Civils Shot 2025

"Current Affairs Simplified, Concepts Amplified "



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JUNE 2024
CURRENT AFFAIRS NOTES

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





- All Sources, One PDF The Hindu, The Indian Express, Live Mint, PIB + Top Coaching Magazines Everything at One Place
- 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".
- Crisp + Filtered Content Only 35-45 pages/month by extracting what's truly Relevant from Newspapers, Magazines, and Reports
- Table Format for Quick Revision No long Paragraphs, Just,"What + Why in News + Static Linkage + Priority Tag".
- 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.



- 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.



- 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.



- 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.





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POLITY & GOVERNANCE



Topic Name	Description
Parole and	Governing Law: Prisons Act, 1894
Furlough	Guidelines: Model Prison Manual, 2016 by Ministry of Home Affairs (MHA)
	Objective:
	Maintain humanitarian approach towards prisoners
	Balance prisoners' rights with societal safety
Parole	Definition: Conditional temporary release of a prisoner with suspension of sentence
	Nature: Discretionary (Not a Right)
	Purpose:
	Emergency reasons (e.g., Death in family, Marriage of family member, Medical
	Treatment)
	Reintegration into society
	Release Period: Does not count towards sentence duration
	Maximum Duration: One Month
	Granting Authority: State Government/ Competent Authority
Furlough	Definition: Temporary release of a prisoner for short-term leave
	Nature: Right of the Prisoner (Subject to Good Conduct)
	Purpose:
	Allow prisoners to maintain family ties
	Improve mental health and social adjustment
	Release Period: Counts towards sentence duration
	Maximum Duration: 14-21 days in a year
	Granting Authority: State Government/ Competent Authority
Special	• Introduced by: 5th Finance Commission (1969) on the recommendation of the
Category	Gadgil-Mukherjee Formula
Status (SCS)	Objective: Provide additional financial assistance to states with unique socio-
	economic and geographical disadvantages
	Criteria (Subjective):
	Hilly & difficult terrain
	Low population density
	Strategic international borders
	Economic & infrastructural backwardness
	Non-viable state finances
	Benefits:
	90:10 Centre-State funding for Central Sponsored Schemes (CSS)
	Tax concessions
	Preferential treatment in funding
	Discontinued: After 14th Finance Commission (2015-20)
	Current Status: Only for Northeastern States + Himalayan States (J&K, Ladakh,
	Himachal Pradesh, Uttarakhand)
Leader of	Heads official opposition in either House of Parliament.
Opposition	Not mentioned in the Constitution, only in Rules of the House.
(LoP)	 Defined under Salary and Allowances of Leaders of Opposition in Parliament Act,
, ,	1977.
	 Party needs 10% of MPs in the House to claim LoP status.

	without official recognition.	
Standing and	Standing Committees	
Ad hoc	Permanent in Nature	
Committees	Formed every year	
	Examples:	
	 Public Accounts Committee (PAC) 	
	o Estimates Committee	
	 Departmental Standing Committees 	
	Ad hoc Committees	
	Temporary in Nature	
	Formed for specific purposes	
	Dissolved after work completion	
	Examples:	
	 Joint Parliamentary Committee (JPC) 	
	 Select Committees 	
	Railway Convention Committee	
Cabinet	Nature: Extra-Constitutional Bodies (Not mentioned in the Constitution)	
Committees	Legal Basis: Established under Rules of Business of Government of India (Gol)	
	Constitutional Mention: Only in Article 352 (After 44th Constitutional Amendment	
	Act, 1978 regarding National Emergency)	
	Composition: Includes Cabinet Ministers + Non-Cabinet Ministers	
	Total Committees (2024): 8 Committees	

List of Cabinet Committees (2024)

Committee Name	Headed by	Important Role
Appointments Committee of the Cabinet	Prime Minister	Appointments to top posts like CVC, CBI, UPSC
Cabinet Committee on Security	Prime Minister	Matters of national security
Cabinet Committee on Economic Affairs	Prime Minister	Economic policies
Cabinet Committee on Parliamentary	Minister of	Parliament sessions & legislative
Affairs	Defence	business
Cabinet Committee on Investment	Prime Minister	Investment-related decisions
Cabinet Committee on Accommodation	Home Minister	Allocation of government accommodation
Cabinet Committee on Employment & Skill Development	Home Minister	Employment & Skill Development
Cabinet Committee on Political Affairs	Prime Minister	Political & Economic issues

Unique Identification	Statutory Body under Aadhaar Act, 2016	
Authority of India	Works under Ministry of Electronics and Information Technology (MeitY)	
(UIDAI)	Issues 12-digit Aadhaar Number	
	Eligibility: Resident of India	
	Key Function:	
	Enrolment & Authentication of Aadhaar	

	Data Security
Living Will Post Office Act, 2023	 Preventing Aadhaar misuse Meaning: Legal document where a person declares medical treatment preferences in case of terminal illness or unconsciousness Recognised under Passive Euthanasia by SC in 2018 (Common Cause Case) Conditions for Validity: Signed before Two Witnesses Certified by Gazetted Officer/Notary Stored with District Collector First State to Implement: Goa (2024) Repeals: Indian Post Office Act, 1898 Aim: Simplifies the legislative framework for delivering citizen-centric services & banking services Key Features: Exemptions from liability for delay, loss, or damage unless prescribed by rules
	No penal provisions under the Act
	Modernises postal operations to support financial inclusion & digital services
Article 3	Empowers Parliament to:
	Process:
	Steps Authority
	Bill Introduction Parliament (Only on President's Recommendation)
	Consultation with Mandatory but Non-Binding State
	Type of Majority Needed Simple Majority
Telecommunications	Replaces:
Act, 2023	 Indian Telegraph Act, 1885 Indian Wireless Telegraphy Act, 1933 Key Features: Right of Way (RoW): Telecom infrastructure allowed on public & private properties Spectrum allocation through auction Universal Service Obligation Fund renamed as Digital Bharat Nidhi Stricter rules on unsolicited commercial communications
Offshore Areas	Formulated Under: Offshore Areas Mineral (Development and Regulation) Act,
(Existence of Mineral Resources) Rules, 2024	 2002 Aim: Regulate the exploration, exploitation, and mining of offshore mineral resources in India Applicability: Covers all minerals found in offshore areas
	 Covers att minerats round in orisnore areas Excludes: Mineral oils Hydrocarbons Part B minerals of MMDR Act, 1957 (Atomic Minerals like Uranium, Thorium)
Offshore Minerals in	Extraction of mineral deposits from the deep seabed (Depth > 200 meters)
India	India's Exclusive Economic Zone (EEZ): Over 2 million sq km Potential recoverable minerals:

Offshore Reserves		ogical Survey of India (GSI der India's Exclusive Econo	
	Mineral	Location	Importance
	Lime Mud	Gujarat &	Used in cement & steel
		Maharashtra coasts	industries
	Phosphorite	Off Tamil Nadu coast	Source of Phosphorus for fertilizers
	Polymetallic	Central Indian Ocean	Contains Copper, Nickel,
	Nodules	Basin	Cobalt, Manganese
	Heavy Minerals	Off Odisha Coast	Source of Ilmenite, Monazite, and Zircon
	Gas Hydrates	Krishna-Godavari Basin	Potential future source of Natural Gas



Topic Name		Description	
National Council	Established: 1961 with Legal Backing under Societies Registration Act, 1860		
of Educational	HQ: New Delhi		
Research and	Functions:		
Training (NCERT)	 Develops National Curriculum Framework (NCF) 		
	 Prepares Textbooks 	s & Educational Research	
	 Provides training to 	teachers	
	 Nodal agency under 	NEP 2020	
	Why in News?		
	Released National Curr	ri <mark>culum F</mark> ramework for School Education (NCF-SE),2023	
	Class 3 to 12 textbooks	to be revised by 2024-25	
National Company	Established: 2016		
Law Tribunal	Legal Backing: Companies Act, 2013		
(NCLT)	• Functions:		
	o Corporate disputes		
	 Insolvency proceed 	dings under Insolvency and Bankruptcy Code (IBC), 2016	
	Oppression and mismanagement cases		
	Feature	Details	
	Head	President (Judicial Member)	
	Appointing Authority	Central Government (After consultation with CJI)	
	Appeals	NCLAT → Supreme Court	
Office of	No mention in Constitu	No mention in Constitution or Statutory Laws	
Parliamentary	Appointed to assist Ministers in Parliamentary Work		
Secretary (PS)	Not part of Council of Ministers		
	Oath administered by Pi	rime Minister	
Security Deposit	Legal Backing: Representation of People Act, 1951		
in Elections	Amount:		
	• ₹25,000 for Lok Sabha	elections	

	₹10,000 for State Assembly elections
	Purpose: Prevents non-serious candidates from contesting elections
	Forfeiture Condition: If the candidate receives less than 1/6th (16.67%) of valid votes
PM's Principal	Post Created: During Indira Gandhi's tenure (1977)
Secretary	Appointed by Appointment Committee of Cabinet (ACC)
	Holds office at the pleasure of PM
	Since 2019 → Given Cabinet Minister Rank
Self-Declaration	Recently mandated by Supreme Court (2024)
Certificates (SDC)	Applicable for:
	• Print
	• TV
	Internet Advertisements
	Ensures transparency in Political & Commercial Advertisements
	Issued by Press Information Bureau (PIB)
	As per recent Supreme Court directive, advertisements in TV, print, or internet
	require a valid Self-Declaration Certificate.



Topic Name	Details
India	Established: 1875
Meteorological	Headquarters: New Delhi
Department (IMD)	Parent Ministry: Ministry of Earth Sciences (MoES)
	Functions - Weather forecasting + Seismology + Agro-meteorology + Climate
	research
	Important Reports:
	State of Climate Report
	Long Range Forecast for Monsoon
Central Institute	Established: 1976
for Cotton	Headquarters: Nagpur, Maharashtra
Research (CICR)	Parent Body: ICAR
	Functions:
	Cotton variety development
	Integrated Pest Management (IPM)
	Cotton biotechnology research
	Key Varieties:
	Gossypium hirsutum
	Gossypium arboreum
Indian Council of	Established: 1929
Agricultural	Headquarters: New Delhi
Research (ICAR)	Parent Ministry: Department of Agricultural Research and Education (DARE),
	Ministry of Agriculture & Farmers Welfare
	Functions - Agricultural education + Research in crop improvement + Soil health
	management
	Key Initiatives:
	Krishi Vigyan Kendras (KVKs)
	National Agricultural Research System (NARS)
Press Council of	Established: 1978
India (PCI)	Act: Press Council Act, 1978
	Nature: Statutory Quasi-Judicial Body

	Objective:
	Preserves freedom of the press
	Maintains standards of journalism
	Composition:
	Chairman: Retired Supreme Court Judge (Nominated by a 3-member Committee)
	28 other members (Journalists, Editors, and MPs)
	Powers: Can censure publications but cannot impose penalties
National Security	Established: 1998 (During Atal Bihari Vajpayee Government)
Adviser (NSA)	First NSA: Brajesh Mishra
	Current NSA: Ajit Doval
	Role:
	Chief adviser to the PM on national security issues
	Heads the National Security Council (NSC)
	Rank equivalent to Union Cabinet Minister
	Eligibility: Can be appointed from IFS, IPS, or Defence Services
National Security	• Formed: 1998
Council (NSC)	Headed by: Prime Minister
	Three-tier Structure:
	Strategic Policy Group (SPG) – Headed by Cabinet Secretary
	National Security Advisory Board (NSAB) – Comprises experts
	Joint Intelligence Committee (JIC)
	Advises on – Political + Economic + Energy + Security issues
Economic	Established: 2017 (Reconstituted)
Advisory Council	Nature: Non-Constitutional, Non-Permanent Independent Body
to the Prime	Current Chairman: Bibek Debroy
Minister (EAC-PM)	Nodal Agency: NITI Aayog
	Functions:
	Analyses macroeconomic issues
	Provides policy suggestions
	Prepares reports like "State of Inequality in India"

ECONOMY



Topic Name	Details
India's External	India recorded trade deficit with 9 out of its top 10 trading partners, reflecting
Trade (FY 2023-	higher imports than exports.
24)	Top 5 Trading Partners (Descending Order):
	China (Largest trading partner for the third consecutive year)
	2. USA
	3. UAE
	4. Russia (Entered top 5 due to increased oil imports)
	5. Saudi Arabia
	Trade Surplus Partners (Top 5):
	USA (Largest trade surplus partner)
	2. Netherlands
	3. United Kingdom
	4. Belgium
	5. Italy

Priority Sector Lending (PSL)

- Introduced in 1972 based on the recommendations of the Gadgil Committee (1969).
- Regulated by the Reserve Bank of India (RBI) to ensure credit access to vulnerable and under-served sectors.
- Primary objective: Inclusive Growth & Financial Inclusion

PSL Categories

Category	Description	Target
Agriculture	Loans to farmers, SHGs,	18% (8% for small &
	and FPOs	marginal farmers)
MSMEs	Loans to Micro, Small, and	No fixed % (Part of overall
	Medium Enterprises	target)
Export Credit	Loans to exporters	Max 32% (For foreign banks
		with <20 branches)
Education	Loans for education	Up to ₹20 lakh (India) & ₹30
	purposes	lakh (Abroad)
Housing	Loans for affordable housing	Up to ₹35 lakh in metros, ₹25
		lakh in others
Renewable	Loans for solar, wind, and	Up to ₹30 crore (Grid-
Energy	biogas projects	connected projects)
Social	Loans for schools,	Up to ₹5 crore
Infrastructure	healthcare centres	

PSL Targets (2023-24)

TOL TUISOUS (2020 24)		
Bank Type	Target	Additional Details
Domestic SCBs & F <mark>oreig</mark> n	40 % of	Agriculture: 18%,
Banks (≥20 branch <mark>es)</mark>	ANBC/CEOBE	Small Farmers: 8%
Foreign Banks (<20	40 % of	Export Credit: 32%,
branches)	ANBC/CEOBE	Others: 8%
RRBs & Small Finance	75 % of	Special Focus on
Banks	ANBC/CEOBE	Agriculture & MSMEs
Urban Cooperative Banks	40% → 75% (from FY	Gradual increase in
	2025-26)	stages

Failure to Meet PSL Targets

- Banks must deposit the shortfall amount into:
 - Rural Infrastructure Development Fund (RIDF) under NABARD
 - Other funds like Small Industries Development Bank of India (SIDBI) and National Housing Bank (NHB)

Recent Updates (2024)

- RBI included Electric Vehicles (EVs) and loans to Agritech Startups under PSL.
- Separate sub-targets for women-led MSMEs were introduced.

