



CURRENT

AFFAIRS

**MONTHLY
HINDU
GIST**

JUNE-2025



Plot-1441, Opp. IOCL Petrol Pump, CRP Square, Bhubaneswar

Ph : 8093083555, 8984111101

Web : www.vanikias.com | E-mail : vaniksias@gmail.com



www.facebook.com/vanikias

VANIK IAS
JUNE 2025
CURRENT AFFAIRS
GIST



RBI TRANSFERS SURPLUS TO GOVERNMENT

#MOBILISATION OF RESOURCES

PRIMARY SOURCE The Indian EXPRESS

Recently, the central board of directors of the **Reserve Bank of India (RBI)** reviewed the **Economic Capital Framework (ECF)**. Based on the ECF, RBI transfers dividends to the government every year. ECF is a financial governance tool that guides RBI to determine risk provisioning and surplus transfers to the government.

RBI TRANSFERS RECORD DIVIDEND

- RBI will transfer ₹ **2,68,590 crore surplus** to the Union government as dividend for the accounting year 2024-25. This is 27% more than the dividend paid in the previous year.
- Based on revised ECF and macroeconomic assessment, the RBI board has decided to further increase the Contingent Risk Buffer (CRB) to 7.50%.

SOURCE OF EARNINGS FOR RBI

- Interest on Government securities held
- Interests on loans and advances made
- Interest earned on Liquid Adjustment Facility operations
- Interest income from foreign currency assets held
- Earnings from forex swaps
- Seigniorage (difference between cost of printing currency note and its face value)
- Valuation gains from Gold

CONTINGENCY RISK BUFFER

- CRB is the reserved fund within the Economic Capital Framework that is maintained by RBI to address potential financial disruptions or crises.
- It is the country's savings for a 'rainy day' (financial stability crisis) which the central bank consciously maintains in view of its role as Lender of Last Resort.

RBI'S SURPLUS TRANSFER TO GOVERNMENT

- Bimal Jalan Expert Committee (2019):** recommended that ECF framework be periodically reviewed every five years. It suggested Contingency Risk Buffer should be **5.5-6.5%** of the RBI's balance sheet to ensure adequate risk provisioning.
- RBI sets aside the Contingency Risk Buffer and other operational expenditures (salaries etc.) from its earnings, and transfers the surplus to the central government in the form of **dividends**.
- Surplus transfer from RBI is an important component of **non-tax revenues** to the central government.
- Surplus RBI transfers to the government depends on how much risk buffer it wants to maintain. A higher risk buffer means a lower amount of transferable surplus and vice versa.

SIGNIFICANCE

- Higher dividend payout by the RBI will help the government in managing the fiscal deficit.
- Higher surplus transfer is likely to improve liquidity conditions in the system.

INDIA'S WPI INFLATION FALLS TO 13-MONTH LOW

#INFLATION

PRIMARY SOURCE pib

India's wholesale inflation fell to a 13-month low to **0.85%** in April 2025. It is down from 2.05% in March. This is largely due

to decline in prices in the fuel & power and primary articles segments.

WHOLESALE PRICE INDEX (WPI)

- Economic indicator that measures inflation at the wholesale level i.e., the average change in price of goods and commodities before they reach the retail or consumer market.
- Reflects price movements of basket of goods, including primary articles (food, oilseeds, minerals), fuel and power, and manufactured products.

- **Compiled by:** Office of Economic Advisor, Ministry of Commerce and Industry.

- **Base year:** 2011-12

- Unlike CPI, WPI does not include services. WPI is used to monitor supply-side inflation and is a critical input for industry pricing, taxation and policy making.

WPI FOOD INDEX

Sub-index of WPI. It is a combination of the food articles from the Primary Articles basket, and the food products from the Manufactured Products basket.

MEASUREMENT OF INFLATION IN INDIA

CRITERIA	WHOLESALE PRICE INDEX (WPI)	CONSUMER PRICE INDEX (CPI)
Level	Measures Inflation at Wholesale level	Measures Inflation at Retail Level
Who Calculates?	Office of Economic Advisor, Ministry of Commerce and Industry	National Statistical Office, Ministry of Statistics and programme Implementation
Base year	2011-12	2012
Categories	Primary Articles, Manufactured products, Fuel and Power	Food and beverages, Tobacco and Intoxicants, Clothing and Footwear, Housing, Fuel, Miscellaneous- Education, Healthcare, Transportation etc.
Highest Weightage	Manufactured products > Primary Articles > Fuel and Power	Food and Beverages
Impact of increase in Food items	Less impact on WPI as compared to CPI, since WPI provides higher weightage to manufactured products and lower weightage to Food items.	Larger impact on CPI as compared to WPI since it gives more weightage to food products.
Services included	No	Yes
Indirect Taxes Included?	No	Yes
Targeted by RBI?	No	Yes. The RBI is required to maintain CPI rate of inflation of 4% with a deviation of 2%.

FIRST MONTHLY PERIODIC LABOUR FORCE SURVEY

#EMPLOYMENT

PRIMARY SOURCE THE HINDU

Ministry of Statistics and Programme Implementation (MoSPI) has released India's **first-ever monthly labour market data** under the revamped Periodic Labour Force Survey (PLFS) for April 2025.

FIRST MONTHLY PERIODIC LABOUR FORCE SURVEY

- **Monthly dataset:** India's first-ever monthly unemployment data under PLFS marks a shift from earlier annual or quarterly datasets. Monthly datasets would lead to more frequent, granular reporting of labour market conditions.
- **Increased sample size:** provides better information about the labour market and its seasonality factor.
- **Data from rural areas:** The revamped model assesses employment and unemployment data from rural areas too.

PERIODIC LABOUR FORCE SURVEY

- PLFS is India's primary official source for measuring employment and unemployment indicators.
- **Launched by:** National Statistical Office under the MoSPI in 2017, replacing the earlier Employment-Unemployment Surveys (EUS) conducted by NSSO.
- PLFS provides estimates based on two reference periods:
 - **Usual Status (US):** capturing long-term employment over the previous 365 days.
 - **Current Weekly Status (CWS):** capturing short-term employment over the last 7 days.

CURRENT WEEKLY STATUS (CWS) METHODOLOGY

PLFS uses the CWS approach to estimate labour indicators. Under CWS, a person is considered:

- Employed if they worked at least one hour on any day during the 7 days preceding the date of the survey.

- Unemployed if they did not work at all but were available for or seeking work for at least one hour on any day during that week.

The estimates of unemployment in CWS give an average picture of unemployment in a short period of 7 days during the survey period. This helps capture dynamic labour market trends more frequently and is the basis for calculating the monthly UR, LFPR, and WPR.

KEY HIGHLIGHTS OF THE FIRST PLFS MONTHLY BULLETIN

- **Unemployment Rate (UR):** UR in April was 5.1%. UR among males was higher compared to females. Urban UR for all persons was higher (6.5%), as compared to rural UR (4.5%).
- **Labour Force Participation Rate** (percentage of persons in the labour force either employed or seeking work). LFPR in CWS among persons of age 15 years and above was 55.6% during the period. LFPR in rural areas was higher than in urban areas.
- **Worker Population Ratio** (percentage of employed persons in the population). Overall WPR was observed as 52.8% during April. WPR in rural areas was higher than urban areas.

INDIA'S NET FOREIGN DIRECT INVESTMENT DROPS BY 96.5%

#EXTERNAL SECTOR

PRIMARY SOURCE The Indian EXPRESS

As per RBI, India witnessed a sharp drop in net foreign direct investment (FDI) in FY25. The **net FDI fell to \$353 million in FY25** from \$10 billion in FY24, the lowest level since 2014.

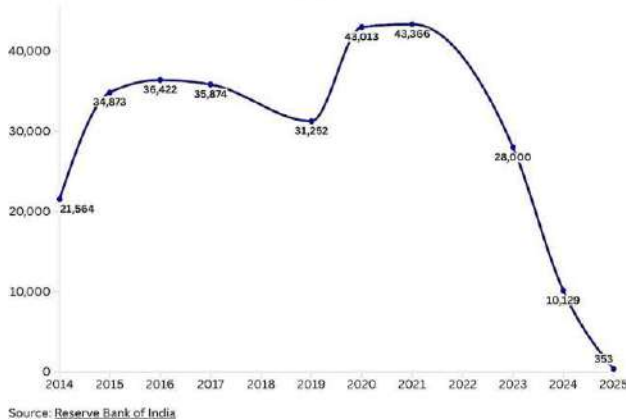
WHAT IS NET FOREIGN DIRECT INVESTMENT (FDI)?

- **Net FDI** is the difference between **FDI inflows** by other countries into India and **FDI outflow** due to direct investments made by Indians abroad.

Net FDI = (Gross investment - Repatriation) - FDI Outflow

Net FDI into India

*Data for FY 18 and FY 22 are unavailable



COMPONENTS OF NET FDI

- **FDI Inflow** (Gross FDI) is gross investment minus repatriation/disinvestment.
 - **Gross Investment** includes- Fresh equity inflows (shares allocated to foreign investors), Reinvestment of profits by foreign companies in India, other capital inflow (loans from parent company to subsidiary)
 - **Repatriation/ disinvestment**- Foreign companies removing capital out of India.
- **FDI Outflow** is the investment by Indian companies abroad.

The net FDI drop is due to:

- Surge in repatriation by foreign investors.
- Disinvestment of existing investments through profitable initial public offerings (IPOs).
- Increased overseas investments by Indian firms.

While the net FDI dropped, gross FDI remained concentrated in core sectors like manufacturing, financial services, energy, and communications, which accounted for more than 60% of total inflows.

RoDTEP SCHEME FOR EXPORTERS RESTORED

#EXPORTS #EXTERNAL TRADE

PRIMARY SOURCE: THE HINDU

The government has **restored the RoDTEP scheme** (Remission of Duties and Taxes on Exported Products) for the advance authorisation (AA), export-oriented units and special economic zones. The scheme had expired in February 2025. It

aims to enhance competitiveness in overseas trade and support small and medium enterprises facing thin margins.

The RoDTEP Scheme for the Domestic Tariff Units (DTAs) shall continue until Sep 30, 2025.

ABOUT RODTEP SCHEME

- **Introduced** in 2021 by replacing the existing MEIS (Merchandise Exports from India Scheme).
- **Purpose:** To ensure that the exporters receive the refunds on the embedded taxes and duties previously non-recoverable and to boost exports.
- **Eligibility criteria:**
 - All sectors including the textiles sector.
 - Manufacturer exporters and merchant exporters (traders).
 - Special Economic Zone Units and Export Oriented Units.
 - Goods exported via courier through e-commerce platforms.
 - No particular turnover threshold to claim RoDTEP.
 - Exported products need to have the country of origin as India.
 - Re-exported products are not eligible.

KEY FEATURES OF RoDTEP SCHEME

- Provides refund of duties and taxes which are levied at central, state and local level and are not refunded under any other mechanism. They include:
 - Central and State Excise Duty on fuel for transportation of export goods (petrol, diesel, CNG, PNG, etc.)
 - Coal cess or duty levied by States on electricity consumed for manufacturing of export goods
 - Mandi tax levied by APMCs
 - Toll tax and stamp duties on import-export documentation
 - Value added tax (VAT) wherever applicable
- Refunds under the scheme would be issued in the form of **transferrable e-scrips** which could be used for paying Basic Customs Duty on import of goods or may be transferred electronically to another party. The benefit will not be in the form of direct credit to the bank account.

Earlier, the sectors like pharmaceuticals, chemicals and iron & steel were excluded from the scheme. Later the

government decided to extend the scheme to these sectors as well.

GAPS IN INDIA'S IRRIGATION SYSTEM

#AGRICULTURE

PRIMARY SOURCE: THE HINDU

Recently, a Young Farmer Award recipient from Maharashtra died by suicide citing unaddressed irrigation demands and government negligence. While India reports the highest water usage in agriculture globally, **access to water for irrigation remains a contentious issue.**

STATE OF IRRIGATION IN INDIA

- Agriculture accounts for almost **80% of the water withdrawal** in India. Annually, 688 billion cubic metres of water is consumed by the farm sector. Irrigation is an inevitable input for increasing agricultural production.
- In FY23, of the 141 million hectares of gross sown area in the country, nearly 73 million hectares or **52%** had irrigation access, up from 41% in 2016. Still, **nearly 50% of gross sown area in the country is deprived of irrigation access.**

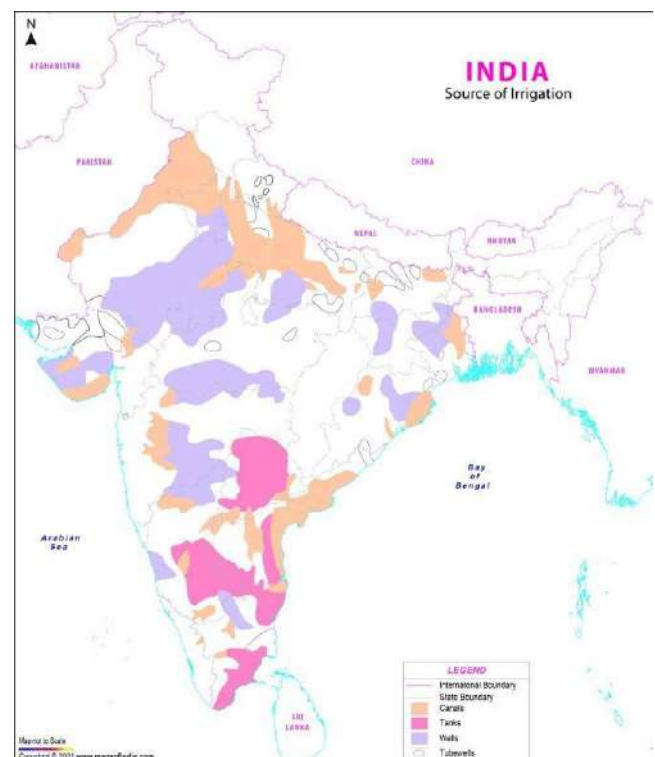
IRRIGATION CHALLENGES IN INDIA

- **Poor Irrigation coverage:** ~50% of net sown area is still completely dependent on rainfall. Over-reliance on traditional sources like wells, tube wells, canals for flood irrigation.
- **Uneven rainfall:** Irrigation is impacted by substantial spatial and temporal rainfall variation exacerbated by climate change.
- **Outdated off-farm and on-farm infrastructure** and poor maintenance reduce irrigation efficiency. **E.g.,** Unlined canals and channels.
- **Lack of adoption of smart irrigation** solutions like micro-irrigation, drip agriculture. **E.g.,** Total area covered under micro-irrigation is 10.3 mha against potential of 69.5 mha.
- **Aggressive groundwater extraction for irrigation:** Due to over extraction, almost 17% of India's groundwater assessment units are deemed 'over-exploited' while 3.9% are in a 'critical' state.
 - **Misaligned cropping patterns:** Rampant cultivation

of water-intensive crops (sugarcane, paddy, cotton) across water-stressed regions exhausts groundwater, thus requiring irrigation solutions.

