurring in binary star systems with a white dwarf. 	Not specified (binary systems in space)	<ul style="list-style-type: none"> White dwarf draws material from Sun-like companion, leading to outburst.
Andromeda Galaxy (M31)	<ul style="list-style-type: none"> Nearest major galaxy to the Milky Way, also called Messier 31. 	Not specified (closest major galaxy)	<ul style="list-style-type: none"> Significant for its proximity and visibility to Milky Way observers.
White Dwarf	<ul style="list-style-type: none"> Star that has exhausted its hydrogen fuel, extremely dense with high surface gravity. 	Not specified (post-main-sequence stars)	<ul style="list-style-type: none"> Half Sun's size, 100,000x Earth's gravity, represents stellar evolution endpoint.
GG Tau A System	<ul style="list-style-type: none"> Unique triple-star system surrounded by a gas/dust disk where planets form. 	489 light-years from Earth	<ul style="list-style-type: none"> Three stars interact, complicating planet formation predictions due to dynamic forces.

SPACE MISSIONS

Mission	Description	Key Features	Organization	Significance
Quantum Satellite	<ul style="list-style-type: none"> Communications satellite using quantum physics for secure signals, resistant to interception. 	<ul style="list-style-type: none"> Utilizes Quantum Key Distribution (QKD) for data protection/eavesdropping detection. Micius launched 2016. 	China (Micius); UN (2025 Quantum Year)	Pioneers secure quantum communication; 2025 designated as International Year of Quantum Science.
Micius	<ul style="list-style-type: none"> World's first quantum communications satellite, launched in 2016. 	<ul style="list-style-type: none"> Demonstrates quantum cryptography in space. 	China	First successful quantum satellite, advancing global secure communication technology.
SpaDeX Mission	<ul style="list-style-type: none"> ISRO's Space Docking Experiment to develop autonomous in-space docking technology. 	<ul style="list-style-type: none"> Docks/undocks two satellites (Chaser & Target) in LEO at 28,800 km/h using Bharatiya Docking System (BDS) and POEM-4. 	ISRO	If successful, India becomes 4th country (after US, Russia, China) with space docking capability.
PSLV Orbital Experimenta I Module (POEM)	<ul style="list-style-type: none"> Uses spent PS4 stage of PSLV as a 3-axis stabilized microgravity platform for experiments. 	<ul style="list-style-type: none"> Supports 4-6 month experiments for small payloads in orbit, leverages microgravity. 	ISRO	Cost-effective solution for startups/academia to test space tech without full satellite launches.
PSLV-C59	<ul style="list-style-type: none"> 3rd generation, 4-stage Polar Satellite Launch Vehicle with multi-satellite/orbit capability. 	<ul style="list-style-type: none"> Carried Proba-3 into highly elliptical orbit as an NSIL commercial mission. 	ISRO (NewSpace India Limited - NSIL)	Demonstrates PSLV's versatility in commercial space launches.

Proba-3 Mission	<ul style="list-style-type: none"> In-Orbit Demonstration mission to observe Sun's corona via precision formation-flying. 	<ul style="list-style-type: none"> World's 1st precision formation-flying with 2 satellites in fixed orbit configuration. 	Not specified (assumed ESA collaboration)	Advances solar observation and satellite coordination technology.
CE20 Cryogenic Engine	<ul style="list-style-type: none"> Rocket engine using liquefied gases (fuel/oxidizer) at low temperatures, powers LVM-3 upper stage. 	<ul style="list-style-type: none"> India's first gas-generator cycle cryogenic engine, largest by ISRO. 	ISRO (Liquid Propulsion Systems Centre)	Enhances India's heavy-lift launch capabilities with advanced propulsion.
Subaru Telescope	<ul style="list-style-type: none"> 8.2-meter optical-infrared telescope located at 4,163m altitude on Mauna Kea, Hawaii. 	<ul style="list-style-type: none"> High-resolution astronomical observations. 	National Astronomical Observatory of Japan	Supports cutting-edge space research with large-scale optics.
IRIS² Programme	<ul style="list-style-type: none"> EU's 3rd flagship programme (after Galileo, Copernicus) for resilience, interconnectivity, and security via satellite. 	<ul style="list-style-type: none"> Offers connectivity to governmental/private users, partnered with SpaceRISE. 	European Union (ESA collaboration)	Strengthens EU's satellite infrastructure for security and communication services.

Quantum Tech

Term	Description
Willow Chip	<ul style="list-style-type: none"> Quantum computing processor developed by Google. Achieved computational supremacy by solving a complex problem in ~5 minutes, which would take classical supercomputers thousands of years. Uses superconducting qubits, enhancing quantum speedup over traditional computing. Potential applications in cryptography, AI, material science, and optimization problems. A major challenge remains quantum error correction, which limits practical large-scale deployment. Part of Google's Quantum AI research initiative, competing with IBM, Microsoft, and others.
Quantum Chip	<ul style="list-style-type: none"> Specialized computer chip based on quantum mechanics. Uses qubits instead of traditional bits, enabling superposition (0, 1, or both states simultaneously). Allows exponential computational power, beneficial for drug discovery, logistics, and secure communication. Key technologies: Superconducting qubits, trapped ions, photonic qubits, each offering unique advantages in scalability and error reduction. India's National Quantum Mission (2023-2031) aims to develop quantum communication, computing, and materials research. Global players include Google, IBM, Microsoft, China's CAS, and India's Tata Institute of Fundamental Research (TIFR) and IISc.

Bio Tech

Term	Description
HSP70/Heat Shock Protein 70	<ul style="list-style-type: none"> A molecular chaperone that assists in protein folding and prevents misfolding under stress conditions. Plays a critical role in protein homeostasis and cell survival by stabilizing newly synthesized or damaged proteins. Highly conserved across prokaryotic and eukaryotic cells, indicating its fundamental biological importance. Involved in stress response, immune regulation, and apoptosis (programmed cell death).
Extrachromosomal DNA (ecDNA)	<ul style="list-style-type: none"> Small, circular DNA fragments present in the nucleus, separate from chromosomes. Commonly found in cancer cells, with studies showing their presence in 90% of certain tumor types (e.g., brain tumors, liposarcomas, breast cancer). Contributes to cancer progression and drug resistance by carrying oncogenes (cancer-causing genes).

	<ul style="list-style-type: none"> • Forms due to DNA damage, chromothripsis (chromosomal shattering), or replication errors. • Being studied for its role in tumor evolution and potential targeted therapies.
mtDNA	<ul style="list-style-type: none"> • Circular DNA found in mitochondria, distinct from nuclear DNA. • Inherited exclusively from the mother, as sperm mitochondria are typically degraded after fertilization. • Essential for cellular respiration, as mitochondria produce ATP (adenosine triphosphate), the cell's energy currency. • Mutations in mtDNA are linked to mitochondrial diseases, impacting energy-intensive organs like the brain, muscles, and heart. • Plays a role in aging, neurodegenerative disorders, and metabolic diseases.
Mitochondrial Diseases	<ul style="list-style-type: none"> • Caused by mutations in mitochondrial DNA (mtDNA) or nuclear genes affecting mitochondria. • Impact cellular energy production, particularly affecting high-energy-demanding organs (brain, muscles, heart, liver). • Symptoms include muscle weakness, neurological disorders, metabolic abnormalities, and organ failure. • Inherited maternally, as mtDNA is passed only from the mother. • Examples: Leigh Syndrome, MELAS (Mitochondrial Encephalopathy, Lactic Acidosis, and Stroke-like episodes), Kearns-Sayre Syndrome. • No definitive cure; treatment focuses on symptom management, dietary interventions, and gene therapy research.
PB2-E627K Mutation	<ul style="list-style-type: none"> • Genetic mutation in the polymerase PB2 gene of influenza A virus, particularly in H5N1 and H9N2 strains. • Increases viral replication, host adaptation, and virulence, making the virus more efficient in infecting mammalian cells. • Common in avian influenza viruses, facilitating their ability to infect humans and other mammals. • Genome sequencing reveals H5N1 strains with this mutation belong to the 2.3.4.4b clade, genotype D1.1, similar to strains in wild birds.
India's First Diabetes Biobank	<ul style="list-style-type: none"> • Established in Chennai, a joint initiative of the Indian Council of Medical Research (ICMR) and Madras Diabetes Research Foundation (MDRF). • First-of-its-kind repository of biological samples from diabetic patients for research.
Dharini	<ul style="list-style-type: none"> • Developed by IIT-Madras, it is the largest publicly available digital dataset of the human foetal brain. • Aims to enhance foetal imaging techniques, facilitate early diagnosis, and improve treatment of neurological disorders. • Helps in detecting brain malformations, developmental delays, and congenital disorders in unborn babies.

Nano Tech

Term	Description
Nanoplastics	<ul style="list-style-type: none"> • Synthetic polymer particles ranging between 1-1000 nanometers in size. • Primary sources: Personal care products (cosmetics, paints, pharmaceuticals, electronics). • Secondary sources: Breakdown and fragmentation of microplastics due to UV radiation, weathering, and mechanical forces. • Capable of penetrating cells and tissues in living organisms, leading to potential health risks. • Can adsorb toxic chemicals and heavy metals, acting as carriers of pollutants.
Microplastics PYQ 2019	<ul style="list-style-type: none"> • Plastic particles smaller than 5 mm, originating from industrial waste, textiles, packaging materials, and plastic debris breakdown. • Found in air, soil, rivers, oceans, and even human blood, liver, lungs, and reproductive tissues. • Harm marine life by blocking digestive tracts, affecting growth, and disrupting endocrine functions. • Can leach toxic chemicals, including phthalates and bisphenol A (BPA), with potential human health risks. • India has banned certain single-use plastics, but microplastic pollution remains a major challenge

AI Related News

Term	Description
GenCast Model	<ul style="list-style-type: none"> • AI-based weather forecasting model developed by Google DeepMind. • Uses diffusion model approach, similar to AI-based image generation techniques. • Can predict weather patterns up to 15 days in advance within just 8 minutes. • Trained on historical reanalysis data (1979-2018) for improved accuracy. • Employs ensemble forecasting, generating multiple forecasts and refining predictions using a neural network.
Global Dialogue on AI	<ul style="list-style-type: none"> • International initiative fostering discussions on AI governance, ethics, and development. • Brings together governments, tech companies, civil society, and academia to address AI's ethical, social, and economic implications. • Aims to establish global standards for responsible AI deployment. • Focuses on issues like AI bias, privacy, misinformation, and regulatory challenges.
IndiaAI Future Skills Platform	<ul style="list-style-type: none"> • One of the 7 foundational pillars of the IndiaAI Mission, launched in 2023. • Aims to build AI workforce readiness and eliminate barriers to AI education. <p>Focus areas:</p> <ul style="list-style-type: none"> • AI skilling programs for students, professionals, and startups. • Collaboration with industry leaders, academic institutions, and research organizations.