Priority Sector Lending Certificates (PSLCs)

- Introduced by RBI in 2016 as a market-based tool to promote efficient allocation of credit under Priority Sector Lending (PSL).
- Tradable certificates issued by banks having excess PSL loans to those having shortfalls.
- Facilitates banks to meet their PSL targets without giving direct loans.
- No transfer of underlying loan or risk → Only the priority sector obligation is transferred.
- Traded on RBI's e-Kuber Portal.
- Valid for **1 year** from the date of issue.
- No limit on the amount of certificates a bank can buy or sell.

External

ECBs are loans raised by Indian resident entities from non-resident lenders for

Commercial Borrowings (ECBs)

commercial purposes.

 Governed by Foreign Exchange Management Act (FEMA), 1999 and RBI guidelines.

Key Features

Parameter	Automatic Route	Approval Route
Maximum	USD 750 million/year	Above USD 750 million
Amount		
Minimum	3 years (Infra: 5 years)	As per RBI discretion
Maturity		
End-use	Capital goods, Infra, Renewable	Any purpose except
	Energy	speculation
Lender Type	Foreign Banks, Export Credit	Foreign Equity Holders,
	Agencies, Multilateral Institutions	Sovereign Funds

ECB Routes

- 1. Automatic Route: No prior approval required (subject to eligibility).
- 2. Approval Route: Prior approval of RBI required for specified purposes.

Latest ECB Trends (2024)

- India raised USD 32 billion through ECBs in FY 2023-24.
- Top sectors:
 - Infrastructure
 - Renewable Energy
 - Startups
 - Health Care
- RBI allowed ECBs for:
 - Electric Vehicle Charging Infrastructure
 - Green Hydrogen Projects
 - Climate Adaptation Projects

Prohibited End Uses

- Real Estate
- Capital Market Investment
- Equity Investment
- Working Capital (except startups)
- Repayment of domestic loans

Foreign Direct Investment (FDI)

- FDI refers to investment by a non-resident entity in the capital of an Indian company or business, with the objective of establishing long-term interest and control.
- Administered by Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry.

Governed by:

Foreign Exchange Management Act (FEMA), 1999

FDI Routes

Route	Description	Examples
Automatic	No prior approval required	IT, Manufacturing,
Route	(subject to sectoral limits).	Renewable Energy
Government	Prior approval from DPIIT +	Defence, Telecom, Print
Route	concerned Ministry needed.	Media

FDI Limit under Automatic Route (2024)

Sector	FDI Limit
Agriculture	100%
Renewable Energy	100%
Defence Manufacturing	74%
Insurance	74%
Telecom	100%
Space Sector (Satellites Manufacturing)	100%

Top FDI Source Countries (2000–2024)

Danie	0	Ol (0/)
Rank	Country	Share (%)
1	Mauritius	26%
2	Singapore	23%
3	USA	10%
4	Netherlands	7%
5	Japan	6%

Top FDI Recipient States (2023-24)

Rank	State	Share (%)
1	Maharashtra	28%
2	Gujarat	18%
3	Karnataka	17%
4	Tamil Nadu	10%
5	Delhi NCR	9%

Sectors with Highest FDI Inflows

Sector	Share (%) (202 <mark>3-24)</mark>
Computer Software & Hardware	39%
Services	14%
Telecom	10%
Trading	7 %
Construction Ac <mark>t</mark> ivit <mark>ie</mark> s	6%

Recent Developments (2024)

- 100% FDI allowed under Automatic Route in:
 - Space Sector (Satellites Manufacturing)
 - o Green Hydrogen Projects
 - o Data Centres
- DPIIT allowed Startups to raise FDI through Convertible Notes.
- FDI in Telecom increased from 74% to 100% under Automatic Route.
- India became the 3rd Largest FDI Recipient in the World (2023) after USA & China.

FDI vs. FPI

Parameter	FDI	FPI
Туре	Long-term Investment	Short-term Investment
Control	Gives Ownership	No Ownership
Regulation	FEMA + DPIIT	SEBI
Impact	Capital Formation	Market Volatility

Why in News?

• India recorded **USD 83.57 billion** FDI inflows in FY 2023-24.

	India became the 3rd Largest FDI Recipient in the World (2023) after USA &	
	. , ,	
GAAR vs BEPS	 China. BEPS refers to tax avoidance strategies used by MNCs to shift profits from high tax jurisdictions to low-tax or no-tax countries (Tax Havens). Example: Google, Apple, Amazon shifting profits to Ireland or Cayman Islands. BEPS Framework Developed by OECD + G20 Countries in 2015 through the BEPS Action Plan (18 Actions). India is a signatory to the OECD BEPS Multilateral Convention (MLI) since 2019 Objective: Prevent Artificial Profit Shifting Ensure Taxation at Place of Value Creation Curb Harmful Tax Practices General Anti-Avoidance Rule (GAAR) IN Introduced in India under Income Tax Act, 1961 Implemented from April 1, 2017 Applicable to transactions made with the primary purpose of tax avoidance Covers both Domestic + International Transactions. Why in News ? India became the first country to implement GAAR + Equalisation Levy + BEPS together. OECD recommended India's Equalisation Levy (Google Tax) as a model for other	5).
	countries.	5 1
Infrastructure Investment Trusts (InvITs)	 Investment vehicles like Mutual Funds that pool money from investors to invest in Infrastructure Projects (Toll Roads, Power Transmission Lines, Gas Pipelines). First introduced by SEBI in 2014. Features of InvITs 	
	Feature Description	
	Regulating Authority SEBI (InvIT Regulations, 2014)	
	Structure Trust-Based Investment Model	
	Minimum Investment ₹10 lakh (earlier ₹1 crore, reduced in 2019)	
	Liquidity Listed InvITs are traded on Stock Exchanges	
	Tax Benefit Pass-through taxation (No tax at InvIT level)	
	Governing Law SARFAESI Act, 2002 + SEBI Regulations	
	 Why in News? India's first Green Energy InvIT launched by National Highways Authority of India (NHAI). Government encouraging InvITs for Asset Monetisation under National Monetisation Pipeline (NMP). 	_
FinTech	Launched by RBI.	
Repository	Web-based comprehensive database of Indian FinTech firms for better regulatory understanding.	'
PRAVAAH Portal	 Full Form: Platform for Regulatory Application, Validation, and Authorization Launched by RBI in 2024 Objective Single-window platform for Regulatory Applications + Approvals Replaces traditional offline manual application system 	
Sovereign Credit	Assessment of a Country's Creditworthiness to repay its debt.	
Ratings	 Provided by Credit Rating Agencies like: ✓ S&P Global 	
	✓ Moody's	

	✓ Fitch
	Key Factors Considered
	Fiscal Deficit
	Inflation Rate
	External Debt
	Political Stability
	GDP Growth
Sanitary and	Trade regulations to protect human, animal, and plant health from risks arising
Phytosanitary	due to:
(SPS) Measures	o Pests
(WTO)	o Plant diseases
	 Contaminants in food (like bacteria, toxins, or chemicals)
	Legal Basis
	Established under Sanitary and Phytosanitary (SPS) Agreement of the World
	Trade Organization (WTO) (1995).
	Part of the Uruguay Round Agreements.
	Came into force on January 1, 1995 .
	India's Stand at WTO
	India supports science-based SPS measures but opposes their misuse as Non-
	Tariff Barriers (NTBs) by developed countries.
	Frequent disputes with USA & EU over:
	 Mango & Basmati Rice Exports (due to pesticide residue)
	o Dairy Products
Preston Curve	 Graph showing the relationship between:
	 Per Capita Income
	○ Life Ex <mark>pect</mark> ancy
	Key Observation
	Higher income → Longer life expectancy
	But after a certain income level (~\$20,000 per capita), life expectancy plateaus
Secured Overnight	Benchmark Interest Rate for US Dollar Loans & Derivatives
Financing Rate	 Replaced LIBOR (London Interbank Offered Rate) from 2023
(SOFR)	



Topic Name	Details		
Rubber Board	Statutory body under Rubber Act, 1947 .		
	Nodal Ministry: Ministry of Commerce & Industry		
	Headquarters: Kottayam, Kerala		
	One of the oldest Commodity Boards in India (Established in 1947).		
	India's Rubber Industry		
	India: 2nd largest producer & 4th largest consumer of natural rubber globally.		
	Top Producing States: Kerala > Tripura > Assam		
	Kerala contributes 75% of India's natural rubber production.		
Pump and Dump	Stock Market Manipulation Scheme.		
Scheme	• Fraudsters artificially inflate stock prices using false or misleading information →		
	Sell at high prices → Small investors suffer losses.		
	Process		
	1. Purchase of low-value stocks.		
	2. Fake promotions through social media, emails, or fake news.		
	3. Artificial price hike due to investor demand.		

	1					
	4. Sellir	g at high prices → Small investors face heavy	losses.			
	Legal Frame	 Prohibited under SEBI (Prohibition of Fraudulent and Unfair Trade Practices) Regulations, 2003. SEBI can impose monetary penalties & ban traders involved in such schemes. 				
	• Prohi					
	Regu					
	SEBI					
Derivatives	• Finar	cial contracts whose value is derived from un	nderlying assets like:			
	o C	Commodities				
	o S	ecurities				
	o C	Currencies				
	o S	tock Index				
	Purpose					
	• Hedg	fing: Risk management against price fluctuation	ons.			
	• Spec	 Speculation: Profit-making from price movements. Types of Derivatives 				
	Types of Der					
	Type	Type Description Example				
	Futures	Agreement to buy/sell at future date	Crude Oil Futures			
	Options	Right (not obligation) to buy/sell	Stock Options			
	Swaps	Exchange of cash flows or interest rates	Interest Rate Swaps			
	Regulation in	India				
	 SEBI 	regulates Equity & Commodity Derivatives .				
	• RBI r					
	Recent Development					
	 SEBI allowed trading in Commodity Options for farmers in 2024. RBI introduced Exchange-Traded Currency Derivatives in 2024 					



Topic Name	Details			
International	UN-affiliated Intergovernmental Organisation to promote global cooperation in			
Sugar	the sugar sector.			
Organisation (ISO)	Established: 1968 under International Sugar Agreement, 1968			
	Headquarters: London, UK			
	Members: 85 countries (Representing 90% of Global Sugar Production & 60% of			
	Global Consumption).			
	Functions			
	Improve transparency in the global sugar market.			
	Collect and publish market data & forecasts.			
	Promote research on sugarcane, beet, and biofuels.			
	Facilitate sustainable sugar production & bioenergy use.			
	lia's Role			
	One of the Largest Producers & Consumers of sugar globally.			
	India hosted ISO Council Meeting in New Delhi (2024) for the first time.			
	India raised the issue of Fair Trade for Sugarcane Farmers and promotion of			
	Ethanol Blending Program.			
Financial	A Social Media Content Creator giving financial advice or investment tips on			
Influencer	platforms like YouTube, Instagram, or Telegram.			
(FinFluencer)	Many are unregistered with SEBI and can mislead small investors.			
	SEBI Guidelines (2024)			
	Mandatory registration under Investment Adviser or Research Analyst			

	Regulations.	
	 No tie-ups with Brokerage Firms without SEBI registration. 	
	Ban on Referral Commissions from Stock Brokers or Mutual Funds.	
Clearing	1. Entity responsible for Clearing & Settlement of trades in:	
Corporation (CC)	Securities	
	Derivatives	
	Commodities	
	2. Acts as an Intermediary between buyers and sellers to reduce Counterparty Risk.	
	3. Regulated by SEBI	
	How It Works	
	 Trade Agreement → Buy/Sell Order Placed 	
	2. Clearing Corporation becomes Counterparty	
	3. Ensures both parties fulfill obligations	
	4. Settlement of Funds and Securities	
	Bonus Concept	
	What is T+1 Settlement System?	
	Introduced by SEBI in 2023.	
	Settlement of trades in One Day (T+1) instead of Two Days (T+2).	
	India became the First Country to implement T+1 Settlement in Stock Markets.	



1. Front Running

- o It refers to the unethical practice of using non-public, price-sensitive information to trade securities before a large transaction is executed.
- o The intention is to profit from the anticipated price movement caused by the upcoming transaction.
- Front running is a form of insider trading and punishable under the SEBI (Prohibition of Fraudulent and Unfair Trade Practices) Regulations, 2003.

2. Variable Repo Rate (VRR)

- It is a liquidity adjustment tool used by the RBI to manage short-term liquidity in the economy.
- Under this mechanism, the interest rate is determined through auction-based bidding rather than being fixed by the RBI.
- The rate is usually lower than the repo rate but higher than the reverse repo rate.
- The borrowing duration is typically more than one day and can go up to 14 days.

3. Sticky Inflation

- It refers to a situation where prices remain high and do not adjust quickly despite changes in demand or supply conditions.
- Sticky inflation is often observed in essential goods and services like food, housing, and healthcare.
- It occurs due to rigid contracts, wage agreements, or price regulations.