E.g., Sugarcane cultivation in water-stressed Maharashtra.

- **Loose regulation:** The Easement Act, 1882, provides every landowner with the right to collect and dispose of all water under the land/over surface, i.e., the owner can dig wells and extract water based on his discretion. Additionally, landowners are not legally liable for any damage caused to water resources because of over-extraction.
- **Gap between potential created and utilised:** Despite heavy public expenditure on canals, governments have not been able to reduce groundwater depletion. **E.g.,** Irrigation Potential Utilised (IPU) is 80 million hectares against Irrigation Potential Created (IPC) of 109 mha presently.
- **Inordinate delay in completion of irrigation projects** due to delayed tendering, contract management, land acquisition etc. The operating efficiency and water use efficiency has also remained sub-optimal in Indian agriculture. While irrigation systems in India report an operating efficiency of 38%, in developed countries it is 55%.



Marginalised groups, especially women, are disproportionately affected by increasing deprivation and decline of water tables with climate change intensifying disparities.

WAY FORWARD

- **Enhancing water efficiency:**

- **In irrigated areas** by reducing the difference between IPC and IPU through proper maintenance of canals and rationalisation of water tariffs/power subsidies.
- **In rain-fed areas** by rainwater harvesting, creating check dams, convergence between MGNREGA and water conservation, desilting ponds and water bodies.
- **Adoption of Model Bill** to control and regulate extraction of groundwater, setting up of Groundwater Regulating Authority, compulsory registration of borewell-owners etc.
- **Policy-led shift in cropping patterns** towards crops suiting regional agro-climatic conditions, less water-intensive crops and crop-diversification.
- **Participatory irrigation management** involving farmers in planning, design, development, and management of water resources schemes and capacity building.
- **Promotion of micro-irrigation techniques** like drip and sprinkler irrigation.
- **Alternative water management technologies** such as alternate wetting and drying, which can result in significant water saving and reduced emissions, may be popularised.

India needs to redesign its irrigation policy to ensure irrigation efficiency and rationalise the use of its limited water resources.

AGRI PHOTOVOLTAICS CAN BOOST FARMERS' INCOME

#AGRICULTURE #INFRASTRUCTURE



Agri Photovoltaics (APVs) offer a sustainable solution to boost farmers' income by combining solar energy generation with crop cultivation and maximise land-use efficiency.

AGRI PHOTOVOLTAICS

- APV is a system that allows solar panels to be installed above farmland enabling both electricity generation and crop cultivation on the same land.
- The common designs in APVs include- (i) growing crops between rows of solar panels (ii) solar panels raised about 2 metres above the ground allowing crops to grow underneath.

BENEFITS OF AGRI PHOTOVOLTAICS

- **Dual Revenue stream:** Farmers can earn both from crop cultivation and generation of solar energy - either through lease income or direct energy sales to the grid.
- **Efficient Land Use:** Simultaneous food and energy production. Increases productivity per unit of land, vital for a country with just 2.4% of global land and 18% of population.
- **Improved microclimate for crops:** APVs may also create favourable microclimatic conditions that reduce water loss from and heat stress on plants.
- **Energy security:** Supports India's solar mission and rural electrification by decentralising energy production. Contributes to India's solar energy targets and aids to commitment to Net Zero emissions by 2070.

CHALLENGES TO ADOPTION OF AGRI PHOTOVOLTAICS

- **High capital expenditure:** While a typical 1MW ground-mounted solar plant in 5 acres of land would cost around Rs 2.7 crore, an APV system will incur additional 11% due to the requirement of specialised infrastructure.
- **Lack of standardised guidelines:** India currently lacks standardised norms for APVs, leading to ambiguity in project design and implementation.
- **Low Feed-in Tariff (FiT) reducing project viability:** FiT is the fixed price at which power producers like farmers or solar developers can sell electricity back to the grid. FiT is often too low, reducing project viability. E.g., Under the PM-KUSUM scheme in Rajasthan, FiT is ₹3.04/unit. At this rate, the payback period for a 1MW ground-mounted solar plant is 15 years, which discourages investors due to the long return period.
- **Land availability and size:** Over 86% of farmers are small and marginal, owning less than 2 hectares of land. Implementing APVs on smaller farms may not be economically feasible.

WAY FORWARD

- **Development of National APV guidelines** incorporating clear specifications on panel height, permissible crop yield loss, and land-use norms.
- **Introduce a higher Feed-in Tariff (FIT)** aligned with the thermal average power purchasing cost for State DISCOMs to reduce the payback period.
- **Expanding institutional support** through grants or NABARD's credit guarantee for APV investments.
- **Leveraging farmer institutions** such as FPOs and cooperatives which can help farmers pool resources and provide stronger market linkages.
- **Capacity-building programmes** training and equipping farmers with the expertise to manage APV systems.
- **Revamp PM KUSUM scheme** on agricultural solarisation to accommodate APVs in its delivery system.

Agri Photovoltaics hold great promise for transformation. However, success depends on two pillars: economic incentives and a robust policy framework that ensures farming remains central.

CENTRE HIKES FAIR AND REMUNERATIVE PRICE FOR SUGARCANE

#AGRICULTURE

PRIMARY SOURCE | The Indian EXPRESS

Cabinet Committee on Economic Affairs has approved a hike in the fair and remunerative price (FRP) of sugarcane to ₹355/quintal for the next sugar season beginning October (2025-26).

FAIR AND REMUNERATIVE PRICE OF SUGARCANE

- Minimum price declared by the central government that sugar mills are legally bound to pay to farmers for the sugarcane procured from them.
- FRP is fixed under the Sugarcane (Control) Order, 1966.
- **FRP is determined** by the Cabinet Committee on Economic Affairs (CCEA) on the recommendations of Commission for Agricultural Costs and Prices (CACP).

- FRP system assures timely payment to farmers, irrespective of the profit and loss to sugar mills.
- Alternatively, the states can set a separate SAP (State Advised Price), often higher than FRP to support local farmers.

DIGITALISING INDIA'S SEED VALUE CHAIN: SATHI PORTAL

#DIGITAL TECHNOLOGY IN AGRICULTURE

PRIMARY SOURCE | THE HINDU BUSINESS LINE

Government is rapidly expanding implementation of **SATHI Portal**. As of mid-2025, 24 States have integrated with the portal, with complete national coverage expected soon.

ABOUT SATHI PORTAL

- SATHI stands for Seed Traceability, Authentication and Holistic Inventory.
- **Developed by:** Ministry of Agriculture and Farmers' Welfare in partnership with the National Informatics Centre (NIC).
- **Aim:** To digitalise the entire Seed Retail Chain- from seed producing agency, distributors, dealers, retailers to farmers to prevent the circulation of spurious or substandard seeds.

KEY FEATURES

- **Centralised online portal** for seed traceability, authentication and inventory.
- **QR coded seed packets:** Each certified seed packet will carry a QR code. Farmers can scan the code to view the entire history of the seed- origin, grower, certifying agency, etc. The seeds would be certified under the supervision of State Seed Certification Agencies (SSCAs).
- **Seed DBT integration:** Centrally registered farmers could buy seeds from valid licensed dealers at market prices, and receive the subsidy directly into their bank accounts.

Currently, uploading data to SATHI is optional for stakeholders. The government is considering amending the Seeds Act, 1966 to make data entry mandatory.

CABINET APPROVES INDIA'S SIXTH SEMICONDUCTOR UNIT

#MANUFACTURING #CRITICAL TECHNOLOGY

PRIMARY SOURCE THE HINDU

Union Cabinet has approved **India's sixth semiconductor unit**- a ₹3,706 crore project to be set up in **Jewar, Uttar Pradesh**.

INDIA'S SIXTH SEMICONDUCTOR UNIT

- Location: Jewar, Uttar Pradesh. This is the first semiconductor plant in the state.
- The chip manufacturing unit will be a joint venture by Indian firm HCL and Foxconn (Taiwanese electronics manufacturing giant).
- The plant is designed for 20,000 wafers per month. The design output capacity is 36 million units per month.
- It will manufacture **display driver chips** for a range of devices including- mobile phones, laptops, personal computers, automobiles etc.
- The unit will attract investments worth ₹3,700 crore. It will fulfill about 40% of India's chip needs and boost chances of bringing display panel manufacturing to India.

INDIA SEMICONDUCTOR MISSION

- Strategic initiative to establish a robust semiconductor and display ecosystem in the country. It seeks to position India as a global hub for electronics manufacturing and chip design.
- **Launched:** 2021.
- **Budget outlay:** ₹76,000 crores
- **Implemented by:** Ministry of Electronics and Information Technology (MeitY)
- **Incentives:** Financial incentives up to 50% of the project cost are provided to companies involved in Semiconductor Fabs, Display Fabs, Assembly, Testing, Marking, and Packaging (ATMP/OSAT) units, Semiconductor Design.

PROJECT APPROVED UNDER INDIA SEMICONDUCTOR MISSION

- As of 2025, six major projects have been approved under the India Semiconductor Mission. Already five semiconductor units are in advanced stages of construction.

COMPANY / JOINT VENTURE	LOCATION
Micron	Sanand, Gujarat
Tata Electronics + PSMC (Taiwan)	Dholera, Gujarat
Tata Semiconductor Assembly & Test (TSAT)	Morigaon, Assam
CG Power + Renesas (Japan) + Stars Microelectronics (Thailand)	Sanand, Gujarat
Suchi Semicon	Surat, Gujarat
HCL + Foxconn (Taiwan)	Jewar, Uttar Pradesh

INDIA CAN BENEFIT FROM CHINA PLUS ONE OPPORTUNITY

#MANUFACTURING #INDUSTRIAL GROWTH

PRIMARY SOURCE THE HINDU

Given the aggressive tariff measures by the US against China, the global trade disruptions will likely open up opportunities for India with the 'China Plus One' strategy.

CHINA PLUS ONE STRATEGY

- Business strategy to avoid investing only in China and diversify business or channel investments into manufacturing in other developing economies such as India, Thailand, Cambodia, Vietnam, Malaysia etc.

REASONS FOR SHIFT FROM CHINA

For the last 20 years, Western companies have heavily invested in China, drawn in by its low production costs, and vast domestic consumer market. However the companies are looking to diversify due to:

- **US-China Trade disputes:** Escalating trade disputes and reciprocal trade restrictions have disrupted global supply chains.
- **Higher tariffs** on Chinese imports and export restrictions on essential resources is increasing the cost of doing business in China.
- **Emerging competitors:** ASEAN and other developing countries are presenting attractive alternatives to China owing to their lower tariffs, simpler tax systems, cheaper labor, and proactive free trade agreements (FTAs).
- **Post COVID-19 Pandemic:** The pandemic exposed supply-chain vulnerabilities of over-reliance on one country and the need to find alternative supply chains.

WHY IS INDIA LAGGING BEHIND COMPETITORS?

The NITI Aayog in its inaugural quarterly report- Trade Watch in 2024 highlighted that India's has seen limited success in seizing 'China plus one' opportunity. The reasons include:

- **Internal Policy challenges:**
 - Poor ease of doing business and greater amount of policy uncertainty deters foreign investors.
 - Cumbersome land acquisition procedure and unavailability of cheap land.
 - Delays in receiving permits, licenses, and approvals due to the involvement of multiple government agencies.
 - Complex tax laws and limited Free Trade Agreements (FTAs) with major trade blocs.
- **Deficient infrastructure** including transportation, power supply shortages impacts the reliability of India's manufacturing sector/prospects.
- **Variation of labour laws** across different states and delayed implementation of New Labour Codes.
- **India's logistics cost** is 14% of India's GDP, which is high when compared to developed nations (where it ranges 8-10%). This reduces overall competitiveness.
- **Low R&D and Innovation:** India spends hardly around 0.7% of its GDP on R&D, quite lower in comparison to the USA (2.1%), China (2.8%), Israel (4.3%) etc.
- **Lack of availability of skilled human resources** adept in complex manufacturing processes, despite having almost 53% of the population in the working-age group.

- **Poor Trade facilitation** as measured by Trading Across Borders. Complex documentation processes and high export costs hinder trade facilitation.

WAY FORWARD

- **Improve Trade Competitiveness** by improving access to factors of production (Land, Labour, Capital), Reduce Logistics costs (14% of GDP) to global benchmarks (8% of GDP), improving Ease of Doing Business by streamlining regulations etc.
- **Fast-track development of infrastructure projects** under the National Infrastructure Pipeline (NIP). Leverage PM Gati Shakti Master Plan to integrate infrastructure planning and bring down logistics cost.
- **Focus on large-scale skills development**, leveraging Skill India Program and Pradhan Mantri Kaushal Vikas Yojana.
- **Expedite signing of Free Trade agreements** with key markets such as the European Union, United Kingdom & ASEAN.
- **Protect domestic markets** from the import of cheap foreign goods through (a) strong and effective technical regulations (b) trade safeguards such as Anti-dumping duties.
- **Enhance digital governance** and increase public and private spending on R&D to at least 1.5% of GDP by 2030.

US QUESTIONS INDIA'S PLI SCHEME FOR SPECIALITY STEEL AT WTO

#MANUFACTURING

PRIMARY SOURCE THE HINDU

The US has raised concerns at the World Trade Organisation (WTO) over India's PLI scheme for specialty steel citing global overcapacity. India defends the scheme as essential for reducing import dependence and achieving self-sufficiency in high-grade steel.

PRODUCT LINKED INCENTIVE SCHEME

- **Objective:** To incentivise domestic manufacturing in key sectors by offering financial incentives linked to increased production and sales.

- **Launched in 2020**, the scheme initially targeted three industries- Mobile and allied Component Manufacturing; Electrical Component Manufacturing; and Medical Devices. Later, it was extended to 14 sectors.
- India's PLI scheme is designed to be **compliant with WTO norms**. It does not include export obligations or link subsidies to export performance, which are not allowed under WTO rules. It only incentivises investment and sales growth within India.

PLI SCHEME FOR SPECIALITY STEEL

- The first round of India's PLI scheme for specialty steel was notified in 2021 by the Ministry of Steel with a budgetary outlay of ₹6322 crore.
- **Objective:** To promote manufacturing of value-added steel grades in the country and help reduce imports of these grades.

U.S Argument	India's Response
PLI could worsen global steel overcapacity	India remains a net importer of steel in FY2S for the second consecutive year despite being the world's second-largest steel producer.
Potential breach of WTO subsidies rules	PLI is WTO compliant - as it does not link subsidies to exports and only incentivizes domestic production and investment.
Large subsidies distort market	India's subsidy is modest (Rs 6322 crore) compared to China's \$50 billion in steel subsidies.