Latest Technologies

Term	Description
Nano Bubble Technology	<ul style="list-style-type: none"> • Uses nano-sized bubbles (<200 nm) to enhance water quality and remove contaminants. • Higher surface area and strong negative charge enable the breakdown of impurities like algae, organic waste, oil, and grease. • Increases oxygen content in water, benefiting aquatic ecosystems and agriculture.
Diamond Battery	<ul style="list-style-type: none"> • Man-made battery that generates electricity when exposed to a radioactive field. • Uses synthetic diamond embedded with radioactive isotopes to create a long-lasting power source. <p>Working principle:</p> <ul style="list-style-type: none"> • Radioactive decay releases beta particles, which interact with the diamond, producing electricity. <p>Advantages:</p> <ul style="list-style-type: none"> • Extremely long lifespan—potentially lasting thousands of years. • Self-sustaining power with no need for recharging. • Compact and durable, making it ideal for extreme environments.

Projects

Term	Description
India's Hyperloop Project	<ul style="list-style-type: none"> • Next-generation high-speed transport system using vacuum-sealed tubes to eliminate air resistance. <p>Key Components:</p> <ul style="list-style-type: none"> • Low-pressure tubes: Reduces air drag, enabling ultra-fast travel. • Magnetic Levitation (Maglev): Allows frictionless movement by levitating the pod. • Linear electric motors: Provide smooth and efficient propulsion. <p>Developments in India:</p> <ul style="list-style-type: none"> • Mumbai-Pune corridor considered for India's first Hyperloop project. • Maharashtra government and Virgin Hyperloop showed early interest, but funding challenges persist. • NITI Aayog exploring feasibility studies for future expansion.
India's Bullet Train Project	<ul style="list-style-type: none"> • Mumbai-Ahmedabad High-Speed Rail (MAHSR): India's first bullet train project. <p>Technology:</p> <ul style="list-style-type: none"> • Uses Japanese Shinkansen technology (E5 Series). • Top speed of 320 km/h (200 mph). • Dedicated high-speed rail track with seismic safety mechanisms.

	Project details: <ul style="list-style-type: none"> • 508 km corridor with 12 stations. • 20% underground, 80% elevated, including a 7-km undersea tunnel. • Joint venture between Indian Railways (NHSRCL) and Japan under a soft loan agreement.
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Minerals

Term	Description
Gallium	<ul style="list-style-type: none"> • Semiconductors: Used in gallium arsenide (GaAs) and gallium nitride (GaN) for high-speed electronics and LEDs. • Thermometers: High-temperature alternative to mercury thermometers. • Liquid Alloys: Forms Galinstan, a non-toxic, room-temperature liquid metal used in medical and cooling applications. • Solar Cells: Used in thin-film solar panels for high-efficiency energy conversion
Germanium	Key Uses: <ul style="list-style-type: none"> • Optical Fibers: Core material for telecommunications and data transmission. • Infrared Optics: Used in thermal imaging, night-vision devices, and space telescopes. • Semiconductors: Integrated in transistors and microelectronics for improved performance. • Catalysts: Applied in polymer production and chemical reactions.
Antimony	Key Uses: <ul style="list-style-type: none"> • Flame Retardants: Used in textiles, plastics, and electronics to reduce flammability. • Lead-Acid Batteries: Improves battery performance, longevity, and charge retention. • Metal Alloys: Enhances hardness and mechanical strength of pewter, solder, and bullets. • Microelectronics: Utilized in semiconductor applications for its unique electrical properties.

Sustainable Construction Materials

Term	Description
Bio-Bitumen	<ul style="list-style-type: none"> • Definition: A sustainable, petroleum-free alternative to traditional bitumen. • Key Ingredients: Derived from biochar, agricultural stubble, lignin, bio-oil, and other organic materials. Uses: <ul style="list-style-type: none"> • Road construction: As a full or partial replacement for conventional bitumen. • Pavement durability: Enhances road life and reduces dependency on fossil fuels. • Carbon footprint reduction: Lower greenhouse gas emissions compared to conventional asphalt production.
Steel Slag, Copper Slag	Steel Slag: <ul style="list-style-type: none"> • Byproduct of steel production. • Used in road construction for improved strength and drainage. • Reduces environmental waste from steel plants. Copper Slag: <ul style="list-style-type: none"> • Byproduct of copper extraction. • Enhances road pavement stability, replacing sand and aggregates. • Higher durability, skid resistance, and cost-effective alternative to traditional materials.

INTERNATIONAL RELATIONS



Topic	Details
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Global Alliance Against Hunger and Poverty (G-20)	<ul style="list-style-type: none"> • Launched: G-20 Summit 2024 (Brazil Presidency). • Objective: Eradicate hunger and poverty (SDG 1, SDG 2) and reduce inequalities (SDG 10). • Implements: Deccan High-Level Principles (2023, G20 New Delhi). Three Pillars: <ul style="list-style-type: none"> • National: Policy support for food security & poverty alleviation. • Financial: Mobilizing multilateral & bilateral funding. • Knowledge: Technical assistance & capacity building. • Membership: Open to non-G20 UN members, FAO, UNICEF, WFP, World Bank. Key Features: <ul style="list-style-type: none"> • Promotes Special Drawing Rights (SDR) rechanneling for funding. • Encourages indigenous crops like millets, quinoa, and sorghum.
Gulf Cooperation Council (GCC)	<ul style="list-style-type: none"> • Established: 1981. • Members: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE. Economic Significance: <ul style="list-style-type: none"> • 14% of India's total trade (2023-24). • Supplies >50% of India's crude oil and 70% of natural gas (Qatar = largest LNG supplier). • 2nd largest remittance source for India (after the US). • Headquarters: Riyadh, Saudi Arabia. • Labor System: Kafala System for migrant workers (PYQ-2016).
India-Sri Lanka Relations	Trade & Economy: <ul style="list-style-type: none"> • ISFTA (India-Sri Lanka Free Trade Agreement) signed in 2000. • India = Sri Lanka's largest trade partner & FDI source (US\$2.2B). • Sri Lanka = India's top SAARC trade partner. • USD 400M RBI currency swap to support Sri Lanka's economy. • Sri Lanka adopts UPI & INR for trade transactions. Multilateral Engagements: <ul style="list-style-type: none"> • Common members of IORA, SAARC, BIMSTEC, UN, WTO, WHO, IMF, World Bank. • Cultural & Religious Cooperation: • India assists in the restoration of Thiruketheeswaram Temple & Kapilavastu Relics. Defense & Strategic Relations: <ul style="list-style-type: none"> • Naval Exercise: SLINEX. • Army Exercise: MITRA SHAKTI. • Geopolitical Issue: Katchatheevu island dispute remains a sensitive matter.
India-Kuwait Relations	Energy & Economy: <ul style="list-style-type: none"> • Kuwait supplies 3.5% of India's total energy needs. • Bilateral Investment Promotion Agreement (2003-2018) facilitated trade & investment. Diplomatic Relations: <ul style="list-style-type: none"> • Indian PM awarded 'Order of Mubarak Al Kabeer', Kuwait's highest civilian honor, in a recent visit.



Topic	Details
Phewa Dialogue	<ul style="list-style-type: none"> • Initiative by Nepal & China to enhance regional prosperity, connectivity, and peace through policy discussions. • Focuses on economic cooperation, infrastructure development, and cultural exchange. • Strengthens China-Nepal strategic ties, aligning with BRI (Belt & Road Initiative).
International Fund for Agricultural Development (IFAD)	<ul style="list-style-type: none"> • Established in 1977 after the 1974 World Food Conference. • UN specialized agency addressing rural poverty & hunger in developing countries. • Only multilateral body solely focused on rural economies & food security. • Membership: 177 countries (India = founding member). Functions: <ul style="list-style-type: none"> • Provides concessional loans & grants for rural development. • Publishes the Rural Development Report. • Headquarters: Rome, Italy.