Agriculture

Topic	Details			
Rice	1. Staple Food Crop fo	1. Staple Food Crop for more than 65% of the Indian population.		
	2. Accounts for 1/3rd of	2. Accounts for 1/3rd of total food grain production in India.		
	3. Covers about 25% o			
	4. Grown primarily as a	4. Grown primarily as a Kharif Crop in North India and as Rabi Crop in parts of Eastern and		
	Southern India.			
	5. Aman, Aus, Boro are r	najor variety		
	T D' D I ' 101	. (0000 04)		
	Top Rice-Producing Sta	tes (2023-24)		
	Rank	State	% Share	

1st	West Bengal	13%
2nd	Uttar Pradesh	12%
3rd	Punjab	11%
4th	Tamil Nadu	9%
5th	Andhra Pradesh	7%

Global Status

- 2nd Largest Producer (After China)
- Largest Exporter of Rice globally (Approx. 40% of Global Trade 2023)
- India banned the export of Non-Basmati White Rice in 2023 to control domestic inflation.

Palm Oil

What is Palm Oil?

- Derived from the **Mesocarp (Pulp)** of the fruit of the **Oil Palm Tree (Elaeis** guineensis).
- High in **Saturated Fats** and remains **semi-solid** at room temperature.
- Used in Cooking, Cosmetics, and Biofuels.

Global Production

Rank	Country	Share (%)
1st	Indonesia	59%
2nd	Malaysia	25%
3rd	Thailand	4%
4th	Colombia	2%
5th	Nigeria	2%

India's Role

- Largest Importer and 2nd Largest Consumer of Edible Oils globally.
- Palm Oil accounts for 60% of India's Edible Oil Imports.

Major Palm Oil Growing States in India

State	Contribution (%)
Andhra Pradesh	52%
Telangana	34%
Kerala	12%

National Edible Oil Mission - Oil Palm (NEOM-OP)

- Launched in 2021 to boost domestic Palm Oil production.
- Target: Cover 10 lakh hectares by 2025-26.
- Focus Areas: North-Eastern States and Andaman & Nicobar Islands.

Natural Rubber

What is Natural Rubber?

- It is obtained from the Latex (milky fluid) of tropical trees like Hevea brasiliensis.
- It is a Polymer of Isoprene (C5H8).
- Mainly used in Tyre Industry (Automobile Sector), Footwear, and Medical Goods.

Ideal Conditions

- Temperature: 20°C 34°C
- Rainfall: 150 300 cm
- Soil: Lateritic, Alluvial, and Well-Drained Soil
- Humidity: **75-90**%
- Requires 100+ rainy days in a year
- Cannot tolerate strong winds

India's Position

• India is the **6th largest producer** of natural rubber globally.

- Major Rubber-Producing States:
 - o Kerala (90% of total production)
 - o Tamil Nadu
 - o Tripura
 - o Assam
 - o Meghalaya

Global Scenario

- Largest Producer: Thailand
- Other Leading Producers: Indonesia, Vietnam, China
- India is the **2nd largest consumer** of natural rubber after **China**.

Rubber Board of India

- Statutory body under the Rubber Act, 1947
- Nodal Ministry: Ministry of Commerce & Industry
- Headquarters: Kottayam, Kerala
- Functions: Research, Development, and Promotion of Rubber Industry

Environment

SPECIES

Name	Description	Habitat / Distribution	IUCN Status
Giant Panda (Ailuropoda melanoleuca)	 Herbivorous (99% diet: Bamboo). Characterized by black and white fur. Has a "pseudo-thumb" (modified wrist bone) for gripping bamboo. 	 Native to China (Sichuan, Shaanxi, and Gansu provinces). Found in temperate forests. 	Vulnerable
Mainland Serow (Capricornis sumatraensis thar)	Omnivorous (Leaves, shoots, fruits, and small animals). Goat-antelope species with short, backward-curving horns. Shy and solitary.	 Found in Eastern Himalayas and Northeast India (Arunachal, Nagaland, Manipur, Mizoram, Assam, Meghalaya, Tripura, Sikkim). Also in China and Southeast Asia. 	Vulnerable
Four-Horned Antelope (Tetracerus quadricornis)	 Only antelope species with four horns. Herbivorous (Grass, leaves, fruits). Diurnal and shy. Competes with livestock for food. 	 Found in India (Western and Central India, Western Ghats) and Nepal. Prefers dry deciduous forests. 	Vulnerable
Arabian Oryx (Oryx leucoryx)	 National animal of UAE, Oman, Jordan. Herbivorous (Grasses, roots, fruits). Adapted to desert life (survives without water for weeks). 	 Found in Arabian Peninsula (Saudi Arabia, UAE, Oman, Jordan, Israel, Iraq). Lives in deserts and arid regions. 	Least Concern (Previously Extinct in Wild)
Hoolock Gibbon (Genus: Hoolock)	 Only ape species in India. Frugivorous (Fruits, leaves, insects). 	 Found in Northeast India, Bangladesh, Myanmar, China. Tropical and subtropical forests. 	Endangered

	1	1	
	Monogamous and		
	territorial.		
	Arboreal (lives in trees).		
Western Hoolock	Smaller than Eastern	• Found in India (Assam,	Endangered
Gibbon (Hoolock	species.	Arunachal, Nagaland,	
hoolock)	Black or brown fur with a	Meghalaya, Mizoram, Tripura,	
	white brow band.	Manipur).	
	Agile tree-dweller.	 Also in Bangladesh and Myanmar. 	
Eastern Hoolock	Larger than Western	Found in Arunachal Pradesh &	Vulnerable
Gibbon (Hoolock	species.	Assam (Dibang Valley, Dapha	
leuconedys)	Lighter brown fur.	Bum, Namdapha National Park).	
leuconeuys)	Less territorial.	Also in China & Myanmar.	
Greater Adjutant	Scavenger bird (Feeds on	Found in India (Assam, Bihar),	Endangered
Stork (Leptoptilos	carrion, fish, small	Cambodia.	
, , ,	vertebrates).	Wetlands and garbage dumps.	
dubius)	Tallest flying bird in India.	Samuel Sa	
	Threatened by habitat		
	loss.		
Saltwater	Largest living reptile (Up	Found in India (Sundarbans,	Least Concern
Crocodile	to 7m long).	Odisha, Andaman & Nicobar).	
(Crocodylus	Aggressive predator	Also in Australia, Southeast Asia.	
porosus)	(Feeds on fish, birds,		
porcodoj	mammals).		
	Can live in both		
	freshwater & saltwate <mark>r.</mark>		
Mugger Crocodile	Broad-snouted	 Found in India (Rivers, lakes, 	Vulnerable
(Crocodylus	freshwater crocodile.	wetlands), Pakistan, Nepal, Sri	
palustris)	Opportunistic carnivore	Lanka.	
	(Fish, reptiles, mammals).	 Prefers freshwater habitats. 	
	 Threatened by poaching. 		
Gharial (<i>Gavialis</i>	 Long, thin snout adapted 	 Found in India (Chambal, Ganga, 	Critically
gangeticus)	for fish-eating.	Yamuna, Brahmaputra), Nepal.	Endangered
	Weak limb structure,	Riverine species.	
	aquatic lifestyle.		
	Threatened by river		
	pollution, sand mining.		
Indian Painted	Burrowing frog species.	• Found in India, Sri Lanka, Nepal,	Least Concern
Frog (Uperodon	Nocturnal (Active at	Bangladesh.	
taprobanicus)	night).	 Prefers marshy wetlands, 	
	Feeds on insects,	forests.	
	termites.		
Pearl Spot Fish	State fish of Kerala.	Found in India (Kerala	Least Concern
(Etroplus	Omnivorous (Feeds on	backwaters, freshwater rivers,	
suratensis)	plankton, algae).	estuaries).	
	Important in aquaculture and local cuisine.	Also in Sri Lanka .	
Diadromous Fish	Fish that migrate between	Found in coastal regions & rivers	Not applicable
5040 1 1011	freshwater & saltwater.	worldwide.	(Category of
	 Includes Salmon, Eel, 	Troitariao.	
	Hilsa.		species)
	i itta.		

Przewalski's Horse (Equus ferus przewalskii)	 Only true wild horse species. Stocky build, short mane. Previously extinct in the wild. 	 Found in Mongolia, China, Kazakhstan. Grasslands & steppes. 	Endangered
Sea Cucumber (Class: Holothuroidea)	 Marine invertebrate. Used in Traditional Chinese Medicine Threatened by overfishing. 	 Found in Indian Ocean, Pacific Ocean, Coral reefs. Seafloor dwellers. 	Vulnerable
Stromatolites	 Fossilized microbial structures. Oldest known life forms (3.5 billion years old). 	Found in Shark Bay (Australia), Andaman & Nicobar.	Not applicable (Geological Feature)
Parengyodontium Album	Fungus species.Important in biodegradation.	Found in Soil, decaying wood .	Not evaluated
Termites (Order: Blattodea)	 Ecosystem engineers, decompose wood. Threat to agriculture & wooden structures. 	Found worldwide (Tropical & Subtropical regions).	Not evaluated

PLANTS/TREES SPECIES

Name	Unique Features	Habitat / Distribution	IUCN Status
Mahua (Madhuca longifolia)	 Native Indian tree used for Traditional Liquor, Oil, and Medicine. Climate-resilient tree of Central India. Flowers edible + High socioeconomic importance for tribal communities. 	 Found in Central & Eastern India (Jharkhand, Chhattisgarh, Odisha, Madhya Pradesh). Also in Nepal & Sri Lanka. 	Not Evaluated
Baobab Tree (Adansonia digitata)	 Known as "Tree of Life". Can live for over 1000 years. Stores water in trunk during droughts Recently found in Mandhata Island (Madhya Pradesh) for the first time in India. 	 Native to Africa & Madagascar. Introduced to India (Gujarat, Rajasthan, Madhya Pradesh). 	Least Concern
Encephalartos Woodii	 World's Rarest Plant (Only Male plant specimens exist). Type of Cycad Plant (Living Fossil). Thought to be extinct in the wild. 	 Native to South Africa. Found only in Botanical Gardens Worldwide. 	Extinct in the Wild
Filoboletus Manipularis	 Rare Bioluminescent Mushroom Glows in the dark due to Luciferase Enzyme. Discovered recently in Western Ghats (Karnataka). 	Found in Tropical Forests of Western Ghats & Northeast India.	Not Evaluated

Davana Flowers	Aromatic medicinal herb Head in Ayungdia Medicina	Native to Southern India (Tamil Nadu, Karnataka, Andhra	Not Evaluated
(Artemisia	Used in Ayurvedic Medicine and Partitional Industry	Pradesh).	
pallens)	and Perfume Industry.	Flauesii).	
District Hilliam	Cultivated for essential oils.		Nick Frankrika d
Dictyostelium	Type of Slime Mold.	Found in Soil Worldwide (Humid	Not Evaluated
Discoideum	Model organism in Cell Biology	Regions).	
	& Evolutionary Research		
	Shows both unicellular &		
	multicellular behavior.		
Chlorella	Type of Green Microalgae.	Found in Freshwater Lakes &	Not Evaluated
Sorokiniana	Used in Biofuel Production &	Ponds.	
	Carbon Sequestration.		
	Rich in Proteins & Omega-3		
	Fatty Acids.		
Microalgae	Tiny aquatic organisms used in	Found in Freshwater & Marine	Not Evaluated
	Biofuels, Cosmetics &	Ecosystems Worldwide.	
	Pharmaceuticals.		
	Important for Carbon		
	Sequestration & Food		
	Security.		
Dendrophthoe	Newly discovered Parasitic	Endemic to Northeast India	Not Evaluated
Longensis	Plant species (2024).	(Assam, Arunachal Pradesh).	
	Grows on Mango & Fig trees.		
	Found in Assam		
Petrocosmea	 New Plant Species (2024). 	Discovered in Arunachal	Not Evaluated
Arunachalense	Herb belonging to	Pradesh.	
	Gesneriaceae family.	Endemic to Eastern Himalayas.	
	• Found at high altitudes (1500-		
	2000m).		
Thismia	Rare Mycoheterotrophic Plant.	Found in Malaysia, Indonesia.	Not Evaluated
Malayana	Completely depends on Fungi	Recently discovered in Western	
	for Nutrition.	Ghats (India).	
	No Chlorophyll (Non-	C	
	photosynthetic).		
Didymocarpus	New Plant Species (2023)	Found in Konkan region of	Not Evaluated
Janakiae	Endemic to Maharashtra	Maharashtra.	
	(Western Ghats).		
	Herb with Bright Yellow		
Dawan a saata 11	Flowers.		Night Providence 1
Paraparatrechina	Newly discovered Blue- Newly discovered	Found in Western Ghats (Karala)	Not Evaluated
Neela	Coloured Ant species (2024).	(Kerala).	
	Named after Neelakurinji Flancour		
Onhishthus	Flowers.	Indiana antono (Bara de Bara de I)	Not Fredricted
Ophichthus	New Snake Eel Species (2024)	• Indian waters (Bay of Bengal).	Not Evaluated
Suryai	(2024)		
	Discovered off the coast of West Bangal (Ray of Bangal)		
	West Bengal (Bay of Bengal).Named after Professor S.		
Musankwa	Sundaram Surya.	- Couthour Africa	Not Evaluated
	ewly discovered Fish Species (2024)	Southern Africa.	MOI EVALUATED
Sanyatiensis	(2024).		
	Found in Sanyati River, Zimbabusa		
İ	Zimbabwe.		

	Named after local	
	Zimbabwean traditions.	
Senna	Invasive Plant Species.	Found in India (Nilgiri Biosphere Least Concern
Spectabilis	Threat to Western Ghats	Reserve).
-	Biodiversity.	Also in Tropical regions
	Native to South America.	worldwide.