VIZHINJAM INTERNATIONAL SEAPORT

#INFRASTRUCTURE

PRIMARY SOURCE: THE HINDU

India's first deep water and container transshipment port at Vizhinjam, Kerala has been officially inaugurated. The port is of immense significance to India's global maritime trade.

VIZHINJAM INTERNATIONAL SEAPORT

- India's first dedicated container transshipment port. It is an all-weather deep water port. Its natural draft of about 20 metres requires minimal capital dredging.
- It is the first semi-automated port in India and the first greenfield port project.
- **Developed by:** Adani Ports and Special Economic Zone Ltd (APSEZ) under a public-private partnership model with the Kerala government.



NEED FOR THE PORT

- **India relies heavily on foreign ports** (like Colombo, Singapore and Klang) for handling around 75% of its inbound and outbound transshipment cargo. This results in an annual revenue loss of approximately \$200 million-\$220 million.
- **India's container throughput capacity** last year was approximately 20 million TEUs (twenty-foot equivalent units), contrasting with China's 330 million TEUs. This highlights the need for modern ports such as Vizhinjam.

HISTORICAL IMPORTANCE OF VIZHINJAM

The town of Vizhinjam in Kerala has played a crucial role in the history of global maritime trade.

- **Inscriptions from the Pandya-Chola era** (1129 AD) records Vizhinjam as Rajendra Chola Pattinam, a port of Kerala.
- **Historians claim** that Balita, a port with considerable commercial importance which finds mention in the first century AD historical travelogue 'The Periplus of the Erythraean Sea', is Vizhinjam's old name.

SIGNIFICANCE OF VIZHINJAM INTERNATIONAL SEAPORT

- **Proximity to international shipping routes:** Amongst all existing Indian ports, Vizhinjam is the closest to international shipping routes. Ultra-large container

vessels can berth without deviating from their route, thereby saving costs.

- **Efficiency with Modern Infrastructure:** As India's first semi-automated port equipped with remote-controlled quay cranes and an AI-powered vessel traffic management system, Vizhinjam will significantly reduce vessel turnaround times.
- **Boost to local economy:** Operations at Vizhinjam would fast-track the development of associated

infrastructure like industrial corridor, allied businesses including ship building, ship repair, logistics, warehousing and direct and indirect employment opportunities.

Warehousing, logistics, and industrial facilities are essential for the port to evolve into a thriving commercial maritime hub.

PRACTICE QUESTIONS

MCQS

Q1. Consider the following statements:

1. The weightage of food in Consumer Price Index (CPI) is higher than that in Wholesale Price Index (WPI).
2. The WPI does not capture changes in the prices of services, which CPI does.
3. The Reserve Bank of India has now adopted WPI as its key measure of inflation and to decide on changing the key policy rates.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 3 only
- (d) 1, 2 and 3

Q2. Which of the following are the sources of income for the Reserve Bank of India?

- I. Buying and selling Government bonds
- II. Buying and selling foreign currency
- III. Pension fund management
- IV. Lending to private companies
- V. Printing and distributing currency notes

Select the correct answer using the code given below:

- (a) I and II only
- (b) II, III and IV
- (c) I, III, IV and V

- (d) I, II and V

Q3. With reference to Foreign Direct Investment in India, which one of the following is considered its major characteristic?

- (a) It is the investment through capital instruments essentially in a listed company.
- (b) It is a largely non-debt creating capital flow.
- (c) It is an investment which involves debt-servicing.
- (d) It is the investment made by foreign institutional investors in the Government securities.

Q4. Which of the following statements, about the 'Remission of Duties and Taxes on Exported Products (RoDTEP) scheme', is/are correct?

1. The scheme provides for refund of all direct and indirect taxes imposed at Centre, state and local level in the form of Duty Scrips.
2. The Duty Scrips are non-transferrable.
3. The Duty Scrips can be used for the payment of only the Basic Customs Duty.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 3 only
- (c) 2 and 3 only
- (d) 1 and 3 only

Q5. The Fair and Remunerative Price (FRP) of sugarcane is approved by the:

- (a) Cabinet Committee on Economic Affairs
- (b) Commission for Agricultural Costs and Prices

- (c) Directorate of Marketing and Inspection, Ministry of Agriculture
- (d) Agricultural Produce Market Committee

DESCRIPTIVE QUESTIONS

Q1. Irrigation plays an indispensable role in sustainable agricultural production. In this context, discuss the irrigation challenges facing India and suggest suitable measures for their redressal.

Q2. India's heavy dependence on semiconductor imports has significant economic, technological, and security implications. Evaluate the steps taken by the government to enhance domestic semiconductor manufacturing.

Answers: 1-a, 2-d, 3-b, 4-b, 5-a



VANIK-IAS
Exclusive Coaching for UPSC/OPSC/WBCS

WAQF IS NOT ESSENTIAL RELIGIOUS PRACTICE: CENTRE

#RIGHTS ISSUE #FUNDAMENTAL RIGHTS

PRIMARY SOURCE THE HINDU

Defending the recently-passed legislation Waqf Amendment Act, 2025, the Central government told the Supreme Court that **Waqf is not an essential religious practice in Islam.**

Centre asserted that it is the state's duty to ensure that public property is not diverted illegally, and nobody could claim right over public land by using **waqf by user principle.**

WAQF IS NOT AN ESSENTIAL RELIGIOUS PRACTICE

The Central government told the Supreme Court that-

- Waqf by its very nature is charity, and any charity is a part of every religion, but not an essential religious practice of any religion.
- A Muslim who does not create a waqf would not be less Muslim or cease to be a Muslim. Creating a waqf was **not mandatory** in Islam, **neither is it a fundamental right** in itself.

WHAT IS AN ESSENTIAL RELIGIOUS PRACTICE (ERP)?

ERP doctrine governs which religious practices are protected under Articles 25 & 26 of Indian Constitution.

In the Commissioner of Police v Acharya Jagadisharananda Avadhuta (2004): The SC held that-

- In order to determine whether or not a particular practice is an essential part of religion, the test must be whether the absence of the practice itself fundamentally alters the religion.

- If the taking away of that part or practice could result in a fundamental change in the character of that religion or in its belief, then such part could be treated as an essential or integral part.
- There cannot be additions or subtractions to such a part because it is the very essence of that religion and alterations will change its fundamental character. It is such permanent essential parts which are protected by the Constitution.

SOME CASES ASSOCIATED WITH ESSENTIAL RELIGIOUS PRACTICE

- **Commissioner of Police v Acharya Jagadisharananda Avadhuta (2004):** The SC held that the Tandava Dance was not an essential practice of the Ananda Marga faith.
- **Shayara Bano v Union of India (2017):** SC held that Triple Talaq is not an essential practice under Islam and could not be offered constitutional protection under Article 25.
- **Karnataka High Court (2022)** upheld the ban on the wearing of hijab (head scarf) by students in schools and colleges in the State. It held that wearing hijab is not an essential religious practice in Islam, and is not protected under the right to freedom of religion guaranteed by Article 25.

ARTICLES 25 & 26 OF INDIAN CONSTITUTION

Article 25: Freedom of conscience and free profession, practice and propagation of religion.

- **All persons are equally entitled** to freedom of conscience and the right to freely profess, practice and propagate religion.
- It does not include the right to convert another person to one's own religion. Forcible conversions impinge on the 'freedom of conscience' guaranteed to all the persons alike.

- These rights are available to all persons- citizens as well as non-citizens. It covers not only religious beliefs (doctrines) but also religious practices (rituals).
- **Reasonable restrictions:** rights are subject to public order, morality, health and other provisions relating to fundamental rights.
 - The state can regulate such practice on grounds of public order, morality and health.
 - The state can regulate or restrict any economic, financial, political or other secular activity which may be associated with religious practice.

Article 26: Freedom to manage religious affairs.

- Every religious denomination or any of its section shall have the following rights:
 - Right to establish and maintain institutions for religious and charitable purposes
 - Right to manage its own affairs in matters of religion
 - Right to own and acquire movable and immovable property
 - Right to administer such property in accordance with law.
- **Article 26 protects collective freedom of religion.** Article 25 guarantees rights of individuals, while Article 26 guarantees rights of religious denominations or their sections.
- **Reasonable restrictions:** subject to public order, morality and health but not subject to other provisions relating to the Fundamental Rights.

PRESIDENTIAL REFERENCE:

ARTICLE 143

#LEGISLATION #JUDICIARY

PRIMARY SOURCE: THE HINDU

Recently, the President of India has made a reference to the Supreme Court under Article 143 of the Constitution on certain questions of law. The current reference is a result of a recent SC judgment that had specified timelines for Governors and the President to act on Bills passed by State legislatures.

ARTICLE 143 OF THE CONSTITUTION: PRESIDENTIAL REFERENCE

- Advisory jurisdiction of the Supreme Court under Article 143 is a relic of the Government of India Act, 1935.

- **As per Article 143**, the President may refer any question of law or fact of public importance to the Supreme Court for its opinion. The President makes such a reference based on the advice of the Union council of ministers.
- **Article 145** provides that any such reference shall be heard by a bench of minimum five judges.
- The Supreme Court may provide its opinion after such a hearing as it thinks fit. It is **not obligatory for the SC to render its opinion.**
- The opinion by the SC is **not legally binding on the President**, and does not hold a precedential value for the courts to follow in subsequent cases. However, it carries a strong persuasive value and is usually followed by the executive and the courts.

THE LATEST PRESIDENTIAL REFERENCE

- The present reference has raised 14 questions, primarily surrounding the interpretation of **Articles 200 and 201**, for the court's opinion.

THE 14 QUESTIONS PRESIDENT MURMU HAS ASKED SC

- 1 What are the constitutional options before a Governor when a Bill is presented to him under Article 200 of the Constitution of India?
- 2 Is the Governor bound by the aid and advice tendered by the Council of Ministers while exercising all the powers available with him when a Bill is presented before him under Article 200 of the Constitution of India?
- 3 In the exercise of constitutional discretion by the Governor under Article 200 of the Constitution of India, is there any bar?
- 4 Is Article 361 of the Constitution of India an absolute bar to the judicial review in relation to the actions of a Governor under Article 200 of the Constitution of India?
- 5 In the absence of a constitutionally prescribed time limit, and the manner of exercise of powers by the Governor, can time-limits be imposed and the manner of exercise be prescribed through judicial orders for the exercise of all powers under Article 200 of the Constitution of India by the Governor?
- 6 In the exercise of constitutional discretion by the Governor under Article 201 of the Constitution of India, is there any bar?
- 7 In the absence of a constitutionally prescribed timeline and the manner of exercise of powers by the President, can time-limits be imposed and the manner of exercise be prescribed through judicial orders for the exercise of discretion by the President under Article 201 of the Constitution of India?
- 8 In light of the constitutional scheme governing the powers of the President, is the President required to seek advice of the Supreme Court by way of a reference under Article 143 of the Constitution of India and take the opinion of the Supreme Court when the Governor reserves a Bill for the President's assent or otherwise?
- 9 Are the decisions of the Governor and the President under Article 200 and Article 201 of the Constitution of India, respectively, justiciable at a stage anterior to the law coming into force? Is it permissible for the Courts to undertake judicial adjudication over the contents of a Bill in any manner, before it becomes law?
- 10 Can the exercise of constitutional powers and the orders of the President/Governor be substituted in any manner under Article 142 of the Constitution of India?
- 11 Is a law made by the State legislature a law in force without the assent of the Governor granted under Article 200 of the Constitution of India?
- 12 In view of the proviso to Article 145(3) of the Constitution of India, is it not mandatory for any bench of this Hon'ble Court to first decide as to whether the question involved in the proceedings before it is of such a nature which involves substantial questions of law as to the interpretation of the Constitution and to refer it to a bench of minimum five judges?
- 13 Do the powers of the Supreme Court under Article 142 of the Constitution of India extend to matters of procedural law or Article 142 of the Constitution of India extends to issuing directions/passing orders which are contrary to or inconsistent with existing substantive or procedural provisions of the Constitution or law in force?
- 14 Does the Constitution bar any other jurisdiction of the Supreme Court to resolve disputes between the Union Government and the State Governments except by way of a suit under Article 131 of the Constitution of India?

SUPREME COURT'S JUDGMENT IN TAMIL NADU

GOVERNOR CASE (2025)

Time limit for Governor:

SC has prescribed a time limit for the Governor to exercise his powers under **Article 200**. The governor:

- Has a **maximum of 1 month** to withhold the assent based on the aid and advice of the State Cabinet.
- Has a **maximum period of 3 months** to return the bill by specifying reasons, if the bill is withheld contrary to the advice of the Cabinet.

- Has a **maximum period of 3 months** to reserve the bill for the President's consideration against the advice of the Cabinet.
- Must grant assent to the bill re-passed by the state legislature under Article 200 within a **maximum period of 1 month**.

Time limit for President:

- The President is required to take a decision on the bills reserved for his consideration by the governor within a period of **three months**.

PAST INSTANCES OF PRESIDENTIAL REFERENCE

There have been around 15 references made since 1950 before the current reference. Some of the landmark opinions from such references include-

- **The first reference was made in the Delhi Laws Act case** (1951) which laid down the contours of 'delegated legislation', through which the legislature could delegate legislative powers to the executive for effective implementation of any law.
- **Kerala Education Bill** (1958) resulted in the court laying down the principle of harmonious construction between Fundamental Rights and Directive Principles of State Policy as well as interpretation of protection given to minority educational institutions under Article 30.
- **Berubari case** (1960), the court opined that ceding or acquisition of territory by India would need a constitutional amendment under Article 368.
- **Keshav Singh case** (1965), the court interpreted the powers and privileges of the legislature.
- **Presidential poll case** (1974), the court opined that Presidential elections should be held notwithstanding vacancies in the electoral college due to dissolution of State assemblies.
- **Special Courts Bill** (1978) provided that the court may decline to answer a reference; that the questions referred must be specific and not vague; and that the court, while answering a reference, should not encroach upon the functions and privileges of Parliament.
- **Third Judges case reference** (1998) laid down detailed guidelines for the collegium system with respect to the appointment of judges to the higher judiciary.

Out of all the references made till date, the SC has declined to provide its opinion for only one reference in 1993 with respect to the Ram Janmabhoomi case.

Presidential Reference raises fundamental questions about justiciability of executive discretion and the extent to which courts can intervene in legislative assent process.

STRENGTHENING PARLIAMENTARY OVERSIGHT MECHANISM IN INDIA

#PARLIAMENT

PRIMARY SOURCE THE HINDU

While the Indian Constitution enshrines checks and balances, legislative oversight has often been diminished. If India seeks 'Maximum Governance', it must also commit to 'Maximum Accountability', starting with an empowered and effective Parliament.