<p>Panama Canal</p>	<ul style="list-style-type: none"> • 80-km artificial waterway in Panama, linking North & South America. • Connects the Atlantic & Pacific Oceans, avoiding the longer Cape Horn route. • Built by the US, completed in 1914. <p>Panama Canal Treaty (1977):</p> <ul style="list-style-type: none"> • Joint control by the US & Panama until 1999, after which Panama gained full control. <p>Permanent Neutrality Treaty:</p> <ul style="list-style-type: none"> • Open to all nations for commercial use. • US retains the right to ensure neutrality & has priority in emergencies.
<p>CPTPP</p>	<p>Trade bloc among 12 Indo-Pacific nations:</p> <ul style="list-style-type: none"> • Members: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam, United Kingdom (joined Dec 2024, first European member). • Formerly known as TPP (Trans-Pacific Partnership); US withdrew in 2017. • Covers 15% of global GDP & a market of over 500 million people. <p>Distinct from the EU:</p> <ul style="list-style-type: none"> • No single market or regulatory harmonization, allowing nations greater policy autonomy. <p>Key Features:</p> <ul style="list-style-type: none"> • Eliminates 99% of tariffs on goods and services. • Investor-State Dispute Settlement (ISDS) mechanism for investment protection. • High labor & environmental standards compared to older trade deals.
<p>U.N. Internal Justice Council</p>	<ul style="list-style-type: none"> • Established in 2009 by the United Nations General Assembly (UNGA). • Ensures independence, professionalism, & accountability in the UN's internal justice system. <p>Composition & Appointment:</p> <ul style="list-style-type: none"> • Members appointed by the UN Secretary-General. • Judges for the UN Dispute Tribunal (UNDT) & UN Appeals Tribunal (UNAT) are selected based on IJC recommendations. <p>Functions:</p> <ul style="list-style-type: none"> • Searches & recommends judicial candidates for UN justice bodies. • Advises UNGA on reforms & efficiency of the UN justice system
<p>Economic Community of West African States (ECOWAS)</p>	<ul style="list-style-type: none"> • Established: 1975 (Treaty of Lagos), revised in 1993 (Cotonou Agreement). • Current Members: 15 West African nations (as of 2024). <p>Recent Developments:</p> <ul style="list-style-type: none"> • Mali, Burkina Faso, and Niger exited in 2024 due to political tensions and military-led governments. <p>Economic & Political Role:</p> <ul style="list-style-type: none"> • Pillar of the African Economic Community (AEC), working toward regional integration. • Common currency planned (ECO) to replace the West African CFA Franc. • ECOWAS Court of Justice: Resolves regional disputes. • ECOWAS Standby Force (ESF): Regional security and peacekeeping mechanism. • Headquarters: Abuja, Nigeria
<p>India Internet Governance Forum (2024)</p>	<ul style="list-style-type: none"> • Established: 2021, modeled on the global Internet Governance Forum (IGF) under the UN. <p>4th Edition (2024):</p> <ul style="list-style-type: none"> • Held in New Delhi, supported by Ministry of Electronics and Information Technology (MeitY) & NIXI (National Internet Exchange of India). • Multi-stakeholder platform for public policy discussions on cybersecurity, data privacy, AI ethics, and digital sovereignty.
<p>UN Commission On Narcotic Drugs (UNCND)</p>	<ul style="list-style-type: none"> • Established: 1946 by United Nations Economic and Social Council (ECOSOC). <p>Mandate:</p> <ul style="list-style-type: none"> • Principal policymaking body for international drug control. • Supervises the implementation of UN drug conventions (1961, 1971, and 1988). • Oversees the United Nations Office on Drugs and Crime (UNODC). • Monitors global drug trends and coordinates supply and demand reduction strategies. • Membership: 53 member states, elected by ECOSOC for four-year terms. • India is a member and plays an active role in global narcotics policy. • Headquarters: Vienna, Austria. <p>Recent Developments:</p> <ul style="list-style-type: none"> • 2024 session discussed global cannabis rescheduling, opioid crisis, and synthetic drug control. • India advocates for stricter control on synthetic drugs like fentanyl. <p>Related Bodies:</p> <ul style="list-style-type: none"> • International Narcotics Control Board (INCB): Monitors treaty compliance. • World Health Organization (WHO): Advises on the medical and scientific use of drugs.

Topic	Details
Asia-Oceania Meteorological Satellite Users' Conference (AOMSUC)	<ul style="list-style-type: none"> • Established: 2010 in Beijing, China. • Objective: Enhances collaboration among meteorologists, scientists, and satellite operators in the Asia-Oceania region. <p>Focus Areas:</p> <ul style="list-style-type: none"> • Improving satellite meteorology for weather prediction. • Advancing remote sensing and climate monitoring. • 2024 Edition: Hosted by India Meteorological Department (IMD), Ministry of Earth Sciences (MoES).
WAVES India	<ul style="list-style-type: none"> • Inaugural Edition: February 2025, Goa. • Organized by: Ministry of Information & Broadcasting, Government of India. <p>Objectives:</p> <ul style="list-style-type: none"> • Promote collaboration in media and entertainment industries. • Facilitate investment, innovation, and trade opportunities in cinema, gaming, OTT, and digital content.
“Crossroad of Peace” Initiative	<ul style="list-style-type: none"> • Launched: October 2023 by Armenia. • Objective: Regional connectivity project linking Azerbaijan, Georgia, Iran, and Turkey. <p>Strategic Importance:</p> <ul style="list-style-type: none"> • Connects Caspian Sea to the Mediterranean Sea. • Facilitates trade routes from Persian Gulf to the Black Sea. • Reduces dependence on conflict-prone corridors like Zangezur Corridor. • Complementary to: International North-South Transport Corridor (INSTC), which enhances connectivity between India, Iran, Russia, and Europe.
International Advisory Body for Submarine Cable Resilience	<ul style="list-style-type: none"> • Established by: International Telecommunication Union (ITU) & International Cable Protection Committee (ICPC). • Objective: Strengthens submarine cable security and resilience against physical, cyber, and geopolitical threats. • Members: 40, including India (represented by the Department of Telecommunications & Tata Communications). • Leadership: Co-chaired by Nigeria and Portugal; meets twice a year.
International Social Security Association (ISSA)	<ul style="list-style-type: none"> • Established: 1927 under the International Labour Organization (ILO). • Headquarters: Geneva, Switzerland. <p>Purpose:</p> <ul style="list-style-type: none"> • Acts as the principal body for social security organizations and governments worldwide. • Promotes excellence in social security administration through research, capacity building, and technical assistance. <p>India’s Engagement:</p> <ul style="list-style-type: none"> • EPFO, ESIC, and PFRDA are ISSA members. • India uses ISSA guidelines for unorganized sector social security expansion.
BRI Cooperation Framework	<ul style="list-style-type: none"> • Signed between: Nepal and China for Belt and Road Initiative (BRI) projects. • Nepal’s BRI Entry: 2017. • Belt and Road Initiative (BRI) (formerly OBOR): • Launched by China in 2013 to enhance trade and infrastructure connectivity. • Two main corridors: <ul style="list-style-type: none"> ○ Silk Road Economic Belt (Overland route connecting China to Europe via Central Asia). ○ 21st Century Maritime Silk Road (Sea routes linking China with Southeast Asia, Africa, and Europe).
United Nations Disengagement Observer Force (UNDOF)	<ul style="list-style-type: none"> • Established: 1974 by UNSC Resolution 350. • Mandate: Supervise ceasefire and maintain a demilitarized zone between Israel and Syria in the Golan Heights. • Renewal: Extended every six months (latest renewal until June 2025). • Headquarters: Camp Faouar, Syria. <p>Contributing Countries:</p> <ul style="list-style-type: none"> • India is the 3rd largest military contributor. • Others: Nepal, Fiji, Ireland, Bhutan, etc.

United Nations Convention on Cybercrime	<ul style="list-style-type: none"> • 193 member states under the United Nations Office on Drugs and Crime (UNODC). • Secretariat: UNODC (United Nations Office on Drugs and Crime). • Effectiveness: Will come into force after ratification by 40 states. Focus Areas: <ul style="list-style-type: none"> • Electronic evidence sharing for international investigations. • Criminalization of cyber offenses (hacking, fraud, child exploitation, dark web crimes). • Prosecution mechanisms and extradition policies.
U.N. Peacebuilding Commission	<ul style="list-style-type: none"> • Established: 2005 by the UN General Assembly (UNGA). • Purpose: Advisory body for peacebuilding, conflict resolution, and post-war recovery. India's Role: <ul style="list-style-type: none"> • >6,000 Indian personnel in UN Peacekeeping missions. • Supports capacity-building programs in Africa and post-conflict zones. • Advocates "African solutions for African problems" policy. Key Functions: <ul style="list-style-type: none"> • Mobilizes financial and technical support for post-conflict reconstruction. • Coordinates international assistance to fragile states.
Programme of Action for Landlocked Developing Countries (2024-2034)	<ul style="list-style-type: none"> • Adopted by: UN General Assembly (UNGA). Builds on: <ul style="list-style-type: none"> • Vienna Programme of Action (2014-2024). • Almaty Programme of Action (2003-2013). Five Priority Areas: <ul style="list-style-type: none"> • Climate Resilience – Adaptation to extreme weather and environmental challenges. • Implementation Strategies – Strengthening governance for economic development. • Regional Trade Integration – Boosting exports and participation in global supply chains. • Transport Connectivity – Improving infrastructure and transit agreements. • Sustainable Growth – Diversification of economies, investment in renewable energy. India's Role: <ul style="list-style-type: none"> • Advocates special financial mechanisms for LLDCs. • Supports South-South cooperation and infrastructure funding for transit corridors.

ART N CULTURE

FAMOUS PERSONALITIES

Topic	Details
Jyotirao Phule	<ul style="list-style-type: none"> • Born: 11 April 1827, Maharashtra (Mali caste, gardener community). • Education: Scottish Missionary High School, Pune (1841). • Philosophy: Liberty, egalitarianism, socialism; influenced by Thomas Paine's 'The Rights of Man'. Major Contributions: <ul style="list-style-type: none"> • Pioneer of women's education in India – Educated Savitribai Phule (1848), together ran girls' schools for lower-caste children. • Founded Satyashodhak Samaj (1873) – Advocated equality for lower castes, women, and farmers. • Criticized Brahmanical dominance and social evils like untouchability and caste oppression. Key Works: <ul style="list-style-type: none"> • Tritiya Ratna (1855) – Social reform and caste critique. • Powada (1869) – Poetic narratives on injustice. • Gulamgiri (1873) – Compared caste oppression in India to slavery in America. • Shetkarayacha Aasud (1881) – Explored farmer exploitation. • Title 'Mahatma' (1888): Given by Vithalrao Vandekar (PYQ-2016). Legacy: <ul style="list-style-type: none"> • First Indian leader to challenge Brahminical hegemony through organized movements. • Inspired Dr. B.R. Ambedkar and anti-caste movements in Maharashtra and beyond.
C. Rajagopalachari	<ul style="list-style-type: none"> • Born: 10 December 1878, Thorapalli, Tamil Nadu. Freedom Fighter & Statesman: <ul style="list-style-type: none"> • Joined Gandhian movement in 1919, leaving law practice.