PROTECTED AREAS IN NEWS

Name	Location	Vegetation	Key Fauna	Unique Facts	Rivers	Tribes
Kawal Tiger	Telangana	Dry	Bengal Tiger,	Part of	Godavari	Gond,
Reserve		Deciduous	Sloth Bear,	Nagarjunsagar-	River	Lambada
		Forest, Teak	Indian Bison	Srisailam Tiger		
		Forest		Reserve		
				Landscape		
Tadoba Andhari	Maharashtra	Tropical Dry	Bengal Tiger,	Oldest & Largest	Andhari	Gond,
Tiger Reserve		Deciduous	Indian	Tiger Reserve of	River	Kolam
		Forest	Leopard,	Maharashtra		
			Dhole	Fire incidents in		
		/		2024		
Pench Tiger	MP &	Tropical	Bengal Tiger,	Inspiration for	Pench River	Gond,
Reserve	Maharashtra	Moist	Indian Gaur,	Rudyard Kipling's		Korku
		Deciduous	Chital	Jungle Book		
		Forest				
Veerangana	Madhya	Dry	Bengal Tiger,	53rd Tiger Reserve	Narmada	Gond,
Durgavati Tiger	Pradesh	Deciduous	Leopard,	of India (2023)	River	Bhil
Reserve		Forest	Chinkara	Named after Rani		
		3,200	IAS-	Durgavati		
Ranthambore	Rajasthan	Tropical Dry	Bengal Tiger,	Famous for Machli	Banas River	Meena,
National Park		Deciduous	Striped Hyena,	– World's Most	+ Chambal	Gujjar
		Forest	Marsh	Photographed	River	
			Crocodile	Tigress	(Nearby)	
Nagi Bird	Bihar	Wetland	Indian	Important Bird	Nagi Dam	None
Sanctuary		Ecosystem	Skimmer, Bar-	Area (IBA)	Reservoir	
			headed Goose	Migratory Bird Hotspot		
Nakti Bird	Bihar	Wetland	Northern	Located near Nakti	Nakti Dam	None
Sanctuary		Ecosystem	Shoveler,	Dam	Reservoir	
-			Eurasian			
			Wigeon			
Pobitora	Assam	Tropical	Indian One-	Highest Rhino	None	Bodo,
Wildlife		Moist	Horned	Density in the		Mising
Sanctuary				World		

		Deciduous	Rhinoceros,			
		Forest	Asiatic Buffalo			
Raimona	Assam	Moist	Golden	Part of Manas	Sankosh	Bodo,
National Park		Deciduous	Langur, Asian	Biosphere	River	Garo
		Forest	Elephant	Reserve		
				Assam's 6th		
				National Park		
				(2021)		
Binsar Wildlife	Uttarakhand	Temperate	Himalayan	Birdwatcher's	Kosi River	Bhotia,
Sanctuary		Broadleaf	Monal,	Paradise	(Nearby)	Kumaoni
		Forest	Leopard,	Scenic views of		
			Black Bear	Nanda Devi &		
				Kedarnath Peaks		
Rajaji Raghati	Uttarakhand	Tropical	Bengal Tiger,	Proposed under	Ganga &	Gujjar,
Biosphere	(Proposed	Moist	Asian	UNESCO MAB	Yamuna	Van
(RRB)	2024)	Deciduous	Elephant, King	Programme	Rivers	Gujjar
		Forest	Cobra	=		

GLOBAL ORGANIZATIONS & ALLIANCES

Name	Established	Objective	Key Facts/Features	India's Role/Significance
	Year			
Global Gibbon	2021	Conservation of	Focuses on habitat	India is home to Hoolock
Network (GGN)		Gibbons	protection and	Gibbon (only Ape species
		VILS	research on enda	in India)
			ngered Gibbon	
		IAS	species	
International	2022	Protect the rights of	Launched at UNEP's	India is a founding
Alliance of Waste		waste pickers	INC-1 on Plastic	member
Pickers (IAWP)			Pollution	
Global Soil	2012	Promote sustainable	Led by FAO	India launched Soil
Partnership (GSP)		soil management	Soil Health	Health Card Scheme
			Restoration Projects	under GSP
Infrastructure for	2021	Support small island	Joint initiative of India,	India pledged \$10 million
Resilient Island	(COP26)	developing states for	UK & Australia	
States (IRIS)		climate resilience		
Antarctic Treaty	2024	Environmental	Annual meeting under	India attended as a
Consultative		Protection in	Antarctic Treaty	Consultative Party
Meeting (ATCM-46)		Antarctica	System	

CONVENTIONS & AGREEMENTS

Name	Established	Objective	Key Provisions	India's Status
	Year			
Montreal Protocol	1987	Phase out Ozone	Kigali Amendment	India ratified Kigali
		Depleting	(2016) to phase out	Amendment in 2021
		Substances	HFCs	
United Nations	1994	Combat	Part of Rio	India hosted COP-14 in
Convention to Combat		desertification and	Conventions	2019
Desertification		drought		
(UNCCD)				
Carbon Border	2023 (EU	Impose carbon tariffs	Targets high-carbon	India raised concerns at
Adjustment Mechanism	Law)	on imports	goods like steel,	WTO
(CBAM)			cement	
Nature Restoration Plan	2024 (EU	Restore 20% of	Focus on	No direct mention, but
(NRP)	Initiative)	degraded land &	Biodiversity	aligns with India's
		water ecosystems	Conservation	National Mission for a
				Green India
New Collective	2024 (Under	C <mark>limat</mark> e Finance for	Replacement of	India demands Climate
Quantitative Goal	UNFCCC)	De veloping	\$100 billion target	Justice
(NCQG)		Countries		

CONSERVATION PROJECTS & INITIATIVES

Name	Launched Year	Objective	Species/Region Covered	Significance
Crocodile Conservation	1975	Protect crocodile	Gharial, Mugger,	India was the first
Project		populations	Saltwater Crocodile	country to launch it
				globally
Rhisotope Project	2024	Use of Isotopes to	South Africa, India	Combines Nuclear
		protect Rhinos	(Proposed)	Science + Conservation
Holistic Development of	2023	Strategic +	Great Nicobar Island	Balances Infrastructure
Great Nicobar Island		Ecological		with Biodiversity
(GNI)		Development		
Miyawaki Technique	1970s	Dense, fast-growing	Urban Afforestation	Used in Chennai &
	(Japan)	forests	Projects	Mumbai for urban forest
				creation
Evacuating Island	2024	Relocation of	Small Island	First Climate Refugee
		Climate Refugees	Developing States	Project

CLIMATE & INFRASTRUCTURE FUNDS

Name	Established	Objective	Funding	India's Role
	Year		Agency/Partners	
Infrastructure	2024	Climate Resilient	UNOPS + GCF	India is a Partner
Resilience Accelerator		Infrastructure		
Fund (IRAF)				
CoHABITAT	2024	Urban Biodiversity	UNEP Initiative	India is exploring
		Restoration		partnerships
Blue Planet Prize	1992	Award for	Japan-based	Not directly related
		Environmental	initiative	
		Conservation		
Evacuating Island	2024	Build Infrastructure	International	Possible India
Infrastructure		for Climate Refugees	Donors	participation under
				South-South
				Cooperation

Science & Technology



Topic	Description			
Dark Matter and	Though both have not been directly observed, there is solid evidence for their			
Dark Energy	existence from gravitational effects.			
Dark Matter	Nature: Hypothetical, invisible matter that does not emit or interact with			
	electromagnetic radi <mark>a</mark> ti <mark>on</mark>			
	Evidence: Detected through gravitational effects on visible matter and galaxy			
	rotation curves			
	Properties:			
	Does not emit, absorb, or reflect light			
	Forms clumped halos around galaxies			
	Exerts attractive gravitational force			
	Composition (Hypothesised):			
	WIMPs (Weakly Interacting Massive Particles)			
	• Axions			
	Sterile Neutrinos			
	Percentage in Universe: 27% of the universe's mass-energy			
Dark Energy	Nature: Hypothetical repulsive force driving the accelerating expansion of the			
	universe			
	Discovered by: Observations of distant supernovae in 1998			
	Percentage in Universe: 68% of the universe			
	Properties:			
	Smoothly distributed across space			
	Constant density			
	Associated with Cosmological Constant (Λ) proposed by Albert Einstein			

	Significance: Explains why the universe's expansion is speeding up instead of slowing down
Recombinant	 slowing down Definition: Proteins produced using recombinant DNA technology by inserting
Proteins (RPs)	desired genes into host organisms like bacteria, yeast, or mammalian cells
Pioteilis (NPS)	Applications:
	Biopharmaceuticals: Insulin, Growth Hormones, Monoclonal Antibodies
	Vaccines: Hepatitis B, HPV
	Enzymes: Industrial and Food Processing
Coal Gasification	 Process: Conversion of coal into syngas (CO, H₂, CH₄, CO₂, H₂O) through partial
Coat Gasincation	oxidation with oxygen, steam, or CO ₂
	Uses:
	Power Generation
	Production of Methanol & Synthetic Natural Gas (SNG)
	Fertilizers (Urea production using syngas)
Underground Coal	Process: In-situ gasification of coal seams deep underground without mining
Gasification	Advantages:
(UCG)	Exploits coal reserves that are otherwise uneconomical
(000)	Reduces surface environmental damage
	Produces cleaner fuel
	Pilot Project: Launched in 2024 by the Ministry of Coal at Jamtara, Jharkhand
Atomic Clock	Function: Measures time based on vibration frequencies of atoms like Cesium-
	133 or Rubidium-87
	Accuracy: Most accurate clocks in the world, losing only 1 second in 300 million
	years
	Operational in India:
	Ahmedabad (Space Applications Centre, ISRO)
	Faridabad (National Physical Laboratory, CSIR)
	Significance:
	Synchronisation of Navigation Systems (NavIC)
National Quantum	Launched by: Govt. of India (2023–2031)
Mission (NQM)	Nodal Agency: Department of Science & Technology (DST)
	Budget: ₹6,000 crore
	Focus Areas:
	Quantum Computing
	Quantum Communication
	Quantum Sensing & Metrology
	Quantum Materials & Devices
International Year	Declared by: United Nations
of Quantum	Objective:
Science and	Raise awareness about the transformative potential of Quantum Science Raise awareness about the transformative potential of Quantum Science
Technology (2025)	Promote international cooperation in quantum research
Key Concepts of	Quantum Superposition = Object exists in more than one state simultaneously. Quantum Superposition = Object exists in more than one state simultaneously.
Quantum Science	Quantum Entanglement = Particles interconnected irrespective of distance. Quantum Suprement = Quantum appropriate authority and particles in the properties.
	Quantum Supremacy = Quantum computer outperforms classical computer. Quantum Crystography = Secure communication through Quantum Key.
	Quantum Cryptography = Secure communication through Quantum Key Distribution (OKD)
	 Distribution (QKD). Quantum Simulation = Models quantum systems accurately.
	 Quantum Simulation - Models quantum systems accurately. Quantum Sensing = High precision measurements of magnetic fields, gravity, and
	time.
SafeEXO-Cas	Technology: Advanced CRISPR/Cas9 gene editing platform
JaieLAU-Uas	Purpose: Improves precision and reduces off-target mutations in genome editing
	Developed by: Researchers from Massachusetts General Hospital (2024)
	Significance:
	Organization

	Safer for gene therapy applications
	Potential treatment for genetic disorders like Sickle Cell Anaemia & Cancer
TRISHNA Mission	Full Form: Thermal InfraRed Imaging Satellite for High-resolution Natural
	resource Assessment
	Collaboration: ISRO + CNES (France)
	Purpose:
	High-resolution thermal imaging
	Water resource management
	Urban Heat Mapping
	Orbit: Sun-synchronous orbit
	Operational Life: 5 years
EarthCARE	Full Form: Earth Cloud Aerosol and Radiation Explorer
Mission	Collaboration: ESA (European Space Agency) + JAXA (Japan)
	Purpose:
	Study cloud-aerosol interactions
	Measure their impact on Earth's radiation balance
	Launch Year: 2024
Daksha Project	Developed by: Inter-University Centre for Astronomy and Astrophysics
	(IUCAA), Pune
	Purpose: Detect high-energy events like Gamma-Ray Bursts (GRBs) and Neutron
	Star Collisions
	Related Missions:
	Astrosat (India's first space telescope)
	NASA's Fermi Gamma-ray Telescope
	NASA's Swift Observatory
	Significance: India's first dedicated Gamma-Ray Burst mission
JUNO Mission	Agency: NASA
	Launched in: 2011
	Objective: Study Jupiter's origin, atmosphere, magnetic field, and gravity
	Significance:
	First spacecraft to map Jupiter's magnetic field
	Revealed that Jupiter's atmosphere is deeper than previously thought
	Current Status: Extended till 2025



Topic	Description						
Planet Nine	Type: Hypothetical 9th Planet in the Solar System						
	Proposed by: Caltech Scientists (2016)						
	Location: Beyond Neptune's orbit						
	Purpose: Explains unusual orbits of Trans-Neptunian Objects (TNOs) in the Kuiper						
	Belt						
	Characteristics (Hypothetical):						
	10 times the mass of Earth						
	20 times farther from the Sun than Neptune						
HM Sagittae	lky Way						
(HM Sge)	Components:						
	White Dwarf						
	Red Giant Star						
	Observation: Hubble Space Telescope (NASA)						

UNOOSA	Established in: 1958
	HQ: Vienna, Austria
	Parent Body: United Nations General Assembly (UNGA)
	Functions:
	Promotes peaceful use of outer space
	Implements Outer Space Treaty (1967)
	Manages UN Register of Objects Launched into Outer Space
	India's Role: Active member
Hydrogen Line	Electromagnetic radiation (21 cm wavelength, 1420 MHz frequency) emitted when
	an electron in a neutral hydrogen atom undergoes an energy level transition.
	Significance:
	Used in radio astronomy to study the distribution of hydrogen in galaxies.
	Helps in mapping the Milky Way and other galaxies.
	Important in Search for Extraterrestrial Intelligence (SETI) research.
KAVACH	Full Form: Indigenous Automatic Train Protection (ATP) system.
System	Developed by: RDSO (Research Designs & Standards Organisation).
	Purpose:
	Prevents train collisions.
	Functions even in foggy weather and for high-speed trains.
	Other Name: Train Collision Avoidance System (TCAS).
	Significance:
	Part of Mission Raftaar to increase train speeds.
	Enhances railway safety and efficiency.
ALMA	Type: Advanced rad <mark>io tele</mark> scope.
Telescope	Location: Atacama Desert, Chile (5000m altitude).
	Collaboration: Europe, USA, Japan, Canada, Chile, South Korea, Taiwan.
	Wavelength Range: Millimeter & Submillimeter (0.3 mm - 9.6 mm).
	Purpose:
	Studies star and planet formation.
	Observes early galaxies and black holes.
	Helps in exoplanet discovery.
PraVaHa	Developed by: ISRO.
Software	Purpose: Aerodynamic simulation software to analyze:
	External & internal airflows on launch vehicles.
	Re-entry dynamics of spacecraft.