PARLIAMENTARY OVERSIGHT MECHANISM

- The Constituent Assembly opted for a Parliamentary system of governance because it ensures greater executive accountability through daily parliamentary oversight.
- **Parliamentary oversight** is the mechanism through which the legislature supervises and scrutinises the policies and actions of the executive. This includes:
 - Question Hour and Zero Hour
 - Parliamentary and Department-related Standing Committees
 - Financial Committees like Estimates Committee, Public Accounts Committee and Committee on Public Undertakings
 - No-confidence motions, adjournment motions, and debates on bills and budgets

**WEAKENING PARLIAMNETARY OVERSIGHT
MECHANISMS**

- **Erosion of Question Hour:** During 17th Lok Sabha (2019-2024), Question Hour functioned only 60% of the scheduled time in Lok Sabha and 52% in Rajya Sabha. Frequent disruptions, adjournments, and lack of

substantive queries and quality reports have diluted its impact.

- **Underutilised Committees:** Findings of Parliamentary committees are seldom discussed on the floor of the House. Consequently, the committee's findings have had limited influence on legislation or executive action. Most Standing Committees lack technical and research staff resulting in superficial reviews of complex policy matters.
- **Lack of Research support for MPs:** MPs in India often operate without specialised staff or professional research support, making it harder to scrutinise complex policies or spending data.
- **Post-Legislative Vacuum:** India lacks formal mechanism for post-legislative scrutiny. Laws are rarely assessed for their real-world outcomes after enactment. This creates a governance gap where performance evaluation of statutes is absent.

ACHIEVEMENTS OF INDIAN LEGISLATIVE OVERSIGHT

Even with its inconsistencies, Indian legislative oversight has had notable successes:

- Standing Committee on Railways recommended waiving Indian Railways' dividend payments in 2015, a move implemented in 2016 to ease financial stress.
- Standing Committee on Transport influenced the Motor Vehicles (Amendment) Act, 2019, notably in establishing the National Road Safety Board.
- Public Accounts Committee (PAC) exposed critical delays, opaque appointments, and corrupt practices during the Commonwealth Games in 2010. On average, PAC has made 180 recommendations every year, out of which 80% were accepted by the government.

WAY FORWARD

- **Institutionalise Post-Legislative Scrutiny:** Create subcommittees under each Standing Committee or specialised body to track the implementation of laws. Emulate UK Model where government departments submit post-legislative reviews within 3-5 years of implementation.
- **Committee Reform and Empowerment:** Mandate floor discussion on select DRSC reports with compulsory ministerial response. Committees must be strengthened with dedicated research and technical support, thus moving beyond mere administrative assistance.

- **Leveraging Technology:** By leveraging AI and data analytics, Parliament can help members flag irregularities, track policy trends, and frame sharper, evidence-based questions.
- **Public Accessibility and Transparency:** Oversight reports should be published in regional languages, supplemented by infographics, short videos, and data dashboards to make committee findings accessible to citizens, promoting participatory democracy.

Strengthening the role of Parliament in scrutinising executive action is essential in not just making laws but also ensuring their effective implementation and accountability.

ED IS CROSSING ALL LIMITS: SC

#LAW ENFORCEMENT BODIES

PRIMARY SOURCE: THE HINDU

The Supreme Court has stayed the investigation conducted by the Directorate of Enforcement (ED) into government-run liquor retailer TASMAC (Tamil Nadu State Marketing Corporation). The SC has criticised the ED for crossing all limits and violating the federal structure.

Earlier, the SC had flagged the ED's pattern of making allegations without any material evidence to support them.

ABOUT ENFORCEMENT DIRECTORATE (ED)

- ED is a multi-disciplinary organisation mandated with investigation of economic crimes and violations of foreign exchange laws.
- It operates under the **Department of Revenue, Ministry of Finance.**
- **Its primary mandate** is to enforce two key laws: Prevention of Money Laundering Act, 2002 (PMLA) and Foreign Exchange Management Act, 1999 (FEMA). Additionally, it is tasked with implementing Fugitive Economic Offenders Act, 2018 (FEOA).
- ED investigates cases of money laundering, violations of foreign exchange laws, and works to attach and confiscate assets derived from criminal activities.
- **Headquarters:** New Delhi

POWERS GRANTED TO ENFORCEMENT DIRECTORATE UNDER DIFFERENT LAWS

1. Prevention of Money Laundering Act, 2002 (PMLA):

- **Power to search and seizure** records or property if the suspect is believed to be involved in money laundering.
- **Power to Arrest:** Authorised officer may arrest a person if has reason to believe that any person has committed an offence punishable under the PMLA Act, based on the material in his possession. He shall inform him of the grounds for the arrest as soon as possible.
- **Summoning powers:** Power to summon any person to give evidence or to produce any records during the course of any investigation or proceeding under the Act.
- **Attachment of property:** Director or an authorised officer (not below the rank of Deputy Director) can attach property of persons accused of money laundering. He may issue a written order to provisionally attach such property for a period not exceeding 180 days.

2. Foreign Exchange Management Act, 1999 (FEMA):

- ED has the powers to-
 - conduct investigation into suspected contraventions of foreign exchange laws and regulations.
 - adjudicate and impose penalties on those adjudged to have contravened the law (violation of FEMA).

3. Fugitive Economic Offenders Act, 2018 (FEOA):

- ED has the power to attach the properties of the fugitive economic offenders who have escaped from India warranting arrest, and provide for the confiscation of their properties to the Central Government.

ISSUES WITH THE FUNCTIONING OF ENFORCEMENT DIRECTORATE

These powers along with functional issues in ED have scope for political misuse.

- **Low conviction rate:** ED has registered 5,422 cases under PMLA till March 2022, but only 23 persons have been convicted- less than 0.5%.
- **Self-Incrimination:** ED can force an accused to self-incriminate during interrogation and such statements can be used as evidence in court. This raises concerns about the violation of Article 20 of Indian Constitution, which protects individuals from self-incrimination.
- **No checks and balances in search/seizure:** Under PMLA, ED officials can carry out search operations even without prior FIR in predicate offence.
- **Autonomy:** Centre government's authority to extend the tenure of ED officials, including the Director, raises

concerns about ED's autonomy. The Act of extension can be an incentive for displaying regime loyalty in discharging duties, and gives scope for the deployment of ED for political vendetta.

- **Accountability:** ED has policing powers without accountability imposed on regular police. **E.g.,** Case information report is not provided to the person concerned at the time of arrest.

Hence, it is necessary to ensure functional autonomy of ED by giving it power to appoint its own cadre and ensure accountability by strengthening PMLA appellate tribunals.

RIGHT TO DIGITAL ACCESS PART OF ARTICLE 21: SC

#FUNDAMENTAL RIGHTS

PRIMARY SOURCE THE HINDU

In a recent judgement, the Supreme Court has held that inclusive and meaningful digital access to e-governance and welfare delivery systems is a part of fundamental right to life and liberty.

Background: A two-judge SC bench was hearing a petition on **how people with disability** find it nearly impossible to successfully complete the digital Know Your Customer (KYC) processes, which include visual tasks.

RIGHT TO DIGITAL ACCESS

The Supreme Court held that:

- **Right to Digital Access** is an instinctive component of the Right to Life and Personal Liberty under Article 21 of Indian Constitution.
- Invoking the **principle of substantive equality**, the SC held that digital transformation must be both inclusive and equitable.
- The state has an obligation to provide an inclusive digital ecosystem to the marginalised, underprivileged, vulnerable, disabled, and historically excluded sections of society. Since many welfare schemes and government services are provided through online platforms, bridging the digital divide has become a necessity to ensure dignified life.

The SC issued directions to the government to improve KYC processes to make them more accessible for persons with disabilities.

The digital divide is characterised by unequal access to digital infrastructure, skills and content, and continues to perpetuate systematic exclusion not only of persons with disabilities but also of large sections of rural populations, senior citizens, economically weaker communities and linguistic minorities.

Hence, the state should proactively design and implement inclusive digital ecosystems to serve not only the privileged, but also the marginalised.

FOREIGNERS TRIBUNALS: DETAINING NON-CITIZENS AND RULE OF LAW

#RIGHTS ISSUE

PRIMARY SOURCE: THE HINDU

The Assam detention regime is in news because of concerns related to liberty and well-being of persons caught in it.

FOREIGNERS TRIBUNALS IN ASSAM

- **Foreigners Tribunals are quasi-judicial bodies** established in Assam to adjudicate cases concerning individuals suspected of being illegal immigrants.
- They were created under the **Foreigners (Tribunals) Order, 1964**, which derives its authority from the Foreigners Act of 1946.
- The tribunals primarily handle cases related to individuals left out of the National Register of Citizens (NRC), with a significant number of cases involving approximately **19.06 lakh** people.

LEGAL BACKGROUND

- **Rule of Law and Liberty:** Indian Constitution upholds the principle that personal liberty can only be curtailed under clear legal and judicial frameworks (Article 21).
- **Detention of Non-Citizens:** Non-citizens in India can be detained under:
 - Foreigners Act, 1946
 - National Security Act (NSA), 1980
- **Preventive Detention:** Though permissible under Article 22, it is subject to strict safeguards and judicial review.

ASSAM EXPERIENCE: CITIZENSHIP AND DETENTION

- **NRC and Citizenship Crisis:** 19 lakh people were excluded from NRC in Assam (2019). Many were declared foreigners despite being long-term residents with no other nationality.
- **Documentation Challenges:** Proof required: Ancestors' residence before March 24, 1971.
- **Common Issues:**
 - Unavailable or destroyed documents (E.g., due to floods).
 - Rejection due to minor discrepancies in names.
- **Impacts:** Individuals are stripped of citizenship and placed in detention centers without effective legal recourse.

ISSUES AND CONCERNS

1. Indefinite Detention: Threat to Liberty

- **Violation of Legal Norms:** Detentions occur without conviction, charge, or trial, it is not aligned with any recognised preventive or punitive purpose.
- As of 2023: Over 1.59 lakh people declared foreigners. Only 39 deported since 2017 (26 till 2023; 13 more recently). A vast majority cannot be deported- they are **stateless** in effect.

2. Violation of Article 21 and Judicial Supremacy:

- **Principles of Detention under Indian Law:** It is ordinarily permitted on conviction by a court, pending trial (judicial custody) or under limited preventive detention, with safeguards (Article 22).
- **Current Regime in Assam Violates these norms:** Detention is not based on court orders or judicial sentencing. There is no legitimate aim such as deportation, trial, or punishment.

3. Executive Overreach and Erosion of Rule of Law:

- **Undermining Judicial Oversight:** Courts have traditionally controlled the deprivation of liberty, executive-directed detentions without effective court supervision violate this balance.
- **Lack of Due Process:** Procedural fairness is ignored in NRC-related adjudications. Individuals declared foreigners by Foreigners Tribunals often lack transparency.

4. Fundamental Constitutional Questions:

- **Nature of Citizenship and Statelessness:** Many detainees are de facto stateless; no country accepts them.

- **Judicial Role and Independence:** If the power to detain shifts away from courts, the judiciary's role is eroded.
- **Threat to Constitutional Governance:** Arbitrary detentions without judicial justification undermine Article 21 and the principle of limited government.

COMPARATIVE CONSTITUTIONAL JURISPRUDENCE IN THIS CONTEXT

- **India: Rajubala Das v. Union of India (2020):** Challenge to arbitrary and indefinite detention of declared foreigners. SC has not yet decisively settled the constitutional limits on such detentions.
- **Australia: In NZYQ v. Minister (2023),** the High Court ruled: Indefinite detention without realistic prospect of deportation is unconstitutional. It also emphasised judicial oversight and legitimate purpose as essential for detention.

Detention must serve a legitimate purpose and follow due process. The regime in Assam represents a constitutional aberration, it violates **Articles 21 and 22** and disrupts the balance between liberty and state power. There is an urgent need for clear legal standards, stronger judicial oversight, and protection of the rights of individuals caught in the citizenship net.

ROHINGYAS NEED TO BE DEPORTED IF HELD FOREIGNERS: SC

#RIGHTS ISSUE

PRIMARY SOURCE THE HINDU

Recently, the Supreme Court observed that if the Rohingya refugees are found to be 'foreigners' under the Foreigners Act, the Central government can deport them in accordance with the procedure under the law.

RECENT RULING OF SUPREME COURT

- The **right to life and due process** (Article 21) and the **right to equality** (Article 14) of the Constitution are available to all (citizens as well as non-citizens in India), but the **right to reside or settle** in any part of India under Article 19(1)(e) is only available to Indian citizens.
- As the Rohingyas do not have a right to settle in India, they will be deported as per the procedure prescribed in law.

INDIA'S STAND ON ROHINGYA REFUGEES

Rohingyas faced genocide in the Myanmar's Rakhine region, and now constitute the world's largest stateless population in the world.

- **India categorises Rohingyas as Illegal Migrants** and continues to detain Rohingya refugees under the domestic acts like:
 - **Foreigners Act, 1946** regulates the entry, stay, and departure of foreigners in India, along with deportation of the illegal migrants in India.
 - **Passport Act, 1967** governs the issuance and regulation of passports in India.
- **The government under the Foreigners Act** has the absolute and unlimited powers to issue orders to prohibit, regulate, restrict entry or departure of foreigners, especially when national security concerns are at play.
- **India is not a signatory to the UN Convention on Refugees (UNHCR).** India is not a party to the key International instruments such as:
 - Conventions against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment.
 - International Convention for the Protection of all Persons from Enforced Disappearance.
- **Therefore, India maintains no legal obligations** to provide asylum and adhere to the Policy of Non-Refoulement. Policy of Non-refoulement prohibits returning individuals to places where they face persecution, torture, or serious harm, protecting refugee and human rights.

STATES CANNOT BE COMPELLED TO ADOPT NATIONAL EDUCATION POLICY: SC

#EDUCATION

PRIMARY SOURCE The Indian EXPRESS

Supreme Court has dismissed a petition seeking the implementation of the National Education Policy (NEP) in Tamil Nadu, West Bengal, and Kerala citing that it cannot compel any state to adopt NEP 2020.

While the Centre claims that the NEP promotes multilingualism, Tamil Nadu argues that it puts unfair pressure on non-Hindi-speaking states.

MAJOR HIGHLIGHTS

- The SC has stated that the court does not have the power to compel a state to follow a central policy like the National Education Policy 2020.
- Under Article 32 of Indian Constitution, the court can only intervene when there is a violation of fundamental rights due to the policy's implementation.

KEY FACTS

- **Education is on the Concurrent list** of Schedule 7 of Indian Constitution, enabling both the Centre as well as the states to enact laws. The 42nd Constitutional Amendment moved education from the State List to the Concurrent List.
- **The Right of Education Act**, under Article 21A, makes education a fundamental right of every child between the ages of 6-14 and specifies minimum norms in elementary schools.
- **Article 32 of Indian Constitution** grants every individual the right to move the Supreme Court for the enforcement of their fundamental rights.
- **The NEP 2020** is the latest education policy in India (after NEP 1986). It is founded on the five guiding pillars of Access, Equity, Quality, Affordability and Accountability. It proposes various reforms in school education as well as higher education including technical education.