	<ul style="list-style-type: none"> Participated in Rowlatt Act protests, Non-Cooperation Movement (1920), Vaikom Satyagraha (1924), Civil Disobedience (Madras Salt Satyagraha, 1930). Elected to Constituent Assembly (Madras) – Instrumental in post-independence governance. <p>Key Political Initiatives:</p> <ul style="list-style-type: none"> C.R. Formula (1944) – Proposed a compromise between the Indian National Congress and the Muslim League to avoid partition. Opposed centralized economic planning and socialist policies post-independence. Founded Swatantra Party (1959) – Advocated free-market policies, opposed Nehruvian socialism. <p>Major Achievements:</p> <ul style="list-style-type: none"> First Indian Governor-General of India (1948-50) after Lord Mountbatten. Chief Minister of Madras Presidency (1937–1939, 1952–1954) – Introduced the Modified Scheme of Elementary Education (Kulak Kalvi Thittam), which faced resistance. <p>Awards & Recognitions:</p> <ul style="list-style-type: none"> Bharat Ratna (1954) – First recipient of India’s highest civilian award. Ramon Magsaysay Award (1958) – First Indian recipient for public service. Sahitya Akademi Fellowship – Recognized for Tamil literature contributions. Ramanujan Award (1962) – For administrative excellence. <p>Legacy:</p> <ul style="list-style-type: none"> Last Governor-General of India, strong advocate for political and economic liberalism.
Guru Teg Bahadur	<ul style="list-style-type: none"> Original Name: Tyag Mal, renamed by Guru Hargobind Sahib (6th Sikh Guru) for his martial skills and renunciation. 9th Sikh Guru (1665–1675). Founded Anandpur Sahib (1665, Punjab) – Became the base for Guru Gobind Singh (10th Guru) and the Khalsa Panth (1699). Diplomatic Role: Mediated between Raja Bishan Singh and Raja Paranpal to ensure stability in the region. <p>Major Contributions:</p> <ul style="list-style-type: none"> Advocated religious freedom, protected Hindus and Sikhs from forced conversions by Aurangzeb. Martyred in Delhi (1675) – Beheaded for opposing religious persecution, leading to Sikh resistance. His martyrdom led to the foundation of the Khalsa (1699) by Guru Gobind Singh. <p>Legacy:</p> <ul style="list-style-type: none"> Gurdwara Sis Ganj Sahib (Delhi) – Built at his martyrdom site. Gurdwara Rakab Ganj Sahib – Where his remains were cremated. ‘Hind Di Chadar’ (Shield of India) – Title for protecting religious freedom. Sikh Empire and modern Sikh identity shaped by his resistance. PYQ Fact: His sacrifice was pivotal in Sikh militarization under Guru Gobind Singh
C. Subramania Bharati	<ul style="list-style-type: none"> Known As: ‘Mahakavi Bharathiyar’ – Pioneer of modern Tamil poetry. Freedom Fighter, Poet, and Social Reformer: Advocated nationalism, women’s empowerment, caste equality, and self-rule. Journalist at Swadesamitran, The Hindu, Bala Bharata, Vijaya, Chakravarthini, India. Considered Sister Nivedita his guru, influenced by her nationalism and Hindu revivalism. Major Literary Contributions: Revolutionary Poems: Inspired by Swadeshi Movement and Tamil nationalism. Songs on Women’s Emancipation and Social Equality. Translated Bhagavad Gita and Vedic hymns into Tamil.

Temples

Ramappa Temple	<ul style="list-style-type: none"> Location: Palampet, Telangana. Also Known As: Rudreswara Temple, wrongly referred to as the Thousand Pillar Temple (which is a separate temple in Warangal). Period: Built during the Kakatiya Dynasty (1123–1323 CE). Built By: Ramappa, a sculptor under Recharla Rudra, a Kakatiya general serving Rudradeva (Rudra Deva I). UNESCO World Heritage Site: 2021 (Cultural Site) – First temple in Telangana to receive UNESCO recognition. <p>Architectural Features:</p>
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	<ul style="list-style-type: none"> • Sandbox Technique Foundation – Absorbs shocks, earthquake-resistant. • Granite Flooring, Basalt Pillars, and Lightweight Floating Bricks (Porous Bricks) – Reduce weight on structure. • Intricate Carvings of Dancers, Mythological Scenes, and Kakatiya Emblems. • Nandi Mandapa and Sanctum with Shikhara. • PYQ Relevance: Kakatiya temples use stellar plans, rich iconography, and advanced engineering (sandbox technique).
Abathasahayeswarar Temple	<ul style="list-style-type: none"> • Location: Alangudi, Tamil Nadu. • Deity: Shiva as Abathasahayeswarar (Protector from Perils). <p>Historical Significance:</p> <ul style="list-style-type: none"> • Patronage: Built during Chola rule, later developed by Vijayanagara and Nayaka kings. • Unique Idol: Aadhi Sarabeshwarar (installed by Kulothunga Chola), depicting Shiva as half-lion, half-bird. <p>Conservation Recognition:</p> <ul style="list-style-type: none"> • Selected for UNESCO Asia-Pacific Awards for Cultural Heritage Conservation. • Recognized for Restoration Efforts preserving temple frescoes, sculptures, and inscriptions. <p>Cultural Importance:</p> <ul style="list-style-type: none"> • Part of Navagraha Temples (dedicated to Guru/Jupiter). • Site of Tamil Shaivism and Siddha Traditions.
UNESCO Asia-Pacific Awards for Cultural Heritage Conservation	<ul style="list-style-type: none"> • Established: 2000 by UNESCO. • Purpose: Recognizes individuals/organizations for outstanding conservation efforts in cultural heritage. • Supported By: Ng Teng Fong Charitable Foundation (since 2021). <p>Categories:</p> <ul style="list-style-type: none"> • Award of Excellence – Highest recognition for exemplary conservation. • Award of Distinction & Award of Merit – Significant contributions. • Special Recognition for Sustainable Development – Conservation linked to SDGs. • Indian Sites Recognized: • Rajabai Clock Tower (Mumbai), Lal Bagh Palace (Indore), Abathasahayeswarar Temple (TN), etc.

Festivals

Hornbill Festival	<ul style="list-style-type: none"> • Known As: "Festival of Festivals". • Location: Kisama Heritage Village, Nagaland (near Kohima). • Organized By: Nagaland Tourism Department (Since 2000). • Purpose: Showcases Naga tribal culture, traditions, music, dance, cuisine, and handicrafts. • Named After: The Hornbill, a revered bird in Naga folklore. <p>PYQ Relevance:</p> <ul style="list-style-type: none"> • Hornbill Species in India: 9 species, highest diversity in the Northeast and Western Ghats. • State Bird of: Arunachal Pradesh & Kerala. • Great Indian Hornbill is a key seed disperser, crucial for forest ecosystems.
Rann Utsav 2025	<ul style="list-style-type: none"> • Location: Great Rann of Kutch, India's largest salt desert. • Organizer: Gujarat Tourism Department. • Duration: Nov 2024 – Feb 2025. <p>Significance:</p> <ul style="list-style-type: none"> • Celebrates Kutch's cultural and artistic heritage. • Promotes Handicrafts (Bandhani, Ajrakh prints, Rogan painting, embroidery). • Traditional Garba, folk music, camel safaris, and adventure sports.
Thrissur Pooram Festival	<ul style="list-style-type: none"> • Location: Vadakkunnathan Temple, Thrissur, Kerala. • Established By: Sakthan Thampuran (1798), Maharaja of Cochin. • Held On: Malayalam month of Medam (April-May). <p>Significance:</p> <ul style="list-style-type: none"> • Grandest temple festival of Kerala. • Rival teams: Paramekkavu Bhagavathi Temple vs. Thiruvambadi Sri Krishna Temple. • Elephant Procession (30+ caparisoned elephants with golden headgear, colorful umbrellas). • Panchavadyam – Traditional percussion music with drums, cymbals, trumpets

GI Tags

Gharchola Saree	<ul style="list-style-type: none"> Saree from Gujarat, recently received Geographical Indication (GI) tag.
Melye-Amiley	<ul style="list-style-type: none"> Tripura's traditional fermented bamboo shoot, indigenous to Tripura, received GI tag.
Kashmiri Papier-mâché	<ul style="list-style-type: none"> Traditional handicraft of Kashmir Valley, received GI tag.

HISTORICAL EVENTS

Topic	Details
Communist Party of India (CPI)	<ul style="list-style-type: none"> Founded: December 1925, at Kanpur Communist Conference. Key Founders: <ul style="list-style-type: none"> Satyabhakta (advocated 'Indian Communism' with no foreign influence). M.N. Roy (pioneered Marxist ideas, attended Comintern). E.T. Roy, Abani Mukherjee, Mohammad Ali, Hasrat Mohani. Objectives & Ideology Socialist State – Abolition of zamindari system and establishment of workers' and peasants' rule. Nationalization of banks and industries. Workers' & Peasants' Rights – Supported trade unions and agrarian movements. Key Contributions in National Movement <ul style="list-style-type: none"> All India Trade Union Congress (AITUC) – 1920: CPI provided leadership. All India Kisan Sabha (AIKS) – 1936: Formed under CPI influence to organize peasants' struggles. All India Students Federation (1936): CPI's youth mobilization wing. Mahila Sanghmas: Women's movements for rights & equality. Major Historical Events <ul style="list-style-type: none"> 1921 Ahmedabad & 1922 Gaya Congress Sessions: CPI sent manifestos demanding full independence. 1929 Lahore Congress Session: Congress formally adopted Purna Swaraj demand; CPI played an ideological role. 1929 Meerut Conspiracy Case: British arrested CPI leaders to suppress labor activism. Banned (1934–1942): Due to British fears of Soviet-style revolution. M.N. Roy's Contribution (1934): Proposed a Constituent Assembly, later adopted by Congress in 1935. CPI's Role in World War II: Initially opposed British war efforts but supported post-1941 after USSR joined Allies.
Belgaum Congress Session (1924)	<ul style="list-style-type: none"> Held On: December 1924, Belgaum, Karnataka. Significance: Only INC session presided over by Mahatma Gandhi. Key Highlights <ul style="list-style-type: none"> Swaraj (Self-rule): Reaffirmed Congress' commitment to Purna Swaraj. Sarvodaya (Welfare of All): Inspired by Gandhi's economic and social philosophy. Anti-Untouchability Conferences: Strengthened Harijan welfare programs. Revamp of INC: <ul style="list-style-type: none"> Cut Congress membership fees by 90% to make it accessible to all. Decentralized Congress structure, making it more grassroots-oriented.

Culture Misc.