Topic	Description
Milgromian	Concept: Alternative theory proposed by Mordehai Milgrom (1983).
Dynamics	Purpose: Explains galactic rotation curves without the need for dark matter.
(MOND)	Key Idea: Modifies Newton's laws of gravity at extremely low accelerations.
	Significance:
	Challenges the dominant dark matter hypothesis.
	Explains the motion of stars in galaxy outskirts.
Lal, Mursan,	Location: Mars
Hilsa	Named After: Indian towns under the International Astronomical Union (IAU) naming
	system.
T Coronae	Type: Rare Recurrent Nova
Borealis	Constellation: Corona Borealis

	Cycle: Every 80 years
	Last Explosion: 1946
	Next Expected Explosion: 2024-25 (Visible to the naked eye)
	Mechanism:
	Binary star system with a white dwarf and a red giant .
	 White dwarf accretes matter from the red giant → Explosion.
Olympus Mons	Location: Mars
	Type: Shield Volcano
	Height: 21.9 km (Tallest volcano in the Solar System)
Alphafold-3	Developer: Google DeepMind + Isomorphic Labs
	Purpose: Al model to predict 3D structures of proteins, DNA, and RNA.
	Significance:
	Revolutionary in drug discovery .
	Helps in understanding protein folding disorders like Alzheimer's and Parkinson's.
Tmesipteris	Rare fern species with the largest genome.
Oblanceolate	Found in New Caledonia and Vanuatu.
Arun-III Hydro	Capacity: 900 MW
Power Project	Type: Run-of-the-River Project
	Location: Arun River, Eastern Nepal
	River System: Arun River (Tributary of Kosi River)
	Developed by: Satluj Jal Vidyut Nigam (SJVN)
	Significance:
	India's largest investment in Nepal's hydropower sector.
Quantum	India's First Quantum Diamond Microchip Imager
Diamond	Developed by: TCS + IIT Bombay
Microchip	Purpose:
Imager	High-precision magnetic field imaging at the atomic scale.
imagoi	Used in healthcare, security, and material sciences.
Xylitol	Type: Natural Sugar Substitute
Ayatot	• Source: Derived from plants, fruits, and vegetables (Birch, Corn Cobs &)
	Uses:
	Sweetener for diabetics (Low Glycemic Index).
	Used in chewing gums, toothpaste, and medications.
White	Appearance: Waxy, yellowish-white solid
Phosphorous	Odour: Garlic-like smell
i nospiiorous	Properties:
	Highly combustible in air.
	Used in military smoke screens and incendiary weapons.
	Legality: Not classified as a chemical weapon under the Chemical Weapons
	Convention (CWC) unless used to harm humans.
LignoSat	Type: World's First Wooden Satellite
LigitoSat	Developer: Kyoto University + Sumitomo Forestry (Japan)
	Material: Made from Magnolia Wood
	Purpose:
	Promote sustainable space technology.
	Reduce space debris as wood burns completely during re-entry.
Double Sun	Phenomenon: Rare Optical Halo around the Sun
Halo	•
าเลเบ	Types:
	22° Halo: Inner ring 46° Halo: Outor ring
	46° Halo: Outer ring Council Petroction of auplight through incorrectals in the atmosphere
	Cause: Refraction of sunlight through ice crystals in the atmosphere Recordly Seep in: Ledekh (2024)
	Recently Seen in: Ladakh (2024) Significance:
	Significance:

	Symbol of climate variations in high altitudes
	Often mistaken as two suns in the sky
JADES-GS-z14-	Discovery by: James Webb Space Telescope (JWST)
0	• Year: 2024
	Significance: Earliest and farthest known galaxy
	Distance: 33 billion light years away
	• Redshift: z = 14.32
	Importance:
	Helps study the early universe formation
	Provides insights into galaxy evolution
COPUOS (UN)	Full Form: UN Committee on the Peaceful Uses of Outer Space
	Established in: 1958
	Parent Body: United Nations General Assembly (UNGA)
	Functions:
	Develops International Space Law
	Implements Outer Space Treaty (1967)
	Manages UN Space Object Register
Outer Space	Adopted by: UNGA
Treaty (1982)	Purpose: Governs the exploration and use of Outer Space
	Key Features:
	Outer space is the "Common Heritage of Mankind"
	No military bases or weapons of mass destruction allowed on Moon or other
	celestial bodies
	States are responsible for national space activities
Rescue	Purpose: International agreement on the rescue of astronauts and return of space
Agreement	objects
	Significance: Provides for:
	Assistance to astronauts in distress
	Return of spacecraft or debris to the launching state
Liability	Purpose: International liability for damage caused by space objects
Convention	Key Feature: Launching states are absolutely liable for damage on Earth
(1972)	CIVILS HOD
Registration	Purpose: Registering space objects with the UN
Convention	Significance: Increases transparency in space activities
(1975)	
Moon	Purpose: Governs the activities of states on the Moon and other celestial bodies
Agreement	Key Features:
(1979)	Moon is the Common Heritage of Mankind
	No private ownership of lunar resources
	Peaceful use only
	Significance: Very few countries have signed (India is not a party)

International Relations



Initiative		Description
UN Peacekeeping	•	Established: 1948 (First mission: UNTSO in Palestine)

Mandate: Maintain international peace and security through: Conflict prevention Peacebuilding Protection of civilians Troop Contribution: India is the 2nd highest troop-contributing country (after Bangladesh) Over 2.75 lakh Indian personnel have served in UN missions In 2007, India became the first country to deploy an all-women peacekeeping contingent (Liberia) Funding: Collective responsibility of UN Member States (based on a scale of assessments) Current Missions (2024): 12 Active Peacekeeping Missions (e.g., UNIFIL in Lebanon, MINUSMA in Mali) 75 years of United Nations Peacekeeping Peacekeeping Hosted a UN Peacekeeping course for women officers
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Peacekeeping countries since 1948 India's Role:
India's Role:
Hosted a LIN Peacekeening course for women officers
Tiostou a Civi i cacekeeping course for worner officers
 Announced ₹1 million contribution to UN Technology Innovation Labs for
peacekeeping
G7 Summit • 50th Summit Location: Apulia, Italy
 India's Role: Participated as an Outreach Country
• Established: 1975 (as G6, Canada joined in 1976)
 Members: US, UK, Germany, Japan, France, Italy, Canada
Former Member: Russia (joined in 1998 as G8, suspended in 2014 after Crimea
annexation)
Structure: Informal grouping with no permanent secretariat, charter, or binding
decisions
Significance: Represents 40% of the global economy and 10% of the world's
population
Hiroshima AI • Initiative by G7 to regulate Artificial Intelligence
Process (HAP)
Gulf Cooperation • Established: 1981 (Riyadh Agreement)
Council (GCC) • Members: UAE, Bahrain, Saudi Arabia, Oman, Qatar, Kuwait
Headquarters: Riyadh, Saudi Arabia
Significance: India's largest trading bloc partner (~15% of India's global trade in
2023)
India-GCC Trade: Mainly crude oil, petroleum products, jewellery, and food
items
Excludes: Iran and Iraq
Security Cooperation: GCC-India Framework Agreement (2004)
Financial Action • Established: 1989 during the G7 Summit held in Paris
Task Force (FATF) • Type: Inter-governmental body
Headquarters: Paris, France
Objective: To formulate global standards and policies to combat Money
Laundering (ML), Terrorist Financing (TF), and Proliferation of Weapons of
Mass Destruction (WMDs).
Membership: 40 members (38 countries + European Commission + Gulf
Cooperation Council (GCC))
India's Membership: Became a full member in 2010
Observer Organisations: United Nations, World Bank, IMF, Interpol, and OECD
Grey List: Countries under enhanced monitoring due to strategic deficiencies in
countering money laundering and terror financing (e.g. Pakistan was removed in

	Oatabay 2022)
	October 2022)
	Blacklist: Non-cooperative countries with severe deficiencies (e.g. North Korea,
	Iran)
	Global Network: FATF works closely with FATF-Style Regional Bodies (FSRBs)
	such as the Asia/Pacific Group on Money Laundering (APG)
Plenary Meetings	FATF Plenary meets thrice a year (February, June, October)
of FATF	
Mutual Evaluation	Process to review anti-money laundering and counter-terrorist financing measures
Reports (MERs)	in member countries
International	Established: 1974 under the framework of the Organisation for Economic Co-
Energy Agency	operation and Development (OECD) in response to the 1973 Oil Crisis
(IEA)	Headquarters: Paris, France
	Objective: To ensure reliable, affordable, and clean energy for its member
	countries and promote energy security, sustainable development, and climate
	action
	Members: 31 countries (All OECD members can join, but membership is not
	automatic)
	India's Status: Became an Associate Member in 2017 (Not a full member due to
	non-OECD status)
	Key Reports:
	World Energy Outlook (WEO)
	Global Energy & CO, Status Report
	World Energy Statistics
	Energy Technology Perspectives (ETP)
	Net Zero by 205 <mark>0 Roa</mark> dmap
	Recent Initiative:
	Launched the Global Energy Transition Stocktake Report (2023)
	Focus on Net Zero Emissions by 2050
Indo-Pacific	Launched by: USA in May 2022 during the Quad Summit in Tokyo
Economic	Objective: To strengthen economic cooperation among Indo-Pacific countries,
Framework for	focusing on fair trade practices, resilient supply chains, and clean energy
	transitions
Prosperity (IPEF)	
	Members: 14 countries
	USA, India, Japan, South Korea, Australia, New Zealand, Singapore, Vietnam, Indianasia, Theiland, Malaysia, Philippinese, Prysia, 5;;; Indianasia, Theiland, Malaysia, Philippinese, Physica, 10;;; Indianasia, Theiland, Malaysia, Philippinese, Physica, 10;; Indianasia, Philippinese, Physica, 10;; Indian
	Indonesia, Thailand, Malaysia, Philippines, Brunei, Fiji
	India's Status: Joined 3 Pillars but opted out of the Trade Pillar citing concerns
	over binding commitments on digital trade and labor standards
	4 Pillars of Cooperation:
	Trade (Digital trade, Labor standards)
	Supply Chains (Resilient and diversified supply networks)
	Clean Energy, Decarbonization & Infrastructure
	Taxation & Anti-Corruption
	Significance for India:
	Promotes Supply Chain Resilience Initiative (SCRI) with Japan and Australia
India-Middle East-	Announced at: G20 Summit 2023, New Delhi
Europe Corridor	Part of: Partnership for Global Infrastructure and Investment (PGII), a US-led
(IMEC)	initiative to counter China's Belt and Road Initiative (BRI)
	Signatories: India, USA, Saudi Arabia, UAE, European Union, Italy, France,
	Germany
	Objective:
	To enhance trade connectivity between India, the Middle East, and Europe
	Provide an alternative to China's BRI for global supply chains
	Strengthen energy cooperation and digital connectivity
	1 0 00 100 100

	Planned Route & Key Ports:
	India: Mundra, Kandla, JNPT (Jawaharlal Nehru Port Trust)
	UAE: Fujairah, Jebel Ali
	Saudi Arabia: Land connectivity from UAE to Haifa (Israel)
	Europe: Haifa (Israel), Piraeus (Greece), Marseille (France)
	Components:
	Rail and maritime connectivity
	Energy corridors (Green hydrogen, clean energy transport)
Artemis Accords	
Artemis Accords	Launched by: USA & NASA in 2020 Objective To promote page of the transparent, and accordance to a page of the transparent.
	Objective: To promote peaceful, transparent, and cooperative space exploration in compliance with international appear law.
	in compliance with international space law
	India's Status: Signed as the 27th Member in June 2023 during PM Modi's US visit
	Legal Foundation: Based on the principles of the Outer Space Treaty, 1967 Key Principles:
	Key Principles:
	Peaceful use of space Transportant in an acceptable in the second section in the section in the second section in the section in the second section in the second section in the section in the second section in the sect
	Transparency in space activities
	International cooperation Properties of angle legited a cited (a.g. Applie legited)
	Preservation of space heritage sites (e.g. Apollo landing sites) Page 2015 Page 20
	Responsible use of space resources Polytic resident and discussed.
	Debris mitigation and disposal
	Main Missions under Artemis Program:
	Artemis-I (2022): Unmanned Moon Mission
	Artemis-II (2024): First crewed lunar flyby since Apollo missions
	Artemis-III (2025): First human return to the Moon (South Pole region)
Colombo Process	• Established in: 2003 (Colombo, Sri Lanka)
	Type: Regional Consultative Process (RCP) on labour migration
	Objective: Promote safe, orderly, and fair labour migration from Asian countries
	to destination countries, especially in the Gulf region and Europe
	Members: 12 Asian Countries
	 India, Bangladesh, Nepal, Pakistan, Sri Lanka, Afghanistan, Indonesia, Vietnam,
	Thailand, Philippines, Cambodia, and China
	India's Role:
	Became Chair (2024-26) for the first time since its inception
	Focus areas during India's Chairmanship:
	 Skill Development & Certification
	Migrant Welfare & Protection
	o Female Labour Migration
	 Digitalization of Labour Migration Systems