WHAT IS THE CONCEPT OF SAFE HARBOUR?

#GOVERNANCE #FREEDOM OF SPEECH

PRIMARY SOURCE THE HINDU

The Union Ministry of Information and Broadcasting is reconsidering the concept of safe harbour for social media platforms to combat the issue of “fake news” online.

ABOUT SAFE HARBOUR

- **Safe harbour is a legal concept** that protects individual websites that allow third party users to share content from legal liability for any unlawful posts. The safe harbour protects the sites from any criminal action for third party content hosted by them.

- **Section 79 of the Information Technology Act, 2000** grants intermediaries safe harbour in India. However, the protections are given with some conditions.

- If an intermediary receives “actual knowledge” of illegal content on their website, and they do not take the content down within a certain time period, they would lose the liability protections under Section 79.
- As per the Supreme Court of India, the “actual knowledge” means a court order or government notification.

SIGNIFICANCE OF SAFE HARBOUR CLAUSE

- It aims to encourage innovation online and prevent website owners from being unfairly hounded for content they had no hand in publishing.
- Without safe harbour protections, online intermediaries could face tremendous consequences for illegal content. **E.g.**, In 2004, the then head of the website eBay in India was arrested because of a user listing of a disk containing child sex abuse material for sale.

HOW ARE INTERMEDIARY LIABILITY PROTECTIONS REGULATED IN INDIA?

- While safe harbour does have the conditions described above, the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021** puts in place additional conditions for platforms to retain protection from intermediary liability. These include:
 - Social media firms need to have a nodal officer, a grievance officer resident in India.
 - The firms need to periodically submit reports of complaints they receive on content, and action taken against them for this.
- **Different parts of the IT Rules have been challenged in courts** in the last few years.
 - **E.g.**, the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2023 contained provisions that would strip safe harbour from sites for content that has been notified as “fake news” by the Press Information Bureau's Fact Check Unit.
 - That amendment was immediately challenged in the Bombay High Court. Petitioners accused the government of exceeding its authority by designating a Fact Check Unit that could be an arbiter of truth, and putting pressure on social media

companies to take content down without following the longer process of sending a notice to users whose content is being removed.

- In 2024, the Bombay High Court struck down the amended Information Technology (IT) Rules, by calling the amendment “unconstitutional”.

WHY IS THE GOVERNMENT CONSIDERING AMENDING THE SAFE HARBOUR CLAUSE?

- The government has accused foreign social media platforms (E.g., X) of flouting Indian laws and acting too slowly on takedown notices. Hence, the government aims to amend safe harbour in order to make platforms more proactive in governing their sites, not just for misinformation, but also for AI-generated deepfakes, cyberfrauds etc.
- The Ministry of Electronics and Information Technology is in the process of drafting a **Digital India Act (DIA)** that would incorporate these changes. However, the outlines of how safe harbour would change under this proposed law have not yet been revealed.

CRACKDOWN ON OVERSEAS CITIZEN OF INDIA CARDHOLDERS

#GOVERNANCE #CITIZENSHIP

PRIMARY SOURCE: THE HINDU

Ministry of Home Affairs has cancelled the registration of 194 Overseas Citizens of India (OCI) since 2014, 57 in 2024, under the Section 7D of the **Citizenship Act 1955**.

WHO IS AN OVERSEAS CITIZEN OF INDIA (OCI)?

- **OCI is an immigration status** authorising a foreign citizen of Indian origin to live and work in India for an indefinite period.
- **OCI card** was launched by the Government of India to meet the demands of the Indians residing overseas who insisted on dual citizenship.

ELIGIBILITY CRITERIA

- **OCI is a Foreign National, who:**
 - was citizen of India at the time of, or at any time after 26th January 1950
 - was eligible to become a citizen of India on 26th January, 1950

- belonged to a territory that became part of India after 15th August 1947
- is a child or a grandchild or a great grandchild of such a citizen
- is a minor child of such persons mentioned above
- is a minor child and whose both parents are citizens of India or one of the parents is a citizen of India - is eligible for registration as OCI cardholder.

- **Spouse of foreign origin of a citizen of India** or spouse of foreign origin of an OCI cardholder and whose marriage has been registered for a continuous period of not less than 2 years immediately preceding the application.
- Any person, who or either of whose parents or grandparents or great grandparents is or had been a citizen of Pakistan, Bangladesh or other country as notified by the Central Government is not eligible for registration as an OCI.
- Foreign nationals cannot apply for OCI in India while on Tourist Visa, Missionary Visa and Mountaineering Visa.

BENEFITS TO OCI CARDHOLDERS

- Allows them to visit India without having to apply for a visa and stay indefinitely.
- Exempt from having to register with the local police for the duration of their stay.
- Parity with Non-Resident Indians (NRIs) in economic, financial, and educational fields, except in matters relating to the acquisition of agricultural or plantation properties.
- Equality for the NRIs for intercountry adoption.

OCIs can travel freely within India and work in the country, however **they cannot vote or own agricultural land**.

WHEN CAN THE OCI CARD BE CANCELLED?

Under Section 7D of the Citizenship Act 1955, the Union government can issue notice to an OCI holder and cancel their registration. If the:

- OCI cardholders get registration using fraud, false representation, or the concealment of any material fact.
- OCI (within five years after their registration as an OCI cardholder) is sentenced to imprisonment for a term of not less than 2 years.
- Shown disaffection towards the Indian Constitution.
- Engaged, associated, unlawfully traded, or communicated with an enemy nation with which India

is at war, or has undertaken any business or commercial activity to assist an enemy in that war.

RIGHT TO REPAIR MOVEMENT IN INDIA

#GOVERNANCE #CONSUMER RIGHTS

PRIMARY
SOURCE THE HINDU

Recently, the **Department of Consumer Affairs** announced that a report for a “Framework on Repairability Index (RI) in Mobile and Electronic Sector” had been submitted to the government.

FRAMEWORK ON REPAIRABILITY INDEX (RI) IN MOBILE AND ELECTRONIC SECTOR

- **Under the Repairability Index**, consumer electronics and electronic appliances would be assigned a score depending on how easy they are to repair.
- **This will be done by evaluating products** under criteria- availability of spare parts, cost of repair, software updates, and availability of information.

RIGHT TO REPAIR MOVEMENT IN INDIA

- **Right to Repair refers** to the right of end users to repair devices they own or service without any manufacturer or technical restrictions. It will give consumers a chance to repair their products at an optimal cost instead of buying new products altogether.
- The Union government had set up the Nidhi **Khare Committee** in 2022 to develop a comprehensive framework on the Right to Repair. The sectors identified include Farming Equipment, Mobile Phones/ Tablets, Consumer Durables and Automobiles/Automobile Equipment.
- India's Department of Consumer Affairs launched the **Right to Repair Portal** in December 2022. In the Portal, the companies will provide information on self-repair manuals, authorised & third-party repairers for companies and products.

SIGNIFICANCE

- Reduce e-waste, promote e-waste recycling, regulate the demand for virgin metals, provide benefits to end consumers and generate employment by allowing third-party repairs.

ECINET: COMMON DIGITAL PLATFORM FOR VOTERS AND OFFICIALS

#ELECTORAL REFORMS #DIGITAL GOVERNANCE

PRIMARY
SOURCE THE HINDU

Election Commission of India has announced development of a new, user-friendly digital interface (ECINET) for voters and other stakeholders such as election officials, political parties and the civil society.

ABOUT ECINET PLATFORM

- New digital platform launched by the ECI to streamline electoral processes.
- Designed to serve as a single-point interface for all election-related services for voters and other stakeholders.
- The initiative comes in response to allegations of:
 - Manipulation of electoral rolls.
 - Duplication of Electors Photo Identity Cards (EPICs).
 - Discrepancies in voter turnout data reporting.

OBJECTIVES

- To integrate and streamline the existing fragmented digital infrastructure of ECI.
- To enhance transparency, accountability, and accessibility in the electoral process.
- To simplify user access by combining services into one unified platform.

INTEGRATION OF EXISTING APPLICATIONS

- ECINET will subsume over 40 mobile and web-based applications including:
 - Voter Helpline App
 - cVIGIL (for reporting MCC violations)
 - Suvidha 2.0 (for political party permissions)
 - Voter Turnout App
 - Saksham (for PwD voters)
 - Expenditure Monitoring System
 - Know Your Candidate (KYC) App
- These apps together accounted for over 5.5 crore downloads.

KEY FEATURES

- Single login interface for users to access multiple services.
- Unified aesthetic and simplified user interface (UI) and user experience (UX).
- Available across multiple devices including smartphones and desktop platforms.
- Designed to reduce the operational burden on users, especially voters and election officials.
- Only authorised ECI officials will be allowed to input or modify data on the platform.
- In case of any discrepancy, the data recorded in statutory forms will be treated as final and binding.

Intended beneficiaries: Expected to benefit approximately 100 crore registered electors, Booth Level Officers, Polling Officials, Electoral Registration Officers etc.

DOT NOTIFIES NEW SATELLITE INTERNET SERVICE RULES

#DIGITAL GOVERNANCE

PRIMARY SOURCE: THE HINDU

The Department of Telecommunications (DoT) has issued a fresh set of stringent security guidelines aimed at tightening control over satellite-based internet services in India.

NEW SATELLITE INTERNET SERVICE RULES

The satellite internet operators-

- **Must localise essential functions** such as locating Network Control and Monitoring Centre within Indian territory.

- **Must provide real time monitoring** to ensure that no user traffic originating from, or destined for India is being routed through any gateway outside Indian territory.
- **Prohibited** from copying or decrypting Indian telecom data outside the country.
- **Must prevent any unintentional coverage spillover** into neighbouring countries using geo-fencing technology and be capable of blocking access to websites banned in India.
- **Required to implement systems** that can block, restrict or deny network access to specific users or groups, based on instructions from the authorities.
- **Must have the ability to intercept communications** and monitor user activity and share user data with security agencies.
- **Must share user terminal information** with Indian security agencies. All terminals in use must be registered and authenticated in the country, and enable support for NavIC (India's own satellite navigation system). Indian satellite internet terminals are prohibited from working outside India.
- **Share a year-wise phased manufacturing plan** aiming at indigenisation to a level of at least 20% of their ground segment of the satellite network. The terminals must eventually be manufactured in India, within a five year span.
- **Ensure that their data centres** are based within the geographical boundary of India and shall make provision to provide Domain Name System (DNS) resolution within its territory.

The rules will apply not only to current GMPCS (Global Mobile Personal Communications by Satellite Services) license holders such as Eutelsat OneWeb and the Jio-SES alliance, but also to new entrants like Elon Musk's Starlink and Amazon's Project Kuiper to operate in India.

PRACTICE QUESTIONS

MCQS

Q1. With reference to the Enforcement Directorate (ED), consider the following statements:

1. It operates under the overall supervision of the Ministry of Home Affairs.

2. Foreign Exchange Management Act 1999 grants powers to the officers of ED to arrest any person guilty for the offense of money laundering.

Which of the statements given above is/are correct?

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q2. Consider the following statements:

1. Rights under Article 25 are only available to the citizens of India.
2. It covers not only religious beliefs but also religious practices.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q3. Consider the following statements:

1. Section 79 of the Information Technology Act 2000 grants intermediaries safe harbour in India.

2. Safe harbour protects the sites from any criminal action for third party content hosted by them.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q4. Right to Digital Access is an instinctive component of:

- (a) Article 14 (b) Article 19
(c) Article 21 (d) Article 29

Q5. Consider the following statements:

1. Advisory jurisdiction of the Supreme Court under Article 143 is a relic of the Government of India Act, 1935.
2. The Supreme Court is mandated to provide its opinion to the President under Article 143.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

DESCRIPTIVE QUESTIONS

- Q1.** The Directorate of Enforcement has been accused of being used as a tool for political vendetta. Examine the issues faced by the Directorate of Enforcement.
Q2. Parliamentary system of governance ensures executive accountability through parliamentary oversight. However, the parliamentary oversight mechanisms are weakening and suffer from inconsistencies. Comment.

Answers: 1-d, 2-b, 3-c, 4-c, 5-a

OPERATION SINDOOR: INDIA HITS PAKISTAN'S TERROR BASES

#SECURITY #TERRORISM

PRIMARY SOURCE: THE HINDU

Under **Operation Sindoor**, the Indian armed forces carried out 24 precision strikes on nine different targets against terrorist infrastructure in Pakistan and Pakistan-occupied Kashmir (PoK).

OPERATION SINDOOR

- India exercised its right to respond to the Pahalgam terror attack, and destroyed the camps used to train terrorists in Pakistan and PoK.

INDIA-PAKISTAN: HISTORY OF WARS & CONFLICTS

As India carries out 'Operation Sindoor' two weeks after the killing of 26 civilians in Jammu & Kashmir's Pahalgam, here's a look at the history of full blown wars and conflicts with Pakistan, and their impact

India-Pakistan wars	Timeline		Areas impacted	Cause of the war	Outcome
	Start	End			
1947-48	Oct 1947	Jan 1949	Jammu & Kashmir	Pakistan-backed tribal militias invaded Kashmir, prompting Maharaja Hari Singh to accede to India, triggering the first Indo-Pak war	UN-mediated ceasefire resulting in the establishment of Line of Control (LoC)
1965	Aug 1965	Sept 1965	Jammu & Kashmir, Punjab (India and Pakistan), Rajasthan, Gujarat	Pakistan launched Operation Gibraltar, sending infiltrators into Jammu and Kashmir to incite rebellion against Indian rule	Signing of Tashkent Agreement on January 10, 1966
1971	Dec 1971	Dec 1971	East Pakistan (now Bangladesh), Indo-Pak border	Discontent between East and West Pakistan; 10 million refugees fled to India	Pakistan surrendered unconditionally, and Bangladesh was created as an Independent nation
1999	May 1999	July 1999	Kargil sector of Jammu and Kashmir	Pakistani soldiers and militants infiltrated Indian territory during winter when forward posts were usually vacated	Eviction of Pakistani intruders and Pakistan faced global diplomatic isolation

- 9 terrorist camps of Lashkar-e-Taiba, Jaish-e-Mohammad and Hizbul Mujahideen were selected based on credible intelligence inputs and targeted to deliver justice to the victims of the Pahalgam attack and their families.



Faced with the prospect of an armed conflict with Pakistan, India conducted nationwide civil defence mock drills under ‘**Operation Abhyaas.**’ The drills were carried out in 244 districts to prepare the country's readiness to deal with emergencies and terrorist attacks.