Durgadi Fort	<ul style="list-style-type: none"> Location: Kalyan, Maharashtra, on the banks of Ulhas River. Built By: Chhatrapati Shivaji Maharaj to strengthen Maratha naval presence. Historical Significance: <ul style="list-style-type: none"> Maratha Navy's Initiation – Fort served as a key naval outpost for maritime control. Strategic Defense – Protected trade routes and countered Portuguese & Siddis' influence. Houses Durga Devi Temple, attracting devotees & tourists.
Indian National Trust for Art and Cultural Heritage (INTACH)	<ul style="list-style-type: none"> Founded: 1984, New Delhi. Legal Status: Under Societies Registration Act, 1860. Largest Non-Profit in heritage conservation (tangible & intangible). Headquarters: New Delhi. Key Initiatives: <ul style="list-style-type: none"> Listing & Restoration of historical sites.

	<ul style="list-style-type: none"> Heritage Education & Awareness Programs. Documentation of Cultural Traditions, Crafts, and Languages. Works with ASI, UNESCO, Govt. of India.
VIRAASAT	<ul style="list-style-type: none"> Founded: 1984, New Delhi. Legal Status: Under Societies Registration Act, 1860. Largest Non-Profit in heritage conservation (tangible & intangible). Headquarters: New Delhi. <p>Key Initiatives:</p> <ul style="list-style-type: none"> Listing & Restoration of historical sites. Heritage Education & Awareness Programs. Documentation of Cultural Traditions, Crafts, and Languages. Works with ASI, UNESCO, Govt. of India.
India Maritime Heritage Conclave (IMHC) 2024	<ul style="list-style-type: none"> 1st Edition – Organized by Ministry of Ports, Shipping & Waterways. Celebrates India's maritime history & global trade contributions. <p>Themes:</p> <ul style="list-style-type: none"> Ancient Trade Routes & Shipbuilding. Chola, Maratha, and Harappan Maritime Legacy. Modern Shipping & Blue Economy.

SCHEMES



Scheme	Details
Har Ghar Jal Initiative – Rural Water Revolution	<ul style="list-style-type: none"> Announced: Union Budget 2019, under Jal Jeevan Mission (JJM). Objective: Provide functional household tap connections (FHTC) to all rural households by 2024. First Certified State/UT: Goa, Dadra & Nagar Haveli, Daman & Diu. Nodal Agency: Department of Drinking Water & Sanitation, Ministry of Jal Shakti. Implementation Strategy: <ul style="list-style-type: none"> - Decentralized Approach: Gram Panchayats & local bodies involved. - Sustainability Focus: Groundwater recharge, conservation, source sustainability. - Real-time Monitoring: Jal Jeevan Mission Dashboard for tracking coverage & quality.
Jal Jeevan Mission (JJM) – Ensuring Safe Rural Drinking Water	<ul style="list-style-type: none"> Launched: 2019. Objective: Provide safe & adequate drinking water via tap connections to all rural households by 2024. Key Features: <ul style="list-style-type: none"> - Community-Based Approach: Involves Gram Sabhas, NGOs, SHGs. - IEC (Information, Education, Communication) for behavioral change. - Water Quality Monitoring: Training 5 women per village for testing water quality. Linked Initiatives: Swachh Bharat Mission (SBM), Atal Bhujal Yojana. Funding: 90:10 for NE & Himalayan states, 100% for UTs.
Jal Jeevan Mission (Urban) – Water Security for Cities	<ul style="list-style-type: none"> Announced: Budget 2021-22 under Ministry of Housing & Urban Affairs (MoHUA). Goal: Universal water supply in statutory towns. Key Objectives: <ul style="list-style-type: none"> - Tap connections in all urban households. - 100% sewage & septage management. - Water Body Rejuvenation for urban lakes & wetlands. - Circular Water Economy: Wastewater treatment & reuse. Implementation Synergy: <ul style="list-style-type: none"> - Complements Rural JJM (55L/person/day FHTC). - Linked with AMRUT 2.0. - Supports SDG-6 (Clean Water & Sanitation).
Crime and Criminal Tracking Network and Systems	<ul style="list-style-type: none"> Launched: 2009, under National e-Governance Plan (NeGP), Mission Mode Project. Nodal Ministry: Ministry of Home Affairs (MHA). Implementation Agency: National Crime Records Bureau (NCRB).

<p>(CCTNS) – Digital Policing</p>	<ul style="list-style-type: none"> • Objective: <ul style="list-style-type: none"> - Integrate all police stations for real-time data sharing. - Improve crime investigation & tracking via analytics. - Enable digital FIRs, charge sheets, reports. • Key Features: <ul style="list-style-type: none"> - Links police, courts, jails, forensics, prosecution systems. - Interoperable Criminal Justice System (ICJS) integration. - Automated fingerprint ID & facial recognition. <p>Latest Update (2024): Integration with 5G, AI & big data for predictive policing.</p>
<p>PRAGATI Platform – Governance at Speed</p>	<ul style="list-style-type: none"> • Launched: 2015 by PMO & NIC. <p>Objective:</p> <ul style="list-style-type: none"> - Real-time monitoring of central/state projects worth ₹50+ crore. - Grievance redressal & inter-ministerial coordination. <p>Features:</p> <ul style="list-style-type: none"> - Multi-purpose, multi-modal digital platform. - Direct PMO monitoring for time-bound execution. - Integration with GeM (Govt e-Marketplace) for procurement efficiency.
<p>CPGRAMS – Citizens’ Direct Grievance Redressal</p>	<ul style="list-style-type: none"> • Developed By: NIC, Department of Administrative Reforms & Public Grievances (DARPG). • Objective: 24×7 Online Platform for public grievances on governance & service delivery. • Key Features: <ul style="list-style-type: none"> - Single Portal across all Ministries/Departments & State Govts. - Time-bound resolution with automated escalation mechanism. - Linked to PRAGATI for PM-level review of critical cases.
<p>National AYUSH Mission (NAM) – Mainstreaming Traditional Medicine</p>	<ul style="list-style-type: none"> • Launched: 2014 under Ministry of AYUSH. • Objective: Strengthen Ayurveda, Yoga, Naturopathy, Unani, Siddha, Homeopathy (AYUSH). • Key Components: <ul style="list-style-type: none"> - AYUSH Health & Wellness Centres (Preventive/Promotive healthcare). - Pharmacopoeial Standards for AYUSH Drugs. - Global AYUSH Diplomacy – MoUs with WHO, BRICS, ASEAN, EU for research. <p>Latest Update (2024): AYUSH Visa launched for international medical tourism.</p>
<p>NAMASTE Scheme – Ending Manual Scavenging</p>	<ul style="list-style-type: none"> • Full Form: National Action for Mechanized Sanitation Ecosystem. • Launched: 2022, replacing SRMS (Self-Employment Scheme for Rehabilitation of Manual Scavengers). • Nodal Ministries: Ministry of Social Justice & Empowerment (MoSJE) & Ministry of Housing & Urban Affairs (MoHUA). • Coverage: 500 AMRUT cities (2022-26). • Implemented By: National Safai Karamcharis Finance & Development Corporation (NSKFDC). <p>Objectives:</p> <ul style="list-style-type: none"> - Mechanized Cleaning of Sewers & Septic Tanks. - Eradication of hazardous sanitation work. - Skill Training & Alternative Livelihoods for Sanitation Workers. <p>Key Features:</p> <ul style="list-style-type: none"> - Central Database of Sanitation Workers (SSWs) for welfare schemes. - Robotic Sewer Cleaning Machines (Bandicoot Technology) adopted in metros. - - Linked to SBM 2.0 for urban sanitation sustainability. <p>Latest Update (2024): Government targets zero manual scavenging by 2026.</p>

★★ Moderate Priority Topics

Scheme/Initiative	Details
<p>PM Poshan Shakti Nirman (PM POSHAN) Scheme</p>	<ul style="list-style-type: none"> • Renamed in 2021 from Mid-Day Meal Scheme (MDMS). • Centrally Sponsored Scheme under NFSA, 2013. • Provides hot cooked meals to Balvatika & Classes I-VIII students in govt & govt-aided schools. • Coverage: 11.8 crore children in 11.2 lakh schools. • Key Features: Social audit, inclusion of millets, women-led meal preparation, local food procurement. • Nodal Ministry: Ministry of Education.

<p>e-Courts Mission Mode Project - Phase III</p>	<ul style="list-style-type: none"> • Phase III (2023-2027) approved by Union Cabinet. • Part of National e-Governance Plan (NeGP), 2007. • Objective: Digitization of courts through ICT-enabled services. • Key Features: Virtual Courts, AI-based legal research, e-Summons, e-Filing, paperless judiciary. • Implementing Body: e-Committee, Supreme Court under Ministry of Law & Justice. • Funding: Central Sector Scheme (100% funded by GoI).
<p>E-Daakhil Portal</p>	<ul style="list-style-type: none"> • Launched: 2020 by National Consumer Disputes Redressal Commission (NCDRC). • Objective: Simplifies consumer grievance filing & tracking under Consumer Protection Act, 2019. • Latest Expansion (2024): Operational in all States/UTs (Latest: Ladakh, Nov 2024). • Key Features: 24x7 Online Filing, AI-based case allocation, integration with UMANG App. • Nodal Ministry: Ministry of Consumer Affairs, Food & Public Distribution.
<p>Jalvahak Scheme</p>	<ul style="list-style-type: none"> • Objective: Promote cargo transport via national waterways. • Launched By: Ministry of Ports, Shipping, and Waterways (MoPSW). • Target: 800 million tonne-km cargo transport by 2027. • Incentives: 35% cost reimbursement for >300 km transport. • Covered Waterways: NW-1 (Ganga), NW-2 (Brahmaputra), NW-16 (Barak). • Aligned with: Sagarmala Project, PM Gati Shakti, National Logistics Policy (2022).
<p>Kisan Pehchan Patra (KPP)</p>	<ul style="list-style-type: none"> • Objective: Unique digital ID for farmers linked to Aadhaar, land records, crop details. • Mandatory for: PM-KISAN scheme enrollment. • Part of: Agri Stack under Digital Agriculture Mission (2021-2025). • Key Features: Unified Farmers Registry, personalized benefits, AI-driven analytics, digital credit access. • Nodal Ministry: Ministry of Agriculture & Farmers' Welfare.
<p>Green Steel Taxonomy</p>	<ul style="list-style-type: none"> • Launched By: Ministry of Steel for decarbonization of steel industry. • India = First country globally to introduce a green steel classification. • Definition: Green Steel = <2.2 tonnes CO2e per tonne of finished steel (tfs). • Key Features: MRV system, greenness certificates, star ratings, incentives for green hydrogen-based steelmaking. • Aligned with: Carbon Credit Market & PAT Scheme. • Nodal Agency: National Institute of Secondary Steel Technology (NISST).
<p>Global One-Stop Centres</p>	<ul style="list-style-type: none"> • Approved By: Ministry of Women and Child Development (MWCD) • Objective: Supports distressed Indian nationals, especially women, abroad • Coverage: 9 centres (Bahrain, Kuwait, Oman, Qatar, UAE, Saudi Arabia Jeddah & Riyadh) • Facilities: 7 centres have shelters • Funding: Ministry of External Affairs (MEA) via Indian Community Welfare Fund (ICWF) • Key Services: Legal aid, counseling, repatriation, documentation support • Alignment: Part of diaspora welfare initiatives under Vande Bharat Mission
<p>One Stop Centre (OSC) Scheme</p>	<ul style="list-style-type: none"> • Launched: 2015 under MWCD • Funding: 100% Centrally Sponsored (Nirbhaya Fund) • Objective: Integrated support for women affected by violence • Key Services: Medical aid, legal assistance, police support, counseling, shelter • Legal Framework: Linked with JJ Act (2000), POCSO Act (2012), Domestic Violence Act (2005), IPC 498A • Implementation: 1347+ centres operational (as of 2024)
<p>Amrit Gyaan Kosh Porta</p>	<ul style="list-style-type: none"> • Launched By: Ministry of Personnel under Mission Karmayogi • Platform: iGOT Karmayogi (Integrated Government Online Training) • Objective: Enhances self-reliance in government training • Developed By: Capacity Building Commission (CBC) & Karmayogi Bharat SPV • Features: Curated learning content, certification, expert-led modules
<p>Karmayogi Bharat</p>	<ul style="list-style-type: none"> • Status: Special Purpose Vehicle (SPV) under Companies Act, 2013 • Manages: iGOT Karmayogi platform • Objective: Continuous learning, competency-based training, and career planning for civil servants • Key Features: Real-time performance tracking, AI-based learning roadmap • Linked With: Mission Karmayogi (2020), NPCSCB (Civil Services Capacity Building)