Partnership for Global Infrastructure and Investment (PGII) Launched by: G7 Countries at G7 Summit 2022 (Germany) Objective: Mobilize \$600 billion by 2027 to finance sustainable infrastructure projects in developing and low-income countries as an alternative to China's Belt and Road Initiative (BRI) Focus Areas: Clean Energy (Renewable Energy, Green Hydrogen) Digital Infrastructure Health Systems

	Climate Resilience
	Gender Equality
	•
	India's Role:
	Key partner under PGII for projects like India-Middle East-Europe Corridor (IMEC)
	Blue Dot Network: Shapes global infrastructure standards under PGII by
	promoting quality infrastructure projects based on Transparency, Sustainability,
	and Economic Impact
International Air	Founded in: 1945 (Havana Conference, Cuba)
Transport	Headquarters: Montreal, Canada
Association (IATA)	Members: Over 300 airlines from 120+ countries (Representing 83% of global air
	traffic)
	Objective:
	Promote safe, secure, and efficient air transport
	Develop global standards for airline operations
	Facilitate cooperation among airlines
	India's Status: Member (Air India, IndiGo, SpiceJet, etc.)
	Recent Development: Focus on Net Zero Carbon Emissions by 2050 through the
	use of Sustainable Aviation Fuel (SAF)
International Civil	Established in: 1947 under the Chicago Convention (1944)
Aviation	Headquarters: Montreal, Canada
Organisation	Type: UN Specialised Agency
(ICAO)	Members: 193 countries (Including India)
	Objective:
	 Set global standards for aviation safety, security, and environmental protection
	Facilitate international air navigation and air transport agreements
	Promote Carbon Offsetting and Reduction Scheme for International Aviation
	(CORSIA)
Arab League	Founded in: 1945 (Cairo, Egypt)
	Headquarters: Cairo, Egypt
	Members: 22 Arab countries
	Objective:
	 Promote political, economic, and cultural cooperation among Arab states
	Protect Arab sovereignty and independence
	Resolve disputes among member states
	Recent Development: Syria was reinstated in 2023 after being suspended in 2011
	due to the civil war
UNCTAD	Established in: 1964
	Headquarters: Geneva, Switzerland
	Objective:
	Promote the integration of developing countries into the global economy
	Address issues related to trade, investment, and development
	Key Reports:
	Trade and Development Report
	World Investment Report
	Technology and Innovation Report
	Digital Economy Report
	Recent Development:
	UNCTAD has launched the Global Supply Chain Forum in 2024 to address
	disruptions in global trade
World Summit on	Initiated in: 2003 (Geneva) and 2005 (Tunis)
the Information	Organisers: ITU, UNESCO, UNDP, UNCTADObjective:
Society (WSIS)	Promote digital cooperation and inclusive information society
	Bridge the digital divide between developed and developing countries

	Discuss issues like cybersecurity, digital infrastructure, and internet governance
	India's Role: Actively participates in WSIS to promote Digital India and Universal
	Internet Access
Social Media 4	Launched by: UNESCO in 2021
Peace Initiative	Objective:
	Address the spread of online hate speech, disinformation, and harmful content
	Promote freedom of expression while tackling digital risks
	Support media and information literacy in conflict-prone regions
	Focus Countries: Bosnia & Herzegovina, Kenya, Indonesia
Manama	Adopted by: Arab League Summit in Manama, BahrainObjective:
Declaration	Called for deployment of UN Peacekeeping Forces in Palestine
	Condemned Israeli settlement activities in West Bank
	Reaffirmed support for a two-state solution
Global Supply	Organised by: UNCTAD & Barbados Government
Chain Forum 2024	Held in: Bridgetown, Barbados (January 2024)
	Objective:
	Address global supply chain disruptions post-COVID-19 and geopolitical
	tensions
	Promote resilient, sustainable, and inclusive trade systems
	Focus on climate-friendly logistics



Path to Peace	Held in: Switzerland (Bürgenstock)	
Summit	Objective:	
	Discuss ways to achieve peace in Ukraine amid the Russia-Ukraine conflict	
	Focus on principles of territorial integrity and international law	
	Participants: Over 90 countries (India participated as an observer)	
Horizon 2047	Signed by: India and France in 2023	
Framework	Objective:	
	 Set a long-term roadmap to guide bilateral ties till 2047 (100th anniversary of India's independence & 100 years of diplomatic relations) 	
	Focus on:	
	Defence cooperation	
	 Space partnership 	
	Renewable energy	
	Digital infrastructure	
	Cultural exchanges	
Action for Peace	Launched by: UN Secretary-General in 2018	
(A4P)	Objective:	
	Strengthen the effectiveness of UN Peacekeeping Missions	
	Improve the safety and security of peacekeepers	
	Promote political solutions to conflicts	
	Key Priorities:	
	Women Participation	
	Protection of Civilians	
	Performance & Accountability	
	India's Role:	
	One of the largest troop-contributing countries to UN Peacekeeping Missions	
Global Principles	Unveiled by: United Nations in 2024	

for Information	Objective:
Integrity	Tackle disinformation, hate speech, and harmful content
	Promote truthful and trustworthy information in the digital space
	Strengthen digital platform accountability
Stockholm	Established in: 1966
International	Headquarters: Stockholm, Sweden
Peace Research	Objective:
Institute (SIPRI)	Conduct research on conflict, arms control, disarmament, and international security
	Publish data on military spending, arms transfers, and nuclear weapons
	Key Reports:
	SIPRI Yearbook
	Global Arms Trade Report
	Military Expenditure Report
	 Recent Development: SIPRI reported India as the largest arms importer (2018- 2022)

Culture

TEMPLES

Aluva Shiva	Location: Kochi, Kerala.
Temple	Situated on the Periyar River Bank at Aluva Manappuram.
	Part of 108 Shiva Temples of Kerala.
	Dedicated to Lord Shiva in the form of Shivalinga.
	Famous for Shivaratri Festival celebrated on the riverbank.
Bavikonda	Location: Visakhapatnam, Andhra Pradesh.
Monastery	Ancient Buddhist monastery dating back to 3rd Century BCE.
	Name means "Hill of Wells" due to Rainwater Storage Tanks found on the site.
	Associated with Hinayana School of Buddhism.
	Excavations reveal Stupas, Viharas, and Relic Caskets.
Jyotirmath	Location: Chamoli, Uttarakhand.
(Joshimath)	One of the Four Cardinal Mathas established by Adi Shankaracharya.
	Promotes Advaita Vedanta Philosophy.
	Associated with Badrinath Temple .
	Serves as the Winter Seat of Lord Badri Vishal.
Vadakkumnathan	Location: Thrissur, Kerala.
Temple	Dedicated to Lord Shiva.
	Famous for Thrissur Pooram Festival.
	One of the Oldest Shiva Temples in India.
	Classified as a UNESCO Cultural Heritage Site.
Martand Sun	Location: Anantnag, Jammu & Kashmir.
Temple	Dedicated to Surya (Sun God).
	Built during the 8th Century by King Lalitaditya Muktapida of the Karkota Dynasty.
	Architectural style: Kashmiri Aryan.
	Now in ruins but a significant Archaeological Survey of India (ASI) site.

FAMOUS PERSONALITIES

Personality Name	Details
Swami	Born as Narendra Nath Datta on January 12, 1863 in Kolkata.

Vivekananda	His birth anniversary is observed as National Youth Day since 1985 .
(1863-1902)	Disciple of Sri Ramakrishna Paramahamsa , who influenced his spiritual journey.
(1000 1002)	Propagated Vedanta Philosophy (Uttara Mimamsa), including Advaita Vedanta (Non-
	dualism), Visishtadvaita Vedanta (Qualified Non-dualism), and Dvaita Vedanta
	(Dualism).
	Gained global fame through his speech at the World Parliament of Religions in
	Chicago (1893), where he began with the iconic salutation "Sisters and Brothers of
	America".
	Founded the Ramakrishna Mission in 1897 for social service, including education,
	healthcare, and relief work.
	Major Literary Works: Karma Yoga, Raja Yoga, Bhakti Yoga, and Jnana Yoga.
	Played a key role in spreading Indian philosophy and spirituality in the West.
	Passed away on July 4, 1902 , at the age of 39.
Ahilyabai	Born in 1725 at Chaundi village (now in Ahmednagar district, Maharashtra).
Holkar (1725	Became the ruler of the Holkar dynasty after the death of her husband Khanderao
– 1795)	Holkar and son Malhar Rao Holkar II.
	Ruled from 1767 to 1795 with her capital at Maheshwar on the banks of the Narmada
	River.
	Renowned for her just administration, philanthropy, and architectural contributions.
	Restored several temples including Kashi Vishwanath Temple (1780), Somnath
	Temple (1783), and Gaya Vishnupad Temple.
	Built numerous ghats, wells, and dharamshalas across India, promoting pilgrimage
	tourism.
	Known as the Philosopher Queen for blending administrative efficiency with
	compassion.
	Maharashtra Government renamed Ahmednagar district to Ahilyanagar (2024) in her
	honour.
	 Often regarded as a symbol of women's empowerment in Indian history.

CHITHE LOCATIONS IN NEWS

Topic	Details	Additional Facts (Pre-2025 Focus)
Vivekananda	Situated at Kanyakumari , T <mark>amil Nadu, </mark>	Managed by Vivekananda Kendra
Rock	where Swami Vivekananda meditated in	Trust.
Memorial	1892 before attending the World	Architectural style: Fusion of
	Parliament of Religions (1893).	traditional Tamil and Bengali
	Built in 1970 to honour his contribution.	architecture.
	Located at the southernmost tip of	Part of Swadesh Darshan
	mainland India.	Scheme under Coastal Circuit.
Mudgal Fort	Located in Raichur district, Karnataka.	Fortification built with Cyclopean
	Built over 1000 years ago with influences	masonry.
	from Chalukyas, Rashtrakutas, Deccan	Important site during the Battle of
	Sultanate, and Vijayanagara Empire.	Raichur (1520) between
	Houses Ranganathaswamy Temple and	Vijayanagara and Bahmani
	Hussain Alam Dargah inside the premises,	ultanate.
	symbolising communal harmony .	
Great	Located in Bengaluru, Karnataka.	Part of the larger Great
Trigonometric	Established during British rule by William	Trigonometric Survey of India
Survey (GTS)	Lambton in early 19th century.	(1802–1871).
Observatory	Crucial for accurate mapping of Indian	Helped measure the height of
	subcontinent's geographical features.	Mount Everest for the first time
		(known as Peak XV then).

		Recognised as an ASI-protected monument.
City of Literature (Kozhikode)	Designated as India's 1st City of Literature by UNESCO Creative Cities Network (UCCN) in 2023. Recognised for its rich Malayalam literary tradition and Vallathol Narayana Menon's contributions.	Hosts Kerala Literature Festival annually. Birthplace of renowned Malayalam writers like MT Vasudevan Nair and SK Pottekkatt. Home to Malayalam Sahitya Academy Library.
UNESCO	Launched in 2004 to promote creativity and	First Indian city to join UCCN:
Creative	sustainable urban development.	Jaipur (2015).
Cities	Covers 7 creative fields: Crafts and Folk	Total 350+ cities globally are part
Network	Art, Design, Film, Gastronomy, Literature,	of UCCN.
(UCCN)	Media Arts, and Music.	UCCN contributes to UN
	• 2024 Annual Conference held in Braga ,	Sustainable Development Goals
	Portugal.	(SDGs), especially SDG 11
	Indian cities in UCCN:	(Sustainable Cities).
	1. Jaipur (Crafts & Folk Art -2015)	
	2. Varanasi (Music -2015)	
	3. Chennai (Music -2017)	
	4. Mumbai (Film -2019)	
	5. Hyderabad (Gastronomy -2019)	
	6. Srinagar (Crafts & Folk Arts 2021)	
	7. Kozhikode (Literatu <mark>re 20</mark> 23)	
World Craft	Designated by World Crafts Council (110.0)	India's first city to be recognised
City	(WCC).	under the WCC Program.
(Srinagar)	Famous for Pashmina shawls, Papier- Ala for and Months in a months	Received the tag in 2021. Received the Classification of the College of the
	mâché, and Kashmiri carpets.	Part of the GI-tagged crafts list in
	 Recognised for preserving traditional craft techniques. 	India.
World Craft	Initiated in 2014 by the World Crafts	WCC works towards the
City Program	Council (WCC AISBL).	preservation of traditional crafts
	Recognises cities for their role in promoting	globally.
	traditional crafts and socio-economic	Part of UNESCO's Intangible
	development.	Cultural Heritage framework.
	Indian cities under WCC:	 Provides a platform for craft-
	1. Jaipur (Rajasthan)	based tourism under
	2. Mamallapuram (Tamil Nadu)	Responsible Tourism Mission.
	3. Mysore (Karnataka)	
	4. Srinagar (Jammu & Kashmir)	