CIVIL DEFENCE MOCK DRILLS IN INDIA

#INTERNAL SECURITY

PRIMARY SOURCE: The Indian EXPRESS

Amid confrontations between India and Pakistan following the Pahalgam terrorist attack, civil defence mock drills were conducted across India.

CIVIL DEFENCE ACT OF 1968

The mock drills are conducted under the Civil Defence Act of 1968. The Act empowers the government to:

- Restrict movement, impose curfews, control assemblies or gatherings, close roads, ports, and transport services as needed, in times of emergencies.
- Detain or arrest a person without the usual legal processes and even order killing of animals.
- Compulsory acquisition of property, requisitioning services, and controlling the supply and distribution of goods (especially essentials).
- Direct individuals or classes of persons to perform certain work or duties, and control industries crucial to national security.
- Regulate or censor communications, publications, and broadcasts.

The last time such elaborate drills were conducted in the country were during the build-up of the 1971 war.

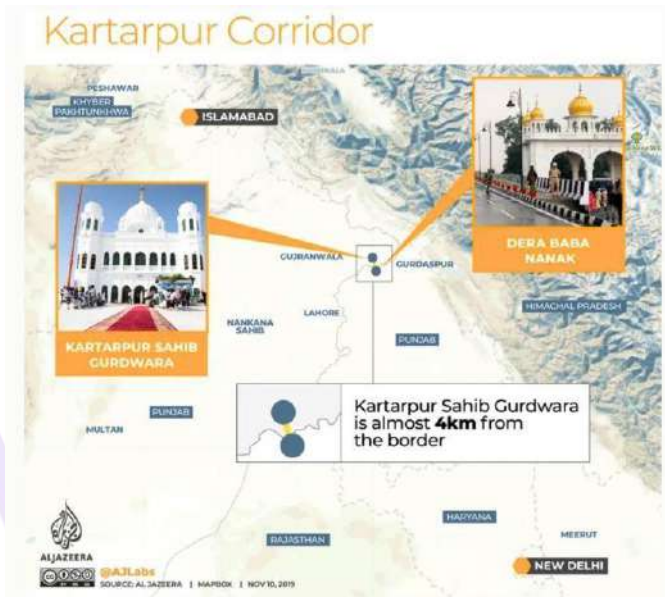
MOCK DRILLS: The drill aims to replicate real-time scenarios that may arise from potential external threats, particularly in sensitive districts near Line of Control (LoC) and International Border (IB). ‘Operation Shield’ is designed to simulate hostile situations, including air raid sirens, blackout protocols, and various emergency response actions to evaluate the preparedness of civil authorities, emergency services, and local populations.

INDIA SHUTS KARTARPUR CORRIDOR

#LOCATIONS IN NEWS

PRIMARY SOURCE: THE HINDU

Indian authorities have indefinitely shut the **Kartarpur Corridor** following the recent terrorist attack in Pahalgam.



ABOUT KARTARPUR CORRIDOR

- Kartarpur Corridor is a religious corridor connecting two gurdwaras (Sikh temples):
 - Gurudwara Dera Baba Nanak, Gurdaspur district, Punjab, India.
 - Gurdwara Darbar Sahib in Pakistan (Darbar Sahib gurdwara is the final resting place of Guru Nanak Dev).
- The crossing allows devotees from India to visit the gurdwara in Kartarpur, Pakistan which is 4.7 kilometres from India-Pakistan border.
- The corridor was first proposed in 1999 by former Prime Minister Atal Bihari Vajpayee, as part of Delhi-Lahore Bus diplomacy.
- The corridor was completed for the 550th birth anniversary of Guru Nanak Dev in 2019.
- The corridor enables visa-free cross-border pilgrimage for up to 5000 Indian devotees of all faiths daily.

INDIA NEEDS NATIONAL SECURITY DOCTRINE

#NATIONAL SECURITY DOCTRINE

PRIMARY SOURCE *The Indian EXPRESS*

The recent events like the Pahalgam terrorist attack, subsequent India-Pakistan confrontation reemphasises the need for a **comprehensive National Security Doctrine (NSD)** for India.

NATIONAL SECURITY DOCTRINE

- NSD is a comprehensive framework that outlines a country's national interest and security objectives. It defines traditional, non-traditional threats and opportunities, and outlines the accountability of its security agencies.
- Developed countries have certain core principles that guide their military machines called the strategic doctrine. However, India does not have an explicit National Security Doctrine.

NEED FOR NATIONAL SECURITY DOCTRINE IN INDIA

Traditional and non-traditional security challenges facing India have necessitated a comprehensive NSD.

- **Internal Security Challenges:**
 - Cross-border terrorism in Jammu & Kashmir
 - Naxalism and North-East Insurgency
 - Ethnic tensions & communal conflicts. E.g., Manipur Conflict
- **External Security Challenges:**
 - Boundary-disputes and skirmishes with China & Pakistan
 - China's Belt and Road Initiative and its influence in Indian Ocean Region
- **Non Traditional Security Challenges:**
 - Climate change, natural disasters and outbreak of pandemic
 - Drug trafficking and transnational crimes
 - Cyber-security threats on critical infrastructure

Various committees like Naresh Chandra Task Force (2012), Parliamentary Standing Committee on Defence (2021) have emphasised the need for NSD.

SIGNIFICANCE OF NATIONAL SECURITY DOCTRINE

- **Strategic Guidance:** Ensure coherent long-term planning and Standardisation of Procedures (E.g., SOPs for military modernisation and allocation of resources)
- **Prompt and Effective Decision-Making** based on the National Security Strategy outlined in the NSD.
- **Integrated Defence Planning:** Synergy across Army, Navy, and Air Force to meet hybrid threats and increased operational efficiency. It will synchronise the coordination among Ministries, Intelligence Agencies, and Armed forces.
- **Consistent Security Response:** Reduce adhocism in dealing with security challenges during coalition government or change in government.
- **Define India's role in the world** and showcase itself as a net security provider, such as during the Mission Sagar initiative for COVID-19 pandemic relief.

The doctrinal approach to security would not only minimise the threat of war but also enhances India's sphere of positive influence. This would also fill the crucial gaps in higher military management and offer a strategic blueprint to navigate the complex global security landscape.

ARTICLE 51 OF UN CHARTER: SELF-DEFENCE CLAUSE

#SECURITY #INTERNATIONAL ORGANISATIONS

PRIMARY SOURCE *THE HINDU*

India has justified Operation Sindoor, its military action against Pakistan-based terrorist targets, by invoking **Article 51 of the UN Charter**- citing the '**unwilling or unable doctrine**' and traditional **principles of necessity and proportionality**.

ARTICLE 51 OF THE UN CHARTER

- **Article 51** of the UN Charter permits the use of force in self-defence against an armed attack. It is an exception to Article 2(4) of the UN Charter, which prohibits the use of force against the territorial integrity or political independence of any state.
- Military Action under Article 51 must satisfy two critical principles:
 - **Necessity** (Force must be the only option left)

- **Proportionality** (response should not exceed the scale of the attack).

- **Article 51** imposes a procedural obligation on member states to immediately report to the UNSC any military measures taken in self-defence. UNSC then assumes the authority to undertake action to maintain or restore international peace and security.

UNWILLING OR UNABLE DOCTRINE

- It permits the use of force in self-defence against non-state actors (NSAs) operating from the territory of another state when that **state is “unwilling or unable” to neutralise the threat.**
- India justified that it waited for 15 days for Pakistan to take actions against the perpetrators of Pahalgam attack.

CAN IT BE EXERCISED AGAINST NON-STATE ACTORS?

- Traditionally, the UN Charter governed conduct between sovereign states. Post 9/11 attack, the **Article 51 extends to non-state actors** such as terrorist organisations, even when they operate from another country's territory.
- The International Court of Justice holds that self-defence can be invoked only when an armed attack is carried out by or on behalf of a state. Thus, state attribution is a necessary condition.

Leiden Policy Recommendations on Counter-Terrorism and International Law (2010) emphasise that military operations against host state's armed forces or facilities are permissible only in “exceptional circumstances”, such as when the state actively supports the terrorists.

INDIA PLANS TO PUSH PAKISTAN ON FATF GREY LIST

#INTERNATIONAL ORGANISATIONS

PRIMARY SOURCE: THE HINDU

India seeks FATF grey list re-entry for Pakistan. Indian authorities are planning to apprise the **Financial Action Task Force (FATF)** of the latest evidence related to destroyed terror bases in Pakistan as part of Operation Sindoor, and the existing terror infrastructure in Pakistan.

FINANCIAL ACTION TASK FORCE

- FATF is an independent inter-governmental body that develops and promotes policies to protect the global financial system against- **money laundering, terrorist financing and the financing of proliferation of weapons of mass destruction.**
- The FATF Recommendations are recognised as the global anti-money laundering (AML) and counter-terrorist financing (CFT) standard.
- **Established in:** 1989 by the G7 countries to combat money laundering. In 2001, the mandate was expanded to combat terrorist financing.
- **Headquarters:** Paris, France
- **FATF does not address issues** related to low tax jurisdiction, tax evasion/avoidance or tax competition.

FATF MEMBERS

- **Currently 39 members:** 37 jurisdictions and 2 regional organisations (Gulf Cooperation Council and European Commission).
- India, China, Israel, UK and USA are the members. Pakistan, North Korea, and Iran are not the members.

FATF 40+9 STANDARDS

- FATF has 40 recommendations against money laundering (AML) and 9 special recommendations against terrorist financing (CFT), commonly known as **‘40+9’ FATF Standards.**
- **FATF conducts peer reviews** of each member to assess levels of implementation of the FATF Recommendations. It holds countries to account that do not comply.

FATF LISTS

- **Black List-** List of Non-Cooperative Countries or Territories: These countries are uncooperative in international efforts against money laundering and terrorism financing. Presently, Iran and North Korea are in Black list.
- **Grey List-** Jurisdictions under increased monitoring: List of countries with strategic anti-money laundering/countering financing of terrorism deficiencies, for which they have developed an action plan with FATF. Greylisting is said to **limit a country's access to loans from international bodies.**

FATF GREY LIST AND PAKISTAN

- Pakistan has a fluctuating FATF status. It was initially greylisted in 2008, removed in 2009, and re-added to

the list between 2012 and 2015, with a fresh greylisting in 2018 that lasted until 2022.

- Pakistan was removed in 2022 with the reminder that it will continue to work with the Asia Pacific Group to further improve its AML/CFT system and was told to implement the FATF action plan.

IMF'S LOAN TO PAKISTAN

#INTERNATIONAL ORGANISATIONS



Executive Board of the International Monetary Fund (IMF) has allowed an immediate disbursement of **\$1 billion** (around Rs 8,500 crore) **under the IMF's Extended Fund Facility (EFF) to Pakistan.**

It has also approved Pakistan's request for an arrangement under the **Resilience and Sustainability Facility (RSF)** of about \$1.4 billion. India abstained from voting in the IMF.

EXTENDED FUND FACILITY OF IMF

EFF provides financial assistance to countries facing serious medium-term balance of payments problems because of structural weaknesses that require time to address.

- **The IMF provides assistance under the EFF to countries** that do not have enough money to pay their bills to the rest of the world for the goods and services they import.
- **The reason for inability to pay** is the "structural weaknesses" in their economy, i.e., fundamental problems in an economy that holds back growth and development. This includes:
 - Inadequate physical infrastructure
 - Lack of an educated workforce
 - Underdeveloped financial and banking system
 - Inadequate capital required for businesses.
- **Such assistance is in the form of a loan** that has to be paid back, and not in the form of a grant or aid.
- **Extended means** that these countries need more time than usual to pay back the money because they need to bring about "structural" changes.

KEY DETAILS OF EXTENDED FUND FACILITY OF IMF

- **Eligibility:** All member countries facing actual or potential external financing needs.

- **Conditionality:**

- Countries' policy commitments are expected to focus on structural reforms and policies to maintain macroeconomic stability.
- Disbursements are conditional on the observance of quantitative performance criteria.

- **Review Modalities:** Periodic reviews of policies and program implementation, as access to IMF resources occurs in tranches (phasing). The IMF's Executive Board regularly assesses program performance and can adjust the program to adapt to economic developments.

- **Duration:** Typically approved for periods of 3 years, but may be approved for periods as long as 4 years to implement deep and sustained structural reforms.

- **Repayment:** Over 4.5 - 10 years in 12 equal semiannual installments.

- **Access limits: Normal access:** A member can currently borrow up to 145% of its quota annually and 435% cumulatively.

- **Interest rate:** Basic rate of charge + Surcharges

- **Basic rate of charge:** The market-determined Special Drawing Rights (SDR) interest rate and a margin (currently 100 basis points).

RESILIENCE AND SUSTAINABILITY FACILITY

- RSF provides affordable longer-term financing to support low-income and vulnerable middle-income countries undertaking macro-critical reforms to reduce the risks to prospective balance of payments (BoP) stability, including those related to climate change and pandemic preparedness.

- **Eligible Countries:**

- All Poverty Reduction and Growth Trust (PRGT) eligible low-income countries.
- Small states (population under 1.5 million) with per capita GNI below 25 times the 2021 IDA operational cutoff.
- All middle-income countries with per capita GNI below 10 times the 2021 IDA operational cutoff.

- **Interest Rate:** Very low, often close to the SDR interest rate, with no surcharge.

- **Duration:**

- It runs together with another IMF program (like SBA or EFF).

- It must last at least 18 months.
- Expires when all amounts available are disbursed. Automatically ends upon the termination, cancellation, or expiry of the concurrent IMF-supported program.
- **Repayment:** 20-year maturity and a 10.5 year grace period during which no principal is repaid.

INDIA'S RESPONSE

- **India has conveyed its strong dissent** to the IMF's decision. India highlighted Pakistan's poor track record using IMF's funds, pointing to the possibility of misuse of debt financing funds for state-sponsored cross-border terrorism.
- **India abstained from voting** in the meeting, as there is no option with member countries to vote against such a decision.

Over the past 35 years, Pakistan has entered 28 IMF programmes, including four in the last five years, with negligible structural reforms or lasting economic stability.

INDIA RESTRICTS BANGLADESHI EXPORTS VIA ALL LAND PORTS

#BILATERAL RELATIONS

PRIMARY SOURCE THE HINDU

India has **restricted Bangladeshi ready-made garment exports** through land ports, citing unfair trade practices. This decision is in response after Bangladesh imposed restrictions on export of Indian yarn and rice via its land ports.

INDIA RESTRICTS BANGLADESHI EXPORTS VIA LAND PORTS

Bangladesh will no longer be allowed to use Indian land ports to export specified commodities to India.

- **Specified commodities will be prevented** from entering India through the land ports of Tripura, Assam, Meghalaya and Mizoram. The specified items include ready-made garments, plastic, wooden furniture, juices, carbonated drinks, fruit-flavoured drinks, bakery, confectionery, cotton yarn, and dyes.
- **Ready-made garments will be allowed to enter India only** through the ports of Kolkata and Mumbai,

where the cargo shipments will be subjected to mandated inspections.