iGOT Karmayogi Platform	<ul style="list-style-type: none"> • Full Form: Integrated Government Online Training (iGOT) platform • Objective: E-learning, mentorship, career planning for government officials • Key Services: Performance tracking, AI-based upskilling roadmap • Target Beneficiaries: IAS, IPS, IFS, PSU Officials • Linked With: National Training Policy (2012), Digital India Initiative
Credit Guarantee Scheme for e-NWR Based Pledge Financing (CGS-NPF)	<ul style="list-style-type: none"> • Launched: December 2024 by Ministry of Consumer Affairs • Objective: Provides collateral-free loans against e-Negotiable Warehouse Receipts (e-NWRs) • Regulated By: Warehousing Development and Regulatory Authority (WDRA) • Eligibility: Small/Marginal Farmers, Women, SC/ST/PwD, MSMEs, Traders, FPOs, Cooperatives • Significance: Supports post-harvest credit needs, prevents distress sales • Key Features: Interest subvention, online tracking, digital loan processing
Bal Vivah Mukta Bharat Campaign	<ul style="list-style-type: none"> • Also Known As: Child Marriage Free Bharat • Launched By: MWCD to combat child marriages Target: Reduce child marriage rate below 5% by 2029 • Focus Areas: 7 High-Burden States & 300 Districts • Legal Framework: Prohibition of Child Marriage Act (PCMA), 2006 • Strategies: Community engagement, awareness campaigns, legal enforcement, financial incentives • Aligned With: Beti Bachao Beti Padhao (BBBP), National Child Policy (2013)
National Housing Bank (NHB)	<ul style="list-style-type: none"> • Established: 1988 under NHB Act, 1987 • Regulator: Was under RBI till 2019, now 100% Govt-owned • Objective: Promotes housing finance institutions, funds affordable housing <p>Key Initiatives: PM Awas Yojana (Urban & Rural) funding Refinancing Home Loans for banks & NBFCs RESIDEX Index: India's first housing price index Alignment: Supports Housing for All by 2024, Smart Cities Mission</p>



Scheme	Key Details
Yuva Sahakar Scheme	<ul style="list-style-type: none"> • Launched: 2018 by Ministry of Agriculture & Farmers Welfare • Objective: Supports new cooperatives & young entrepreneurs (≥3 months old) • Eligibility: Startups, FPOs, young cooperative societies • Financial Assistance: Subsidies + Other GoI incentives • Alignment: National Cooperative Policy, Atmanirbhar Bharat
Ayush Oushadhi Gunvatta evam Utpadan Samvardhan Yojana	<ul style="list-style-type: none"> • Type: Central Sector Scheme under Ministry of Ayush • Regulates: Ayurveda, Siddha, Unani & Homoeopathy (ASU&H) medicines • Legal Framework: Drugs & Cosmetics Act, 1940 • Validity: Till 31 March 2026 • Focus: Quality control, R&D, drug standardization
Homi Bhabha Chair Scheme	<ul style="list-style-type: none"> • Launched: 2021 by Department of Atomic Energy (DAE) • Objective: Recognizes scientists' contributions in atomic energy & related tech • Target Group: Includes retired and active scientists • Administered By: Dept. of Atomic Energy • Significance: Encourages nuclear research & policy advisory
Youth Co:Lab (2024-25)	<ul style="list-style-type: none"> • Launched: 2017 (Co-created by UNDP & Citi Foundation) • India Launch: 2019, in collaboration with AIM (NITI Aayog) • Objective: Empowers youth for SDGs via leadership, innovation & entrepreneurship • Key Themes: Social impact startups, climate resilience, digital transformation
SheSTEM 2024	<ul style="list-style-type: none"> • Organizers: AIM (NITI Aayog) & Embassy of Sweden • Event Type: Annual conference promoting women in STEM • 2024 Theme: Battery Technology and Energy Storage (BEST) • Objectives: Inspire women in STEM careers, promote industry-academia collaboration

Search and Rescue Aid Tool (SARAT)	<ul style="list-style-type: none"> • Launched: 2016 under INCOIS (MoES), Make in India • Purpose: Enhances search & rescue operations at sea • Technology: Uses ensemble modeling for time/location prediction • Tracking: Monitors ocean currents & wind patterns
Anna Chakra Tool	<ul style="list-style-type: none"> • Developed By: Department of Food & Public Distribution • Objective: Optimizes PDS supply chain • Technology: Uses AI algorithms for food grain distribution • Significance: Reduces transit losses, ensures food security
SCAN Portal	<ul style="list-style-type: none"> • Full Form: Single-Window Claims Approval for National PDS • Launched By: Dept. of Food & Public Distribution • Purpose: Streamlines PDS subsidy claims for states • Features: Faster approval, digital scrutiny, real-time tracking
SAMARTH Udyog Bharat 4.0 Initiative	<ul style="list-style-type: none"> • By: Ministry of Heavy Industries under Capital Goods Sector Scheme • Objective: Promotes Industry 4.0 adoption in manufacturing • Focus: Smart factories, automation, AI-driven production • Timeline: 2025 Target
JIGYASA Program	<ul style="list-style-type: none"> • Launched: 2017 by CSIR during Platinum Jubilee • Objective: Fosters scientific curiosity among students (VI-XII) • Methodology: Virtual Labs, Hands-on Science Activities • Aligned With: NEP 2020, National Science Movement
CHARAK Initiative	<ul style="list-style-type: none"> • Launched By: Northern Coalfields Ltd (NCL), Ministry of Coal • Objective: Free treatment for EWS patients in Singrauli & Sonbhadra • Diseases Covered: Cancer, TB, HIV, Heart Disease, Transplants, Burns, Liver Disorders • Type: CSR Initiative
SMILE Programme	<ul style="list-style-type: none"> • Full Form: Strengthening Multimodal & Integrated Logistics Ecosystem • Partnership: India & ADB (Policy-Based Loan) • Objective: Enhances logistics policy framework, private MMLP investment • Key Benefits: Reduces logistics cost, boosts supply chain efficiency
RuTAG Initiative	<ul style="list-style-type: none"> • Full Form: Rural Technology Action Group • Launched By: PSA Office (2004) • Objective: Provides S&T solutions for rural development • Activities: Tech interventions, training, demonstrations
Science and Heritage Research Initiative (SHRI)	<ul style="list-style-type: none"> • Launched: 2019 by Ministry of Science & Technology • Objective: Engages scientists for heritage preservation • Areas Covered: Archaeological research, conservation technologies
Kisan Kavach	<ul style="list-style-type: none"> • Developed By: BRIC-inStem (DBT) • Purpose: Protects farmers from pesticide exposure • Material: Lightweight, anti-pesticide fabric suit
eMaap	<ul style="list-style-type: none"> • Launched By: Dept. of Consumer Affairs • Objective: Integrates State Legal Metrology Depts into a single system • Functions: Licensing, enforcement, compliance, verification
Viksit Panchayat Karmayogi Initiative	<ul style="list-style-type: none"> • Launched: 25 Dec 2025 on Good Governance Day • By: Ministry of Personnel • Objective: Capacity-building for Panchayati Raj Institutions (PRIs) • Features: Innovative governance tools, e-learning modules
Atma Nirbhar Clean Plant Programme	<ul style="list-style-type: none"> • Announced: Budget 2023-24 under MIDH • Objective: Provides virus-free planting materials for horticulture • Implemented By: NHB & ICAR • Benefits: Higher yields, climate-resilient varieties, ecosystem protection
Urban Infrastructure Development Fund (UIDF)	<ul style="list-style-type: none"> • Announced: Budget 2023-24 • Operationalized By: NHB (₹10,000 crore corpus) • Objective: Supplements State/UT urban infrastructure efforts • Funding Source: Priority Sector Lending (PSL) shortfall • Modeled On: Rural Infrastructure Development Fund (RIDF)