Scheme	Description
Mission KarmaYogi	• Launched: 2020
(NPCSCB)	Objective: Capacity building of civil servants through individual, institutional &
(5552)	process-level reforms
	Platform: iGOT Karmayogi – Digital learning platform for personalised training
	Focus: Competency-based training for efficient, transparent & citizen-centric
	service delivery
	Implementing Body: Karmayogi Bharat (SPV) under the Ministry of Personnel,
	Public Grievances & Pensions
Pradhan Mantri	Launched: 2015
Awas Yojana	Ministry: Ministry of Housing and Urban Affairs (MoHUA)
(PMAY-Urban)	Objective: Housing for All by 2022 (Now extended till December 2024 for
	incomplete houses)
	Beneficiaries:
	Economically Wea <mark>ker S</mark> ection (EWS)
	Low-Income Group (LIG)
	Middle-Income Gr <mark>oup (MIG-I & MIG-II</mark>)
	Slum Dwellers
	Four Verticals:
	In-situ Slum Rehabilitation (using land as a resource)
	Credit Linked Subsidy Scheme (CLSS) – Interest subsidy on home loans
	Affordable Housing in Partnership (AHP) – Public-Private Partnership model
	Beneficiary-led Individual House Construction (BLC) – Financial assistance for
	constructing or enhancing existing houses
	Funding Pattern:
	 ₹ 1.5 lakh per house for EWS ₹ 2.67 lakh interest subsidy under CLSS
	 ₹ 2.67 lakh interest subsidy under CLSS Implementing Agency: State/UT Governments, Urban Local Bodies (ULBs)
Pradhan Mantri Jan	Launched: 2008 (Renamed as PMBJP in 2015)
Aushadhi Kendras	Ministry: Ministry of Chemicals & Fertilizers
(PM-JAK)	Nodal Agency: Pharmaceutical & Medical Devices Bureau of India (PMBI)
(PM-JAK)	Aim: Provide quality generic medicines at 50-90% lesser cost than branded
	medicines
	Coverage: Over 10,000 Kendras operational across India (as of 2024)
	Products Sold:
	Generic Medicines
	Surgical Equipment
	Ayush Products (Ayurvedic, Homeopathic, and Unani products)
	Sanitary Napkins (Suvidha at ₹1 per pad)



Name of Scheme	Information
Bima Sugam	Launched by: IRDAI (Insurance Regulatory and Development Authority of India)
	Purpose: Unified digital insurance marketplace
	Features:
	One-stop platform for policy buying, servicing, and claims settlement
	Covers life, health, motor, and travel insurance
	Enhances transparency and consumer convenience
National Technical	• Launched: 2020
Textiles Mission	Ministry: Ministry of Textiles
	• Duration: 2020-2024
	Aim: Promote Technical Textiles in India through:
	√ Research & Development
	✓ Market Promotion
	✓ Skill Development
	✓ Export Promotion
	Sub-Scheme: GREAT (Grant for Research and Entrepreneurship across
	Technical Tex <mark>tiles</mark>)
e-Samridhi Portal	Launched by: NAFED & NCCF (National Cooperative Consumers' Federation
	of India Ltd)
	Purpose: Digital platform for procurement, price monitoring, and supply point management of acceptial commodities.
Bhuvan Panchayat 4.0	chain management of essential commodities
Biluvali Palicilayat 4.0	Developed by: NRSC, ISRO (National Remote Sensing Centre) Purpose: Comparied Parts Platform for Gram Panahovet Javal anatial
	Purpose: Geospatial Data Platform for Gram Panchayat-level spatial planning & governance
4	Features:
	Satellite-based mapping of village assets
	Monitoring of MGNREGA works
	Support for natural resource management
Krishi Sakhi	Ministries: MoA&FW (Ministry of Agriculture & Farmers Welfare) + MoRD
Convergence Program	(Ministry of Rural Development)
(KSCP)	Purpose: Empower rural women as Para-extension Workers to provide
(1.001)	agricultural advisory services
	Linked Program: Lakhpati Didi Program
	• Target: Create 3 crore Lakhpati Didis (Women earning ₹1 lakh annually)
National Agricultural	Established: 1958
Cooperative Marketing	Headquarters: New Delhi
Federation of India Ltd	Function: Apex body for Agri-marketing cooperatives
(NAFED)	Nodal Agency: For Operation Greens (Tomato, Onion, Potato price
, ,	stabilisation scheme)



Scheme	Description
National Forensic	Scheme Type: Central Sector Scheme
Infrastructure	Ministry: Union Home Ministry
Enhancement	Objective: Strengthen forensic labs & infrastructure to enhance the criminal
Scheme (NFIES)	justice system
Ochemic (NT 120)	Key Focus Areas:
	Upgrading State and Central forensic labs
	Capacity building of forensic professionals
	Supporting the implementation of the Bharatiya Nyaya Sanhita (BNS), 2023
	(which mandates forensic examination in certain cases)
Viability Gap	Ministry: Ministry of New and Renewable Energy (MNRE)
Funding (VGF) for	Objective: Support the installation of 1 GW Offshore Wind Projects
Offshore Wind	Project Breakdown:
Energy	500 MW in Gujarat
	500 MW in Tamil Nadu
	Funding: VGF mechanism to bridge the cost gap and attract private investment
Capacity Building	Established: 2021
Commission (CBC)	Part of: Mission Karmayogi (NPCSCB)
	Autonomy: Independent body with executive & financial autonomy
	Functions:
	Sets competency frameworks for civil servants Develope a set of se
	Develops performance benchmarks for training institutions
GREAT Scheme	Monitors civil service capacity-building programs Full Forms Organization Boson and Future programs
GREAT Scheme	Full Form: Grant for Research and Entrepreneurship across Aspiring Innovators in Technical Textiles
	Ministry: Ministry of Textiles
	Objective: Support research, innovation, and startups in technical textiles
	Funding:
	Grant of up to ₹50 lakh for a period of 18 months
	Open to individual innovators, startups, and research institutions
National Database	Developed by: ISRO (Indian Space Research Organisation)
for Emergency	Objective:
Management	Geospatial database for disaster management
(NDEM)	Real-time monitoring of natural disasters
(INDEI I)	Helps in disaster preparedness, response, and mitigation
	Key Features:
	Uses satellite imagery and GIS-based mapping
	Supports disaster response agencies (NDMA, NDRF, State Disaster
	Management Authorities)
National Standards	Developed by: Capacity Building Commission (CBC)
for Civil Service	Objective: Standardize training quality across Central Training Institutes
Training Institutions	(CTIs)
(NSCSTI)	Key Features:
	Sets baseline standards for faculty, curriculum, and infrastructure
	Focuses on competency-based training Focuses uniformity in civil convice connective building programs
	Ensures uniformity in civil service capacity-building programs
	•

Reports and Indices



Report/Index	Details
Name	
Financial Stability Report,	 Recently issued by the Reserve Bank of India (RBI) as its 29th edition; a twice-yearly report summarizing the findings of the Financial Stability and Development Council's
2024	(FSDC) Sub-Committee, led by the RBI Governor. Other RBI publications include Financial Stability Report (biannual), Monetary Policy Report (biannual), Consumer Confidence Survey (quarterly), Inflation Expectations Survey of Households (quarterly), Report on Foreign Exchange Reserves (biannual), and Digital Payments Index (DPI).
World Investment Report 2024	Released by the United Nations Conference on Trade and Development (UNCTAD).
Gender Gap Report 2024	 An annual publication from the World Economic Forum (WEF); India ranks 129th based on four main criteria: economic participation and opportunity, educational attainment, health and survival, and political empowerment.
Energy Transition Index 2024	Published by the World Economic Forum (WEF).
Global Economic Prospects Report	Issued by the World Bank.
Red List of Mangrove Ecosystems Report	 Compiled by the International Union for Conservation of Nature (IUCN); India's mangrove distribution: West Bengal (42.45%, the largest portion), Gujarat (23.66%), and Andaman & Nicobar Islands (12.39%).
Migration and Development Brief 2024	Released by the World Bank.



Topic Name	Details
State of Ocean	Publisher: UNESCO.
Report 2024	 Highlights the role of oceans in absorbing 90% of the Earth's excess heat energy, leading to Deoxygenation, Sea Level Rise, and Marine Ecosystem Degradation. Emphasizes the urgent need for Sustainable Ocean Management.
State of World	Publisher: FAO (Food and Agriculture Organization).
Fisheries and	Comprehensive analysis of Global Fisheries and Aquaculture Production Trends.
Aquaculture	Focuses on the impact of Climate Change and Illegal, Unreported, and
2024	Unregulated (IUU) Fishing.
	 Highlights the importance of Blue Transformation for sustainable aquatic food systems.
Blue	Launched by FAO in 2021.
Transformation	Aims to enhance Food Security, Nutrition, and Sustainable Livelihoods through

in Action	Aquatic Food Systems.
	Focus on promoting Climate-Resilient Fisheries and Aquaculture Practices.
World	Publisher: ILO (International Labour Organisation).
Employment	Examines Global Employment Trends, Unemployment Rates, and Labour Market
and Social	Inequalities.
Outlook 2024	Addresses the impact of Technological Change , Green Transition , and Economic
	Slowdown on job creation.
State of Global	Published by Health Effects Institute (HEI) in collaboration with UNICEF.
Air Report 2024	Provides data on Air Pollution Levels and their impact on Global Health
	Outcomes.
	Emphasizes the health burden on Children and Vulnerable Communities .
	Calls for immediate action on Clean Air Policies.
Untapped	Publisher: UNDP.
Collective	Explores how Collective Intelligence Technologies such as Crowdsourcing, AI, and
Intelligence for	Citizen Science can accelerate Climate Action.
Climate Action	Highlights case studies demonstrating successful integration of technology with
Report	Community Engagement.
State and	Publisher: World Bank.
Trends of	Assesses global developments in Carbon Pricing Initiatives like Carbon Taxes and
Carbon Pricing	Emission Trading Systems.
2024 Report	Highlights the role of Carbon Pricing in meeting Net-Zero Emission Targets.
Sustainable	 Publisher: UN Sustainable Development Solutions Network (SDSN).
Development	 Tracks countries' progress towards Sustainable Development Goals (SDGs).
Report 2024	 Includes SDG Index Rankings and recommendations for policy improvement.
SDSN	Established in 2012.
(Sustainable	Works under the UN Secretary-General to promote integrated approaches for SDGs
Development	and Paris Agreement .
Solutions	Focuses on Research, Education, and Global Cooperation.
Network)	
Trans-Fat	Publisher: WHO.
Elimination	Highlights global progress towards eliminating Industrially Produced Trans Fats (IP-
Report 2024	TFAs).
	 Assesses the implementation of the REPLACE Framework in member countries.
Trans-Fatty	 Unsaturated fatty acids formed artificially by Hydrogenation of Oils.
Acids (TFA)	Recognized as the Worst Type of Fats.
	Increases risk of Cardiovascular Diseases, Diabetes, and Obesity.
	WHO aims to eliminate TFAs globally by 2023.
REPLACE	Launched by WHO in 2018.
Framework	Aims to eliminate Industrially Produced Trans Fats through regulatory and voluntary
	measures.
	Consists of six strategic action areas: Review, Promote, Legislate, Assess, Create,
	Enforce.



Topic Name	Details
India	Publisher: Observer Research Foundation (ORF).
Employment	Projects Employment Trends in India by 2030.
Outlook 2030	Focus on Technological Disruptions, Green Jobs, and Urbanization.
	Suggests need for Skill Development and Labour Market Reforms.
Container Port	Developed by World Bank & S&P Global Market Intelligence.

Performance	Ranks 348 Global Ports based on Container Handling Efficiency.
Index (CPPI)	Aims to promote Operational Improvements in maritime logistics.
	Top Indian Port (2023): Visakhapatnam Port.
Global Food	Publisher: International Food Policy Research Institute (IFPRI).
Policy Report	Focuses on Climate Change Impacts on Food Security.
2024	Highlights need for Resilient Food Systems , Agroecology , and Inclusive Policies .
	Theme: Transforming Food Systems under Climate Change.
World Wealth	Publisher: Capgemini Research Institute.
Report 2024	Analyzes Global Wealth Distribution across 71 Countries.
	Highlights growing wealth inequality and impact of Geopolitical Instability on wealth
	creation.
Child Nutrition	Publisher: UNICEF.
Report 2024	Assesses Nutritional Status of Children globally.
	Focus on Stunting, Wasting, and Childhood Obesity.
	Calls for investment in Maternal and Child Nutrition Programs.
International	Publisher: U.S. State Department (USCIRF).
Religious	Reviews Religious Freedom Violations across countries.
Freedom 2023	India placed on "Special Watch List".
Report	Highlights Discrimination, Violence , and Legal Restrictions on religious minorities.
Multilateral	Publisher: SIPRI (Stockholm International Peace Research Institute).
Peace	Analyses Global Peacekeeping Missions.
Operations	Focus on UN, Regional, and Non-UN Operations.
2023 Report	Africa hosts 50% of Multilateral Peace Missions.
A World of	Publisher: UNCTAD (United Nations Conference on Trade and Development).
Debt Report	Warns of rising Global Public Debt crossing \$92 Trillion.
2024	Highlights debt burden on Developing Countries.
	Calls for Debt Restructuring Mechanism .

Defence

WEAPONS

Weapon/Syst	Significance	Key Features
em		-IAS
INS	India's most	Modified Kiev-class carrier acquired from Russia.
Vikramaditya	formidable	Commissioned in 2013 into the Indian Navy.
	aircraft carrier.	Equipped with MiG-29K fighter jets and Kamov helicopters.
		Operates using a ski-jump takeoff system (STOBAR).
		Displacement: 44,500 tonnes.
INS Vikrant	India's first	Constructed by Cochin Shipyard Limited (CSL).
(IAC-1)	indigenously	Commissioned in 2022.
	built aircraft	Can accommodate up to 30 aircraft, including MiG-29K and ALH
	carrier.	helicopters.
		Uses a Short Takeoff But Arrested Recovery (STOBAR) system.
		Displacement: 43,000 tonnes.
Nagastra-1	India's first	Designed and developed by Solar Industries, Nagpur.
	indigenous	 Features an Al-based targeting system for precision strikes.
	loitering	Operational range between 15 km – 30 km.
	munition	Can carry a high-explosive warhead for neutralizing enemy
	(Suicide	targets.
	Drone).	Operates in autonomous and manual modes.
RudraM-II	Advanced air-	Developed by Defence Research and Development Organisation
	to-surface	(DRDO).

	missile for	Powered by a solid-propellant motor.
	precision	Effective range: 350 km – 400 km.
	strikes.	Designed for Suppression of Enemy Air Defenses (SEAD)
		missions.
		Compatible with Su-30MKI and other fighter aircraft.
MR-MOCR	India's first	Developed by DRDO's Defence Laboratory, Jodhpur.
(Medium	electronic	Disrupts enemy radar and sensor-based detection.
Range-	warfare	Uses microwave chaff technology to create electronic
Microwave	system to	countermeasures.
Obscurant	obscure	Enhances survivability of military assets during operations.
Chaff Rocket)	enemy radars.	
Javelin Anti-	A state-of-the-	Jointly developed by Raytheon and Lockheed Martin (USA).
Tank Weapon	art man-	Infrared-guided missile for precision strikes.
System	portable, fire-	Range: 2.5 km.
	and-forget	Capable of top-attack and direct-attack modes.
	ATGM.	India plans procurement under the US Foreign Military Sales
		(FMS) program.