DETERIORATING TRADE RELATIONS- RECENT DEVELOPMENTS

Bangladesh was India's largest trade partner in South Asia, accounting for bilateral trade worth \$18 billion in FY2023. Political and economic tensions between India and Bangladesh are growing, reflected by:

- **India ended the Transshipment Facility for Bangladesh** that allowed export cargo from Bangladesh to third countries via Indian Land Customs Stations, en route to Indian ports and airports. The transshipment arrangement began in 2020. Under this system, cargo could be transported through Indian borders and shipped from Indian ports or airports, destined for third countries including Bhutan, Nepal, and Myanmar.
- **Bangladesh imposed port restrictions** on export of Indian yarn via land ports allowing the yarn exports only via seaports.
- **India imposed port restrictions** on imports from Bangladesh of ready-made garments of all categories across all land ports- LCS (Land Customs Stations) and ICP (Integrated Check Posts).

The move is expected to complicate the already fragile India-Bangladesh relationship; given Bangladesh's increasing ties with China. At least 93% of Bangladesh's ready-made garment exports to India pass through the land ports.

However, the restrictions imposed on specified items on all LCS and ICP will help advance the local manufacturing sector in India's north-east region.

KALADAN MULTI MODAL PROJECT

#INFRASTRUCTURE #ACT EAST POLICY

PRIMARY SOURCE The Indian EXPRESS

India is prioritising the long-delayed **Kaladan Multi Modal Transit Transport Project** linking Mizoram to Kolkata via Myanmar, amid worsening ties with Bangladesh and strategic concerns over the Siliguri Corridor.

KALADAN MULTI MODAL TRANSIT TRANSPORT PROJECT

- Multi-modal infrastructure initiative designed to link Kolkata port with Mizoram via Myanmar, bypassing the Siliguri Corridor and Bangladesh.
- The framework was signed by India and Myanmar in 2008, under the broader rubric of India's Act East Policy.
- The multi-modal project comprises **sea** (Kolkata to Sittwe), **inland waterways** (Sittwe to Paletwa), and **road transport** (Paletwa to Zorinpui to Mizoram).



As the term Multi Modal suggests the project combines several modes of transport:

Segment	Mode	Details	Status
Kolkata to Sittwe	Sea	This 539 km stretch between the two seaports will be covered by ship via the Bay of Bengal.	This part of the project has been completed.
Sittwe to Paletwa	Inland waterways	This 158 km stretch on the Kaladan river in Myanmar will be covered by boat.	Completed
Paletwa to Zorinpui	Road	This 108 km four-lane road will be the last leg of the corridor in Myanmar.	The last 50-odd-km of this highway (from Kalatwa, Myanmar to Zorinpui) is yet to be completed.
Zorinpui-Aizawal-Silchar-Shillong	Road	While Zorinpui is connected to Aizawal and the rest of the Northeast by road, the NHIDCL plans to eventually extend the high-speed corridor from Shillong all the way to the border town. MoRTH-sanctioned 166.8 km 4-lane highway from Shillong to Silchar	Under construction

STRATEGIC IMPORTANCE OF KALADAN MULTI MODAL TRANSIT TRANSPORT PROJECT

- **Bypassing Chicken's Neck:** Siliguri Corridor is a narrow passage susceptible to blockade during conflict with China and Bangladesh. KMMTTP provides a critical redundancy to this chokepoint.
- **Offers an independent and alternative route** in case of political or diplomatic issues with Bangladesh.
- **Strengthens India's Act East Policy-** supports India's goal of connecting with Southeast Asia.
- **Economic benefits:** Upon completion, expected to reduce Kolkata-Mizoram transit distance by 1000 km, saving 3-4 days in cargo movement. Boosts trade, tourism, and infrastructure.

- **Counter to China's presence in Myanmar:** China is building the China-Myanmar Economic Corridor (CMEC). India's Kaladan Project is a strategic counterbalance to ensure India's influence in the region.

RECENT DEVELOPMENTS

- The Ministry of Road Transport and Highways (MoRTH) has now okayed a 166.8-km four-lane highway from Shillong to Silchar, which will eventually be extended to Zorinpui, Mizoram, and connect the KMMTTP with a high-speed road corridor that runs through the heart of the Northeast.
- With the help of the Kaladan project, cargo will reach from Vizag and Kolkata to the Northeast, without being dependent on Bangladesh.

CHALLENGES TO OPERATIONALISATION

- Since the 2021 military coup, Myanmar is undergoing a civil conflict; only 21% of territory is under junta control.
- The Rakhine State, through which the KMMTTP passes, is largely controlled by the Arakan Army, a group designated as a terrorist outfit by the Myanmar junta. While the Arakan Army has expressed support for the Kaladan project and claimed to provide protection, any direct engagement risks violating diplomatic norms and damaging India-Myanmar state-to-state relations.

The Kaladan Multi-Modal Project is no longer just a connectivity initiative- it is a geostrategic imperative. As Bangladesh becomes less predictable and Myanmar remains unstable, India must strategically recalibrate its regional connectivity approach.

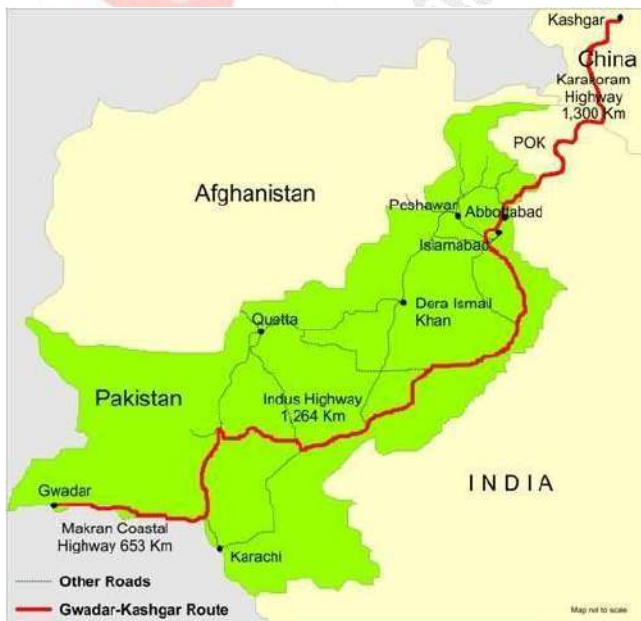
CPEC SET TO BE EXPANDED TO AFGHANISTAN

#BILATERAL AGREEMENTS

PRIMARY SOURCE: *The Indian EXPRESS*

China-Pakistan Economic Corridor is set to be expanded to Afghanistan with the foreign ministers of the three countries agreeing on it as part of broader efforts to boost trilateral cooperation.

CHINA-PAKISTAN ECONOMIC CORRIDOR



- CPEC is a flagship project under China's **Belt and Road Initiative (BRI)** launched in 2015.
- It aims to connect **China's Xinjiang province to Pakistan's Gwadar Port** through a network of roads, railways, and energy projects in order to facilitate trade and economic integration.
- The project has been touted to boost Pakistan's economy and provide China with direct access to the Arabian Sea.
- The original \$46 billion infrastructure project has now ballooned to over \$62 billion in investments.

WHAT DOES CPEC'S ENTRY INTO AFGHANISTAN MEAN?

- CPEC's extension into Afghanistan involves connecting Pakistani infrastructure to Afghan roads, railways and mineral-rich provinces, potentially linking the entire region to China's western logistics and trade networks.
- **This move could include:**
 - Expanding the ML-1 railway line to connect with Afghan freight corridors
 - Building highways through Torkham and Spin Boldak crossing points (key border crossing points between Pakistan and Afghanistan).
 - Chinese access to Afghanistan's vast lithium and rare earth resources.
 - Energy pipelines connecting Iran and Central Asia through Afghan territory.
 - Potential military logistics disguised as trade infrastructure.

INDIA'S CONCERNS AROUND CPEC

- **Violation of India's sovereignty** and territorial integrity as it passes through Pakistan-occupied-Kashmir, part of India's territory.
- **Part of China's strategy to encircle India** through infrastructure and military partnerships with neighbouring countries, thereby increasing China's influence in South Asia.
- **Security concerns:** Development of infrastructure in PoK and Balochistan under CPEC raises security concerns, as it could facilitate greater military mobility for Pakistan and China in the region.
- **Terror-nexus risk:** Taliban regime, which once harboured Jaish-e-Mohammed and Lashkar-e-Taiba fighters, may once again serve as launchpad for anti-India activities. With Chinese funds and Pakistani

intelligence support, this triangle could fund, train, and export terrorism into India.

- **Undermines India's regional connectivity projects:** CPEC could undermine its own regional connectivity projects, such as the Chabahar port in Iran, by providing alternative trade routes that bypass India.

Expansion of CPEC into Afghanistan represents a strategic challenge for India, as it could alter the regional balance of power and affect India's security and economic interests.

CHENNAI-VLADIVOSTOK EASTERN MARITIME CORRIDOR

#INFRASTRUCTURE #MARITIME TRADE

PRIMARY SOURCE: THE HINDU BUSINESS LINE

The Chennai-Vladivostok Maritime Corridor connecting India and Russia has emerged as a strategic sea link.

CHENNAI-VLADIVOSTOK EASTERN MARITIME CORRIDOR

- Emerging strategic maritime route connecting Chennai Port (India's East Coast) with Vladivostok Port (Russia's Far East).
- **Envisioned during:** Eastern Economic Forum (2019) in Vladivostok, Russia.



- It covers a distance of around 10,458 kms and passes through the Sea of Japan, East China Sea, South China Sea, Malacca Strait and Bay of Bengal.

- **Alternative to Suez Canal** route, enhancing India's energy security, reducing logistics costs, and bolstering Eurasian connectivity.
- **Key component of India's efforts** to diversify trade routes amid geopolitical disruptions such as the Red Sea crisis.

RECENT DEVELOPMENTS

In FY2025, EMC saw a sharp increase in cargo traffic- coal shipments and crude oil transport. It is linked to geopolitical disruptions in the Red Sea (Houthi targeting ships).

ADVANTAGES OF EASTERN MARITIME CORRIDOR

- **Reduced distance:** The route is ~45% shorter, enables lower transit times, reduces freight costs and enhances competitiveness of Indian exports to Russia.
 - Mumbai to St. Petersburg via Suez Canal: 16,066 kms
 - Chennai to Vladivostok via EMC: 10,458 kms
- **Port Infrastructure and Regional Development:** EMC has improved cargo handling at non-major ports like Dhamra, Gangavaram, and Krishnapatnam. Chennai Port is being developed as a container aggregation hub for the East Coast.
- **Importing coking coal from Russia's Far East** is cheaper and faster. It further augments the supply to East Coast steel plants.
 - India's crude steel capacity is largely concentrated on the East Coast (over 70%). India is heavily dependent on imported coking coal.
 - Historically, Australia supplied 70-75% of India's coking coal imports. This share has reduced to around 60%, with increased imports from Russia and the US.
- **Russia's Far East** could serve as a future base for Fertilizer production units, LNG export terminals. These would cater to India's agricultural and energy sectors respectively.
- **Potential to open new export markets** for Indian goods in Russia and Northeast Asia, spur industrial growth in East Coast states (Tamil Nadu, Andhra Pradesh, Odisha) and generate employment through port-led development.

WAY FORWARD

- **Resolving operational challenges** like harsh winters in Vladivostok which limit shipping during certain months. Other issues include container imbalances

and logistical bottlenecks. Both India and Russia are working on logistics optimisation and bilateral cooperation.

- **Enhancing Trade Mechanism:** The countries must work towards developing financial mechanisms to support bilateral trade by establishing Rupee-Rouble trade settlements.

EMC is a strategic instrument in India's 'Act East' and 'Indo-Pacific Policy', and Russia's 'Pivot to Asia' strategy. It symbolises India-Russia synergy in building resilient, multipolar trade systems in the face of global disruptions.

ALTERNATIVE SHIPPING ROUTE TO SUEZ CANAL

#LOCATIONS IN NEWS

PRIMARY SOURCE: The Indian EXPRESS

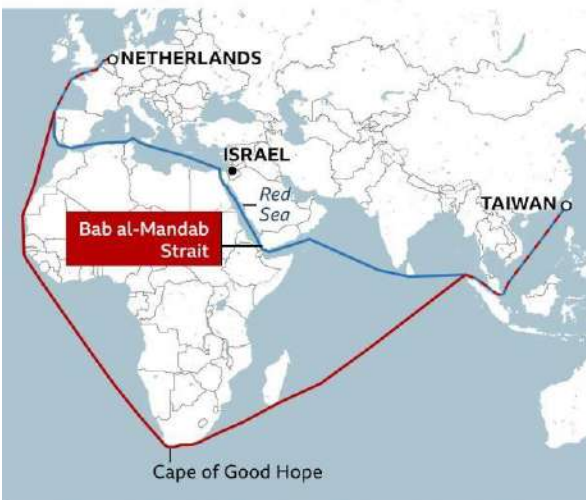
Despite a 15% Suez Canal transit fee discount and the US-Houthi ceasefire, shipping lines remain cautious about returning to the Suez Canal Route. Instead, the ships are taking the longer Cape of Good Hope route.

SUEZ CANAL

Alternative shipping route avoiding Red Sea

Using Red Sea/Suez Canal	Around Cape of Good Hope
10,000 nautical miles (18,520km)	13,500 nautical miles (25,002km)
25.5 days*	34 days*

*Based on ultra large container vessel's average speed of 16.48 knots



Source: Vescon Nautical

BBC

- The Suez Canal is an **artificial sea-level waterway in Egypt**, connecting the **Mediterranean Sea** to the **Red Sea**.

- Built by French engineer Ferdinand de Lesseps, and completed in 1869 but opened for navigation in 1879. The Canal was nationalised by Egypt in 1956.

- **Length:** 193 km

- It enables direct shipping between Europe and Asia without circumnavigating Africa.

- It links Europe with the Indian Ocean via the Mediterranean Sea and Red Sea by cutting the travel distance by approximately 7,000 km.

- Handles about 12-15% of global trade, including a significant portion of oil and gas shipments.

RECENT DEVELOPMENTS

- Because of the Houthi attacks starting in late 2023, many global shipping companies began avoiding the Red Sea and Suez Canal, rerouting their ships around the Cape of Good Hope, a much longer route.
- As a result, Suez Canal revenues plunged from \$10.3 billion in 2023 to \$4 billion in 2024, and global shipping costs soared. To revive the traffic, Egypt's Suez Canal Authority (SCA) has offered a 15% fee discount on transit fee to cargo ships of minimum 130,000 mt capacity.