Report	Key Details
India State of Forest Report (ISFR) 2023	<ul style="list-style-type: none"> Released By: MoEFCC, prepared by Forest Survey of India (FSI) Edition: 18th, biennial since 1987 <p>Findings of Report</p> <ul style="list-style-type: none"> Forest & Tree Cover: 25.17% (2021: 24.62%) Forest Cover: 21.76%, Tree Cover: 3.41% Max Increase (States): Chhattisgarh > UP > Odisha Max Decrease (States): MP > Karnataka > Ladakh Max Forest Cover Increase: Mizoram > Gujarat > Odisha States/UTs with >33% Cover: 19 States/UTs with >75% Cover: 8 (Mizoram, Lakshadweep, A&N Islands, Arunachal Pradesh, Nagaland, Meghalaya, Tripura, Manipur) North-East Trend: 67% cover, decline except Mizoram (+178 sq km) Top Forest/Tree Cover (Area-wise): MP > Arunachal Pradesh > Maharashtra Top Forest/Tree Cover (Percentage-wise): Lakshadweep (92%) > Mizoram (88.3%) > A&N Islands (81.95%) Mangrove Cover: 4,991.68 km² (0.15%), -7.43 sq km from 2021, max in West Bengal Bamboo Cover: Increased, top in MP > Arunachal Pradesh > Maharashtra > Odisha Carbon Stock: 30.43B tonnes CO₂e, +2.29B tonnes since 2005, vs 2.5-3.0B tonnes target by 2030
Global Wage Report 2024	<ul style="list-style-type: none"> Released By: International Labour Organization (ILO) Focus: Global wage trends, inflation impact, gender pay gap, labor policies
World Cities Report 2024	<ul style="list-style-type: none"> Released By: UN Habitat Title: <i>World Cities Report 2024: Cities and Climate Action</i> Focus: Urban climate resilience, sustainable infrastructure, policy recommendations
Global Outlook for 2025 Report	<ul style="list-style-type: none"> Released By: World Food Programme (WFP) Focus: Global food security, hunger trends, climate impact on agriculture

MODERATE PRIORITY

Report	Key Details
State Finances: A Study of Budgets Of 2024-25	<ul style="list-style-type: none"> Released By: Reserve Bank of India (RBI) Gross Fiscal Deficit (GFD): Below 3% of GDP (2022-23, 2023-24), budgeted at 3.2% (2024-25) Revenue Deficit: 0.2% (2022-23, 2023-24) Capital Expenditure: Increased from 2.4% (2021-22) to 2.8% (2023-24), budgeted at 3.1% (2024-25) Key Focus: Debt sustainability, fiscal consolidation, state borrowing trends
All-India Home Price Index (HPI)	<ul style="list-style-type: none"> Released By: RBI (Quarterly) Measures: Residential property price trends across major Indian cities Uses: Monetary policy insights, housing sector analysis, inflation impact on real estate
Global Status of Salt-Affected Soils Report	<ul style="list-style-type: none"> Released By: Food and Agriculture Organization (FAO) Focus: Extent, causes, and impact of soil salinization on agriculture and food security Relevance for India: Over 6.7 million hectares of salt-affected soils, critical for soil reclamation policies
World Drought Atlas (2024)	<ul style="list-style-type: none"> Released By: UN Convention to Combat Desertification (UNCCD) & European Commission's Joint Research Centre Launched During: UNCCD's COP16 in Riyadh, Saudi Arabia

	<ul style="list-style-type: none"> • Key Findings: Global drought trends, impact of climate change on water security • India Context: Drought-prone states like Rajasthan, Maharashtra, Gujarat, Andhra Pradesh
Nexus Assessment Report	<ul style="list-style-type: none"> • Released By: Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) • Focus: Interlinkages between biodiversity, water, food, health, and climate • India's Relevance: Agricultural biodiversity, sustainable water management, climate policies
Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)	<ul style="list-style-type: none"> • Established: 2012, with 150 member countries (India is a founding member) • Not a UN Body: Operates independently, but uses UNEP's secretariat services • Objective: Strengthen science-policy interface for biodiversity conservation and sustainable use
Consumer Confidence Survey (CCS)	<ul style="list-style-type: none"> • Conducted By: RBI (Bi-Monthly) • Measures: Consumer sentiment on economic conditions, spending patterns, job security Key RBI Reports: <ul style="list-style-type: none"> • Financial Stability Report (Half-Yearly) • Monetary Policy Report (Half-Yearly) • Inflation Expectations Survey of Households (Quarterly) • Report on Foreign Exchange Reserves (Half-Yearly) • Digital Payments Index (DPI) (Quarterly)
Global Report on Trafficking in Persons 2024	<ul style="list-style-type: none"> • Released By: United Nations Office on Drugs and Crime (UNODC) • Focus: Human trafficking trends, legal frameworks, law enforcement actions • India's Relevance: Major source, transit, and destination for trafficking; linked to bonded labor, forced prostitution
Benchmarking Infrastructure Development Report 2024	<ul style="list-style-type: none"> • Released By: World Bank • Focus: Infrastructure financing, project efficiency, governance models • India's Position: Emphasis on PM Gati Shakti, National Infrastructure Pipeline (NIP), logistics performance index



Least Priority Topics

Report	Key Details
World Malaria Report 2024	<ul style="list-style-type: none"> • Released By: World Health Organization (WHO) • Key Achievement: India exited High Burden to High Impact (HBHI) group in 2024 • Global Context: Sub-Saharan Africa still accounts for ~95% of malaria cases • India's Efforts: National Framework for Malaria Elimination (NFME) 2016-2030; focus on early diagnosis, vector control
State of Tax Justice Report 2024	<ul style="list-style-type: none"> • Released By: Tax Justice Network • Focus: Global tax avoidance, illicit financial flows, tax havens • India's Relevance: Tax transparency, black money regulation, impact of OECD's Global Minimum Tax
Arctic Report Card 2024	<ul style="list-style-type: none"> • Published By: National Oceanic and Atmospheric Administration (NOAA) (Annually since 2006) • Focus: Climate change impact on the Arctic, ice melt trends, biodiversity shifts • India's Role: Observer in Arctic Council; launched India's Arctic Policy 2022
Network Readiness Index (NRI)	<ul style="list-style-type: none"> • Co-Published By: Portulans Institute & Saïd Business School, University of Oxford • Measures: Digital readiness of countries, ICT infrastructure, governance, e-participation • India's Position: Growing focus on 5G, AI, Digital India initiatives
Air Quality Dashboard	<ul style="list-style-type: none"> • Developed By: International Centre for Integrated Mountain Development (ICIMOD) • Focus: Air pollution trends, real-time monitoring, impact on South Asian mountain regions • India's Relevance: Severe air pollution in Indo-Gangetic Plain, Himalayan smog monitoring

Smuggling in India Report (2023-24)	<ul style="list-style-type: none"> Released By: Directorate of Revenue Intelligence (DRI) Focus: Trends in gold, narcotics, wildlife, arms smuggling India's Efforts: Enhanced border security, anti-smuggling operations, role of technology in enforcement
Directorate of Revenue Intelligence (DRI)	<ul style="list-style-type: none"> Formed: 1957 Under: Central Board of Indirect Taxes & Customs (CBIC), Ministry of Finance Role: Premier anti-smuggling intelligence & enforcement agency Headquarters: New Delhi
Domestic Migration Report	<ul style="list-style-type: none"> Released By: Economic Advisory Council to the Prime Minister (EAC-PM) Focus: Interstate & intrastate migration trends, policy implications India's Relevance: Role in urbanization, labor market shifts, schemes like One Nation One Ration Card (ONORC)
India Skills Report 2025	<ul style="list-style-type: none"> Published By: Wheebox with AICTE, Confederation of Indian Industry (CII), Association of Indian Universities Focus: Employability of Indian youth, skill gaps, demand-supply trends Key Findings: STEM skills in high demand; employability rate improving in metro & Tier-2 cities

DEFENSE

WEAPONS

Weapons	Description	Key Features	Development
Voronezh Radar	<ul style="list-style-type: none"> Russia's early warning and missile defense radar system. 	<ul style="list-style-type: none"> Tracks ballistic missiles and aircraft up to 8,000 km. Uses phased array tech for rapid beam steering, reducing mechanical complexity. Operational since 2012. 	Russia
Kaveri Engine Project	<ul style="list-style-type: none"> Developed to power the Light Combat Aircraft (LCA) Tejas. DRDO shifted focus to dry version for UAVs. 	<ul style="list-style-type: none"> Initiated in 1980s, aimed at indigenous fighter jet propulsion. 	Gas Turbine Research Establishment, DRDO (India)
RS-28 Sarmat (Satan 2)	<ul style="list-style-type: none"> Russia's liquid-fueled intercontinental ballistic missile (ICBM), known as "Satan II" in the West. 	<ul style="list-style-type: none"> Heavy ICBM, 18,000 km range, max speed 25,500 kph. 	Russia
Dark Eagle Anti-Missile System	<ul style="list-style-type: none"> Long-range hypersonic anti-missile system designed to counter various missile threats. 	<ul style="list-style-type: none"> Stops ballistic, cruise, hypersonic missiles, warheads; intercepts in mid-air. 	United States
INS Tushil	<ul style="list-style-type: none"> Multi-role stealth guided missile frigate built in Russia for the Indian Navy. 	<ul style="list-style-type: none"> Advanced stealth features for low radar detection, enhanced stability in diverse sea conditions. 	Kaliningrad, Russia (for Indian Navy)
INS Nirdeshak	<ul style="list-style-type: none"> Second vessel under Indian Navy's Survey Vessel Large (SVL) Project. 	<ul style="list-style-type: none"> Designed for hydrographic surveys, navigation assistance, and maritime operation support. 	India (Indian Navy SVL Project)

EXERCISES

Exercise	Description	Participants	Details
Exercise AGNI WARRIOR	<ul style="list-style-type: none"> Bilateral military exercise between the Indian Army and Singapore Armed Forces. 	<ul style="list-style-type: none"> India, Singapore 	<ul style="list-style-type: none"> 13th edition concluded in Maharashtra.
SAREX-24	<ul style="list-style-type: none"> National Maritime Search and Rescue Exercises & Workshop conducted by Indian Coast Guard. 	<ul style="list-style-type: none"> Indian Coast Guard 	<ul style="list-style-type: none"> 11th edition (2024).