PROJECTS/OPERATIONS

Project/Operation/Initiative	Significance	Key Features
Project 28 (P28)	Indigenous Anti- Submarine Warfare (ASW) Corvette development program.	 Involves the construction of 4 Kamorta-class corvettes. Built by Garden Reach Shipbuilders & Engineers (GRSE) under Make in India initiative. First ship: INS Kamorta (Commissioned in 2014). Equipped with Advanced Torpedoes, Hull-mounted Sonar systems, and Anti-Submarine Rockets. Features stealth technology to reduce radar cross-section.
Operation Vijay	Military operation to reclaim Kargil Heights from Pakistani intruders.	 Launched in May 1999 during the Kargil War. Victory declared on 26th July 1999 (Kargil Vijay Diwas). Indian Army recaptured key locations like Tiger Hill and Tololing Heights. Supported by the Indian Air Force's Operation Safed Sagar.
INDUS-X	U.SIndia Defence Innovation Collaboration launched in 2023.	 Joint initiative under India-U.S. Defence Partnership Roadmap. Focuses on collaboration between Defence Start- ups, Private Sector, and Government Agencies. Promotes innovation in Artificial Intelligence (AI), Quantum Technologies, Cybersecurity, and Space Technologies. Strengthens bilateral cooperation in Defence Research and Development (R&D).

EXERCISES

Exercise	Туре	Countries		Key Features
JIMEX 24	Bilateral	India &	•	Focus on Maritime Security, Anti-Submarine Warfare,

	Maritime	Japan	and Surface Warfare.
	Exercise		• Started in 2012 .
			Enhances interoperability and naval cooperation.
RIMPAC	Multinatio	26	World's largest naval exercise.
24	nal	Countries	Held biennially near Hawaiian Islands.
	Maritime	(India, USA,	Focuses on Maritime Security, Disaster Relief, and Anti-
	Exercise	Japan,	Piracy Operations.
		Australia,	• First held in 1971 .
		etc.)	
Red Flag	Multinatio	USA, India,	Hosted by US Air Force (USAF) at Nellis Air Force Base,
Exercise	nal Air	and Allied	Nevada.
	Combat	Nations	 Indian Air Force first participated in 2008.
	Exercise		Simulates realistic aerial combat scenarios.
			Focus on Air Superiority, Ground Attack, and Electronic
			Warfare.
Exercise	Bilateral	India &	Held at Cairo West Air Base, Egypt.
HOPEX	Air Force	Egypt	Focus on Air Defence, Joint Operations, and Combat
	Exercise		Tactics.
			Strengthens defence cooperation between both nations.
Exercise	Multinatio	India, USA,	India's First Multinational Air Combat Exercise.
Tarang	nal Air	UK,	Planned for 2024.
Shakti	Exercise	France,	Focus on Large Force Engagement (LFE) and
		UAE,	Multinational Cooperation.
		Australia,	Aims to enhance joint operational capabilities.
		Japan,	
		Spain,	
		Germany	

Health



Disease/Virus	Туре	Transmission	Key Features	WHO Classification
Nipah Virus (NiV)	Zoonotic Virus	Bats → Humans, Contaminated Food, Person- to-Person	 First identified in Malaysia (1998). Natural host: Fruit Bats (Pteropus genus). High fatality rate: 40-75%. Causes Encephalitis and Respiratory Symptoms. Outbreaks in Bangladesh, India (Kerala - 2018, 2021, 2023). 	WHO Priority Pathogen (High-Risk)
H5N2 Bird Flu	Avian Influenza Virus	Contact with infected birds or droppings	 Subtype of Influenza A Virus. Rare human infections but pandemic potential if mutations occur. Symptoms: Fever, Cough, Pneumonia-like illness. 	WHO Emerging Zoonotic Threat

	Detected in Mexico (2024) in
	the first human case.
	Monitored under the One
	Health Approach.



Topic Name	Details
Biopharmaceutical	Global collaboration for Drug Security & Research .
Alliance	Joint initiative by India, USA, Japan, South Korea, and European Union.
	Launched to address drug supply shortages during COVID-19.
	Focuses on vaccines, critical medicines, and raw material supply chains.
	Part of Global Health Resilience Partnership.
	Promotes Public-Private Partnerships in biopharma.
Indian Council of	Apex body for Biomedical Research in India.
Medical Research	Established in 1911 as IRFA (renamed ICMR in 1949).
(ICMR)	Functions under Department of Health Research (DHR) , Ministry of Health and
	Family Welfare.
	Funds research on diseases like HIV, Malaria, Cancer, and Lifestyle Disorders.
	Neither statutory nor regulatory body.
	 Recently launched National Ethical Guidelines for Biomedical Research (2023).
Global Initiative on	 International framework for Digital Health Infrastructure.
Digital Health	Announced during G20 Summit 2023 (India).
(GIDH)	Managed by WHO.
	Focuses on interoperability, data exchange, and reducing duplication of digital
	health efforts.
	Secretariat to be set up at WHO Headquarters, Geneva.
	Aligns with Ayushman Bharat Digital Mission.
Fatty Liver Disease	Non-communicable disease with rising global burden.
(NAFLD)	Condition where fat accumulates in the liver without alcohol use.
	 Closely linked to Obesity, Diabetes, and Cardiovascular Diseases.
	Observed on 13th June as International Fatty Liver Day.
	India became the first country to launch an operational guideline for NAFLD
	under the National Programme for Prevention & Control of Non-
0 1' 0 1	Communicable Diseases (NPCDCS).
Quality Control	Regulatory framework to ensure Product Quality Standards . Standards
Order (QCO)	Issued by the Government of India under various ministries. Outline Standards (RIS)
	Certification granted by Bureau of Indian Standards (BIS). Applicable to demonstic and imported products.
	Applicable to domestic and imported products. Part of Make in India initiative to out house and and imported.
	Part of Make in India initiative to curb substandard imports. Covers contain like Flootropies. Chamically Taxtiles, and Healthcare Bradwate.
	Covers sectors like Electronics, Chemicals, Textiles, and Healthcare Products.



Topic Name	Details
International	- Adopted in 2005 , replacing International Sanitary Regulations (1951) .
Health	- Legally binding framework under WHO for detecting, assessing, reporting, and

Regulations	responding to Public Health Emergencies of International Concern (PHEIC).
(IHR)	- Members: 194 WHO Member States + Liechtenstein & Holy See.
(/	- Aim: To prevent the international spread of diseases while avoiding unnecessary
	interference with international traffic and trade.
World	- Established in 1924 .
Organization	- Global authority on Animal Health and Epizootic Disease Control.
for Animal	- 183 member countries (including India).
Health	- Headquarters: Paris, France .
(WOAH/OIE)	- Works independently of the UN System .
(- Focuses on Animal Welfare, Zoonotic Diseases, and Antimicrobial Resistance.
N332-GT5 and	- Nanoparticle-based HIV vaccine candidates.
eOD-GT8	- Designed to stimulate the production of Broadly Neutralizing Antibodies (bNAbs)
332 3.3	against HIV.
	- Aim: To provide long-term immunity against different strains of HIV.
	- Developed by International AIDS Vaccine Initiative (IAVI) & Moderna.
Capsaicin	- Active chemical compound found in Chili Peppers .
	- Triggers pain receptors (TRPV1) , causing a burning sensation.
	- Used in Pain Relief Creams , Pepper Sprays , and Culinary Preparations .
	- Also being studied for Anti-Cancer and Weight Loss properties.
Donanemab	- New drug developed by Eli Lilly for Alzheimer's Disease .
2 0110110111011	- Works by targeting Amyloid Plaques in the brain.
	- Shown to slow cognitive decline in early-stage Alzheimer's patients.
	- Approved by US FDA in 2023 under accelerated pathway.
Dementia	- Umbrella term for diseases causing Memory Loss, Confusion, and Behavioral Changes.
	- Common Types: Alzheimer's Disease (60-70%), Vascular Dementia.
	- No permanent cure available.
	- Risk Factors: Age, Genetics, Hypertension, Diabetes, Lifestyle Habits .
Omega-3 Fatty	- Essential Polyunsaturated Fats .
Acids	- Types: ALA (Plant-based), EPA & DHA (Marine-based).
	- Sources: Nuts, Flaxseed, Fish Oils.
	- Benefits: Improves Heart Health, Brain Function, and reduces Inflammation.
Klebsiella	- Gram-negative bacteria from the Enterobacteriaceae family.
Pneumoniae	- Causes Pneumonia, Bloodstream Infections, and UTIs.
Bacteria	- Rising cases of Antibiotic Resistance (Carbapenem-Resistant Klebsiella Pneumoniae -
	CRKP).
	- Common in Hospital-Acquired Infections (Nosocomial Infections).
Inflammatory	- Chronic Autoimmune Disorder affecting the digestive tract.
Bowel Disease	- Two major types: Crohn's Disease and Ulcerative Colitis .
(IBD)	- Symptoms: Abdominal Pain, Diarrhea, Fatigue .
	- No curative treatment, only Symptom Management through medications and lifestyle
	changes.

INTERNATIONAL LOCATIONS IN NEWS



Topic	Details	Pre-2025 Focus
Red Sea	 Narrow water body connecting Suez Canal (north) → Bab el Mandeb Strait (south) → Arabian Sea. Bordering Countries: Egypt, Saudi Arabia, Yemen, Sudan, Eritrea, Djibouti. Part of the Great Rift Valley (Afro-Arabian Rift Valley). Important for Global Trade via Suez Canal (10-12% of Global Trade passes through it). 	 Recently in news due to Houthi Rebel Attacks (2024) impacting global shipping routes. USA-led Operation Prosperity Guardian launched to protect maritime trade. Home to the world's northernmost tropical coral reefs. Salinity: Higher than other seas (Average 40 PSU). Recognised under IMO Particularly Sensitive Sea Area (PSSA).



Topic	Details	Pre-2025 Focus
Vizhinjam Seaport	 Located at Vizhinjam, Kerala. India's First Deepwater Container Trans-shipment Port. Developed by Adani Ports and SEZ Ltd. in PPP mode. Will reduce India's dependency on Sri Lanka's Colombo Port for trans- 	 Operational trials began in October 2023. Natural draft depth of 20 metres (deepest among Indian ports). Part of the Sagarmala Project Located close to International Shipping Route (East-West Shipping Route). Strategic boost to India's Blue Economy
Lipulekh Pass	 Shipment cargo. Located in Uttarakhand's Pithoragarh district (Kumaon region). Tri-junction pass between India, China (Tibet), and Nepal. Traditional route for Kailash Mansarovar Yatra. Recently in news due to India-Nepal border disputes (claim over Kalapani region). 	 Altitude: 5,334 metres. New motorable road to Lipulekh Pass inaugurated in May 2020 by BRO. Nepal issued a new map in 2020 showing Lipulekh, Kalapani, and Limpiyadhura as its territory. Critical for India's defence logistics on the China border.



Topic	Details	Pre-2025 Focus
Tashigang Village	Located in Lahaul-Spiti district, Himachal Pradesh.	 Inhabited by just 50-60 voters Village follows Buddhist traditions.

	14/ LU LU LU LD UL 10/ LL 14/050	
	World's Highest Polling Station at 4,650	Important under Election
	meters.	Commission's Accessible Voting
	First set up during 2019 Lok Sabha	Initiative.
	Elections.	
	Part of Hemis National Park ecosystem.	
Namaqualand	Desert region located in Southwestern	Part of Succulent Karoo
	Africa across South Africa and Namibia.	Biodiversity Hotspot.
	Known for seasonal wildflower bloom	 UNESCO World Network of
	(Namaqua Daisies).	Biosphere Reserves (2017).
	Recently in news due to the discovery of	Rich in copper mining activity.
	World's Oldest Inhabited Termite Mounds	
	(34,000 years old).	
Pantanal	Located in Brazil (Mato Grosso & Mato	Designated UNESCO Biosphere
Region	Grosso do Sul states).	Reserve (2000).
	• World's Largest Tropical Wetland (~150,000	Faces threat from wildfires and
	sq. km).	agricultural expansion.
	Crucial for Biodiversity Conservation	Part of the RAMSAR Convention
	(Jaguar, Giant Otter).	Wetlands List.
Dagestan	Located in Southern Russia (Caucasus	Borders Caspian Sea.
Region	region).	Part of the North Caucasus
	Recently in news due to Terrorist Attacks	Insurgency zone.
	(2024) targeting churches and synagogues.	Important for Oil and Natural Gas
	Known for its ethnic diversity and Islamic	resources.
	influence.	
Mount Kanlaon	Strato volcano located on Negros Islands,	Part of Mount Kanlaon Natural
	Philippines	Park.
	Recently erupted in 2024.	Member of the Pacific Ring of
	Highest peak in the Visayas Region (2,465)	Fire.
	meters).	Protected under the ASEAN
		Heritage Parks.

ISLANDS



Island	Location	Details
Senkaku Islands	East China Sea	Disputed between Japan (Senkaku) and China (Diaoyu)



Island		Location		Details
Saipan	•	Western Pacific	•	Controlled by the United States since WWII
Island		Ocean		
Delos Island	•	Aegean Sea, Greece	•	Ancient Greek and Roman sanctuary, part of Cyclades
				Archipelago
Crete Island	•	Southern Aegean	•	Largest Island in Greece
		Sea		Historically significant for Minoan Civilization