SLINEX	<ul style="list-style-type: none"> Bilateral naval exercise between India and Sri Lanka. 	<ul style="list-style-type: none"> India, Sri Lanka 	<ul style="list-style-type: none"> Enhances naval cooperation.
Exercise CINBAX	<ul style="list-style-type: none"> Bilateral military exercise between Indian Army and Cambodian Army. 	<ul style="list-style-type: none"> India, Cambodia 	<ul style="list-style-type: none"> Strengthens military ties.
Exercise Harimau Shakti	<ul style="list-style-type: none"> Annual bilateral military exercise between India and Malaysia. 	<ul style="list-style-type: none"> India, Malaysia 	<ul style="list-style-type: none"> Promotes joint operational capabilities.
Exercise Surya Kiran	<ul style="list-style-type: none"> Joint annual military exercise between the Indian Army and Nepal Army. 	<ul style="list-style-type: none"> India, Nepal 	<ul style="list-style-type: none"> Enhances interoperability.
Project Sambandh	<ul style="list-style-type: none"> One-man philanthropic initiative launched in 2017 by Retired Colonel Vembu Shankar (Shaurya Chakra awardee). 	<ul style="list-style-type: none"> Indian Army (Retired Officer Initiative) 	<ul style="list-style-type: none"> Focuses on welfare/support, not a formal exercise.

HEALTH

Disease

Topic	Description	Key Features	Additional
Marburg Virus Disease (MVD)	<ul style="list-style-type: none"> Highly virulent RNA virus causing hemorrhagic fever, in the same filovirus family as Ebola. 	<ul style="list-style-type: none"> Transmitted from Rousettus fruit bats to humans, then human-to-human. No approved antiviral or vaccine. 	Natural hosts: fruit bats.
Dinga Disease	<ul style="list-style-type: none"> Fictional zoonotic disease caused by hypothetical Dinga Virus (DGV). 	<ul style="list-style-type: none"> Rapid transmission, high morbidity, significant socioeconomic impact. 	Hypothetical scenario.
Norovirus	<ul style="list-style-type: none"> Highly contagious RNA virus (Caliciviridae), aka 'stomach flu' or 'winter vomiting bug.' 	<ul style="list-style-type: none"> Causes gastrointestinal illness, spreads via contaminated food/water/surfaces, oral-faecal route, multiple strains, no vaccine. 	Highly contagious, reinfection possible.
World AIDS Day	<ul style="list-style-type: none"> Globally observed on 1st December since 1988. 	<ul style="list-style-type: none"> 2024 Theme: "Take the rights path: My health, my right!" 	Raises awareness about HIV/AIDS.
HIV	<ul style="list-style-type: none"> Human Immunodeficiency Virus weakens immune system by attacking CD4 (T-cells), leading to AIDS. 	<ul style="list-style-type: none"> No cure, managed with antiretroviral drugs (3+ combo). In India: 2.5M+ affected, 44% reduction in new infections since 2010. 	UNAIDS (1996), Luc Montagnier Nobel 2008, AIDS notified in India.
Brain Rot	<ul style="list-style-type: none"> Decline in mental health/cognitive abilities due to excessive low-quality online content consumption. 	<ul style="list-style-type: none"> Caused by brain overstimulation, especially from social media. 	Emerging mental health concern.
Haemophilia A	<ul style="list-style-type: none"> Rare genetic disorder impairing blood clotting due to deficient clotting factor VIII. 	<ul style="list-style-type: none"> Sex-linked (X chromosome), males more affected, causes prolonged/spontaneous bleeding, joint damage. 	Caused by gene mutations.
Rare Diseases	<ul style="list-style-type: none"> Debilitating lifelong diseases/disorders, prevalence ≤ 1 per 1000 (WHO), aka orphan diseases. 	<ul style="list-style-type: none"> 63 listed in NPRD 2021 (3 groups), updated periodically. CDSCO approved 1st anti-complement therapy. 	Managed by orphan drugs.
Notifiable Disease	<ul style="list-style-type: none"> Diseases legally required to be reported to govt authorities for monitoring/outbreak prevention. 	<ul style="list-style-type: none"> State subject (List II), Central list also maintained. Examples: AIDS, Hepatitis B, Dengue, Malaria, etc. Snakebite recently added. Cancer not included. 	Legal reporting mandatory, varies by state.

GLP-1 Receptor Agonists	<ul style="list-style-type: none"> New drug class mimicking GLP-1 hormone to regulate appetite, blood sugar, lipid metabolism. 	<ul style="list-style-type: none"> Binds GLP-1 receptors, controls glucose, improves cardiovascular health, manages neurodegenerative diseases. 	Emerging therapy for multiple conditions.
Hydroxychloroquine	<ul style="list-style-type: none"> Antimalarial and antirheumatic drug. 	<ul style="list-style-type: none"> Kills malaria-causing organisms. 	Dual-purpose medication.
Varmam Therapy	<ul style="list-style-type: none"> Traditional Indian healing within Siddha system. 	<ul style="list-style-type: none"> Involves pressure on specific body points. 	Part of Siddha medicine.
Helicobacter Pylori	<ul style="list-style-type: none"> Common bacteria attacking stomach lining, adapted to acidic environment. 	<ul style="list-style-type: none"> Grows in digestive tract, linked to ulcers/infections. 	Prevalent gastric pathogen.

International Locations in News

Topic	Details
Lekki Deep Sea Port	<ul style="list-style-type: none"> Located in Nigeria.
Latakia Port	<ul style="list-style-type: none"> Principal port of Syria, situated on the eastern Mediterranean coast.
Canary Islands	<ul style="list-style-type: none"> Spanish archipelago in the Atlantic Ocean, part of the European Union's outermost regions.
Kerch Strait	<ul style="list-style-type: none"> Located in the Eastern Crimean Peninsula, connects the Black Sea and Sea of Azov, separates Kerch Peninsula (Crimea, west) from Taman Peninsula (Russia's Krasnodar Krai, east). Only direct link between Russia and Crimea.
Kilauea Volcano	<ul style="list-style-type: none"> Active volcano in Hawaii Volcanoes National Park, Hawaii, USA.
Nazca Lines	<ul style="list-style-type: none"> Located on the Peruvian coastal plain, south of Lima.
Kyrgyzstan and Tajikistan Border	<ul style="list-style-type: none"> Central Asia border disputed over territorial claims and resource access (water, grazing land) in the densely populated Ferghana Valley.
Denali Fault	<ul style="list-style-type: none"> Major strike-slip fault in Alaska, USA.
Greenland	<ul style="list-style-type: none"> In the North Atlantic Ocean, between Europe and North America, across Baffin Bay from Canada. Part of North America geographically, former Danish colony, now an autonomous province of Denmark with self-government and parliament. Foreign/security/currency policies under Denmark.
Sponge City	<ul style="list-style-type: none"> Chinese concept for sustainable urban development, including flood control, water conservation, quality improvement, and ecosystem protection. Features green roofs, constructed wetlands, increased tree cover to regulate microclimates, enhance humidity, and reduce health risks.

National Locations in News

Varkala Cliff	<ul style="list-style-type: none"> Kerala, India. Part of Warkalli Formation (Mio-Pliocene, 5.3M years ago), composed of laterite, sandstone, carbonaceous clay. Sandstone acts as an aquifer. India's 27th National Geological Monument (GSI, 2014). Called 'mini-Goa' for serene environment. Sri Narayana Guru's philosophy promoted here.
Sagar Island	<ul style="list-style-type: none"> West Bengal, India. Westernmost island of Ganges-Brahmaputra delta, at the mouth of Hugli River, largest in Sundarbans archipelago, separated from mainland by an arm of the river to the east.
Gangasagar Mela	<ul style="list-style-type: none"> Annual event during Makar Sankranti in West Bengal, India, at the confluence of Ganga and Bay of Bengal. India's 2nd largest human congregation after Kumbh Mela. Began with Kapil Muni's temple by Queen Satyabhama (430 AD).
Lothal	<ul style="list-style-type: none"> Discovered by S.R. Rao in 1954, located between Bhogavo and Sabarmati rivers, Gujarat, India. Indus Valley Civilization site with oldest man-made dry dock (2200 BC). Linked to Dholavira, traded with Mesopotamia. National Maritime Heritage Complex (NMHC) approved here.

Khorlochhu Hydropower Project	<ul style="list-style-type: none"> On Kholongchhu River in Eastern Bhutan's Trashiyangtse region.
Upper Siang Hydropower Project	<ul style="list-style-type: none"> Proposed 11,000 MW hydropower plant on the Siang River, Upper Siang district, Arunachal Pradesh, India.
Rooppur Nuclear Power Plant	<ul style="list-style-type: none"> Under construction in Bangladesh, will be the country's first nuclear power source.
Online Safety Amendment (Social Media Minimum Age) Bill 2024	<ul style="list-style-type: none"> Introduced by Australia, requires age-restricted social media platforms to prevent Australians under 16 from having accounts.

MISC.

Veer Baal Diwas	<ul style="list-style-type: none"> Observed annually on December 26 since 2022 in India, commemorates martyrdom of Baba Fateh Singh and Zorawar Singh, Sahibzade of Guru Gobind Singh Ji. Mughal Army forced Guru Gobind Singh and followers to flee Anandpur fort.
Erasmus Prize	<ul style="list-style-type: none"> Awarded to Indian author Amitav Ghosh in 2024 by Netherlands-based Praemium Erasmianum Foundation.
Indira Gandhi Peace Prize (2024)	<ul style="list-style-type: none"> Instituted in 1986 by a trust in memory of former PM Indira Gandhi, given to individuals/organizations for peace and development. 2024 recipient: Michelle Bachelet, former Chilean president and human rights advocate.
International Day of Persons with Disabilities (IDPD)	<ul style="list-style-type: none"> Observed annually on December 3, established by UN General Assembly in 1992.
National Energy Conservation Award (NECA)	<ul style="list-style-type: none"> Initiated by Bureau of Energy Efficiency (BEE) under Ministry of Power, India, in 1991, alongside National Energy Conservation Day (December 14). BEE (statutory body, 2002) promotes energy efficiency under Energy Conservation Act 2001.
Pradhan Mantri Rashtriya Bal Puraskar	<ul style="list-style-type: none"> Annual award by Ministry of Women and Child Development, India's highest civilian honor for children aged 5-18. Recognizes excellence in Bravery, Art & Culture, Environment, Innovation, Science & Technology, Social Service, Sports within 2 years of nomination.