Despite the ceasefire and discounts, most shippers stay on the longer Africa route. As the vessels go around Africa, it is leading to higher shipping costs, extended voyage durations by 10-14 days, higher fuel burn, and eventually higher freight rates.

UK HANDS OVER CHAGOS ISLANDS TO MAURITIUS

#LOCATIONS IN NEWS

PRIMARY SOURCE: The Indian EXPRESS

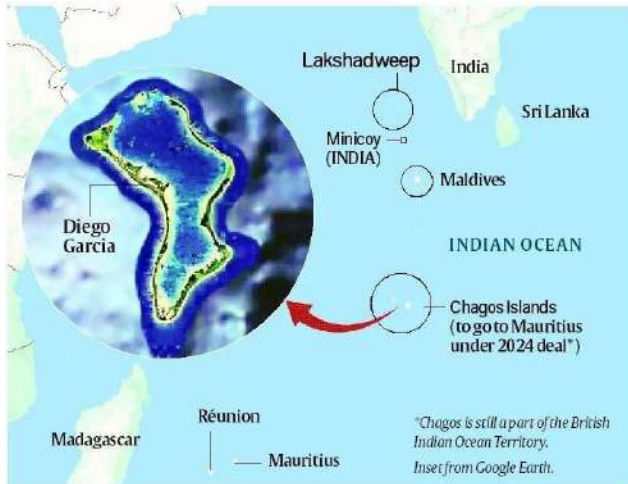
The United Kingdom has agreed to **transfer sovereignty** of the Chagos Islands to Mauritius. Chagos was separated from Mauritius in 1965, when Mauritius was still a British colony. The deal allows the UK and US to retain **joint use of the Diego Garcia military base** for 99 years.

GEOGRAPHY OF CHAGOS ARCHIPELAGO

- Chagos Islands - officially known as the British Indian Ocean Territory - comprise seven atolls with about 60 individual islands.

- **Location:** Located in the Indian Ocean, about 1600 km northeast of Mauritius.

- **Land Area:** 56.1 sq km total, with Diego Garcia covering 32.5 sq km (which is comparable to Lakshadweep Island of India).
- **Largest Atoll:** Great Chagos Bank (12,642 sq km), the world's largest atoll structure.



ABOUT CHAGOS ISLANDS DISPUTE

- **Disputed Territory:** Chagos Islands have been a point of contention between Mauritius and the UK since Mauritius gained independence in 1968.
- **Recognition by UK:** In 2024, the UK recognised Mauritius' sovereignty over Chagos but retained control over Diego Garcia, the largest island.
- **Strategic Importance:** Diego Garcia hosts a joint UK-US military base, crucial for military operations in Asia and the Indian Ocean.

BRITISH INDIAN OCEAN TERRITORY (BIOT) & DIEGO GARCIA BASE

- **Formation of BIOT (1965):** UK created BIOT, separating Chagos from Mauritius, and paid £3 million for it.
- **US-UK Secret Agreement (1966):** Allowed the establishment of a US military base in Diego Garcia.

STRATEGIC IMPORTANCE OF DIEGO GARCIA

- The base became fully operational in 1986.
- **Used in** 1990-91 Gulf War, Iraq & Afghanistan wars and presently, it remains a key UK-US military outpost in the Indian Ocean.

Diplomatic developments: Mauritius has raised the issue of claim in international fora for decades.

- **2017:** UNGA sought an ICJ ruling on the archipelago's status.

- **2019 ICJ Ruling:** Declared the UK must end its administration of Chagos as rapidly as possible.
- **UNGA Resolution (2019):** Called for UK's unconditional withdrawal within six months.

2024 UK-MAURITIUS AGREEMENT

• Terms of the Deal:

- The UK recognised Mauritius' sovereignty over Chagos.
- Diego Garcia remains under UK control for 99 years for military operations.
- Mauritius can resettle Chagossians on islands except Diego Garcia.

India has welcomed the treaty signed between Mauritius and the United Kingdom, which restores Mauritian sovereignty over the Chagos Archipelago, including Diego Garcia.

US-UKRAINE MINERALS DEAL

#GLOBAL DEVELOPMENTS

PRIMARY SOURCE THE HINDU

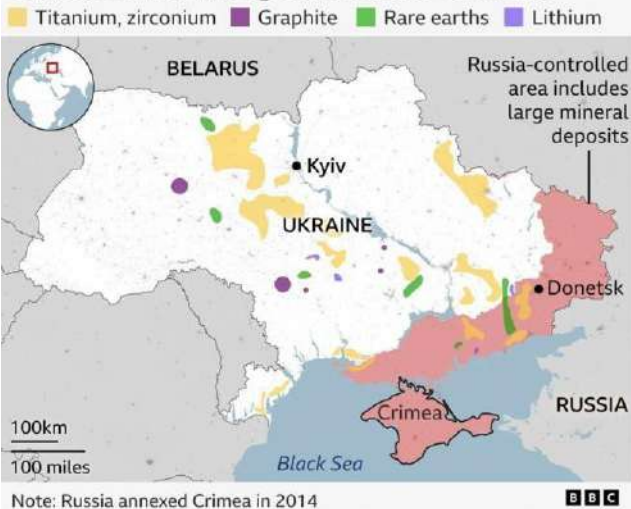
The US and Ukraine have signed an agreement to grant the US some access to Ukraine's vast mineral resources.

US-UKRAINE MINERALS DEAL

- The agreement is officially called the **United States-Ukraine Reinvestment Fund**. The agreement has been ratified by the Ukrainian Parliament.
- **The full ownership** of the mineral resources would remain with Ukraine, and the Ukraine will determine what minerals can be extracted and where.
- **The US will get access** to Ukraine's vast reserves of critical minerals and rare earth minerals. It also includes provisions for oil, natural gas and other hydrocarbons.
- **The agreement establishes a reconstruction investment fund**, and both the U.S. and Ukraine will have an equal say in its management and equal voting rights.
 - Ukraine will contribute 50% of all future profits from government-owned natural resources into the fund.

- The US will also contribute in the form of direct funds and equipment, including air defence systems and other military aid.

Critical mineral deposits across Ukraine



- **Contributions to the fund will be reinvested** in projects related to mining, oil and gas as well as building infrastructure in Ukraine. The US will not take any profits from the fund for the first 10 years.

The agreement provides Ukraine assurance about continued American support in its ongoing war with Russia. However, it does not mention **any explicit security guarantees** to deter future Russian aggression.

INDIA AND UK CONCLUDE FREE TRADE AGREEMENT

#BILATERAL RELATIONS #TRADE AGREEMENTS

PRIMARY
SOURCE THE HINDU

India and the United Kingdom have signed a Free Trade Agreement (FTA) granting zero-duty to 99% of Indian exports and reducing tariffs.

INDIA-UK FREE TRADE AGREEMENT

- India and the UK have concluded a **FTA** that promises to deepen bilateral economic ties, enhance strategic cooperation, and boost trade and investment. It is India's 16th FTA.
- **India's FTAs:** India has inked trade deals with Sri Lanka, Bhutan, Thailand, Singapore, Malaysia, Korea, Japan, Australia, UAE, Mauritius, the 10-nation bloc ASEAN (Association of Southeast Asian Nations), and four

European nations' bloc EFTA (Iceland, Liechtenstein, Norway, and Switzerland), UK.

WHAT IS A FREE TRADE AGREEMENT?

- FTA is a bilateral or multilateral understanding where participating countries consent to eliminate or lower customs duties on the bulk of traded goods.
- These agreements also involve **reducing non-tariff barriers** on substantial imports from partner countries whilst simplifying regulations to enhance services trade and cross-border investments.
- FTAs enable **zero-duty entry** into partner country markets, allowing for greater diversification and expansion of export destinations.
- By securing preferential treatment over non-FTA member competitors, domestic exporters enjoy a level playing field, especially when other nations have already established similar agreements.
- FTAs **attract foreign investments** and help stimulate domestic manufacturing.

KEY HIGHLIGHTS OF INDIA-UK FTA

India-UK free trade agreement and Double Contribution Convention pact is expected to lead to significant economic benefits for both the countries.

- **99% of Indian exports** will receive duty-free access to UK markets. India stands to gain substantial advantages from tariff elimination on approximately 99% of tariff lines, which covers nearly 100% of trade value.
- **India will reduce import tariffs** on 90% of UK tariff lines, with 85% becoming fully tariff-free within 10 years.
- **India will receive advantages** from the UK's FTA commitments in various service sectors, including IT/ITeS, financial, professional, and educational services.
- **India agrees to lower tariffs** on various products, including whisky, medical devices, advanced machinery, and lamb, enhancing the competitiveness of UK exports.
 - Automotive tariffs will be significantly reduced from over 100% to 10% under a specified quota system.
 - Whisky and gin tariffs are to be halved from the current 150% to 75% before reducing to 40% by year ten of the deal.

- **Double contribution convention:** Indian professionals working temporarily in the U.K. will be exempt from paying social security for up to three years, reducing the financial burden on both employees and employers.
- **Facilitate easier movement for skilled workers,** including contractual service suppliers, business visitors, investors, intra-corporate transferees, family members of transferees with work authorization, and Independent Professionals such as yoga instructors, musicians and chefs.
- **Sectoral boost:** Sectors which are set to benefit in India include textiles and apparel, leather and footwear, gems and jewellery, pharmaceuticals, agriculture and processed foods etc.

The FTA aligns with the shared ambition to **scale bilateral trade to USD 100 billion by 2030**. Thus, fostering deeper economic interdependence between the economies.

INDIA KEEPS DATA EXCLUSIVITY OUT OF UK FTA

#BILATERAL RELATIONS #TRADE AGREEMENTS

PRIMARY SOURCE The Indian EXPRESS

India safeguards its \$25B generic drug industry by excluding data exclusivity from the India-UK FTA to ensure affordable drug access and faster generic launches.

DATA EXCLUSIVITY OUT OF UK FTA

- The UK was pushing for inclusion of Data Exclusivity provisions in the FTA which would have prevented Indian generic drugs manufacturers from using the clinical trial data generated by the pharma patent holders.
- India has kept out data exclusivity provisions from the FTA. India's stance **upholds the TRIPS norms**, protecting pharma exports and local manufacturers' interests.

ABOUT DATA EXCLUSIVITY

- **Data Exclusivity** refers to the fixed period during which the non-clinical and clinical trial data submitted by the innovator pharmaceutical company to the

regulatory body cannot be used by the generic manufacturers.

- **Purpose:** It protects data generated in the course of clinical trials of a drug. By gaining exclusive rights over this data, innovator companies can prevent their competitors from obtaining marketing licence for low-cost generic versions during the tenure of this exclusivity.

LACK OF DATA EXCLUSIVITY LAW IN INDIA

Indian Drug and Cosmetic Act 1940 and the Drug and Cosmetic Rules 1945 do not provide for data exclusivity.

- **Lack of Data Exclusivity law risks unfair commercial use** of test data submitted to the Indian government during application for market approval of pharma or agro-chemical products.
- **Indian laws allow the use of this data** by companies to launch copies of the drugs that go off-patent. This reduces time and costs for generic manufacturers. If generic companies were to generate the same data independently, it would delay their generic launches.

India's generic drug industry is estimated at about \$25 billion and the country exports half of its output. Data exclusivity is beyond the provisions of the **Trade Related Aspects of Intellectual Property Rights** (TRIPS) agreement under the World Trade Organisation.

CBAM LEFT OUT OF INDIA-UK FREE TRADE AGREEMENT

#BILATERAL RELATIONS #TRADE AGREEMENTS

PRIMARY SOURCE The Indian EXPRESS

Carbon Border Adjustment Mechanism (CBAM) is not a part of India-UK FTA. India's goods exports of at least \$775 million to the UK can face the risk of higher tariffs under CBAM. It is expected to begin from January 1, 2027.

CARBON BORDER ADJUSTMENT MECHANISM

- Originally proposed by the European Union, and later adopted by the UK, CBAM aims to **impose tariffs of up to 35% on carbon-intensive goods** such as iron, steel, and aluminium.
- It aims to prevent carbon leakage where companies shift production to countries with lower carbon standards to avoid carbon costs.

IMPACT OF CBAM ON INDIAN EXPORTS

- **Reduce price competitiveness:** Carbon tax on carbon intensive goods (steel, aluminium, cement, and fertilisers etc.) from India will make Indian goods more expensive than local or other compliant imports.
- **Undermines FTA benefits:** While the FTA might reduce or eliminate tariffs, Indian exports could still face hefty carbon taxes, potentially far exceeding the UK's current average tariff rate of under 2%.
- **Burden on MSMEs:** MSMEs often lack resources to measure and report carbon emissions, making CBAM

compliance costly and potentially forcing them out of export markets.

INDIA'S RESPONSE

- **India has labelled CBAM as an unfair measure** and a violation of the common but differentiated responsibilities (CBDR) principle.
- **India has argued that CBAM violates WTO rules** and proposed a '**rebalancing mechanism**' under which the UK would compensate Indian exporters if they suffer losses due to this tax. However, the UK remains unwilling to grant any concession under CBAM.

PRACTICE QUESTIONS

MCQS

Q1. With reference to Article 51 of the UN Charter, consider the following statements:

1. It permits the use of force in self-defence only after obtaining prior permission from the United Nations Security Council.
2. The doctrine of 'Unwilling or Unable' allows states to use force against non-state actors when the host state fails to act against them.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q2. Consider the following statements with reference to Kaladan Multi Modal Transit Transport Project:

1. Multi-modal infrastructure initiative designed to link Kolkata port with Mizoram via Bangladesh and Myanmar.
2. It is India's strategic counter to China's presence in Myanmar.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2

- (d) Neither 1 nor 2

Q3. The Eastern Maritime Corridor (EMC), which connects Chennai to Vladivostok, passes through which of the following water bodies?

1. Sea of Japan
2. East China Sea
3. Arabian Sea
4. Malacca Strait
5. Bay of Bengal

Select the correct answer using the code given below:

- (a) 1, 2, 4 and 5 only
- (b) 2, 3 and 4 only
- (c) 1, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

Q4. Consider the following statements with reference to Chagos Archipelago:

1. It is located in the Indian Ocean to the northeast of Seychelles.
2. The archipelago consists of the world's largest atoll structure.
3. The Diego Garcia military base is jointly administered by the US and Mauritius.

Which of the statements given above is/are correct?

- (a) 1 and 2 only

- | | |
|------------------|----------------------|
| (b) 2 only | (a) Xinjiang-Karachi |
| (c) 1 and 3 only | (b) Yunnan-Gwadar |
| (d) 1, 2 and 3 | (c) Xinjiang-Gwadar |
| | (d) Tibet-Chabahar |

Q5. The China-Pakistan Economic Corridor (CPEC) connects which of the following?

DESCRIPTIVE QUESTIONS

- Q1.** What is the need for a National Security Doctrine (NSD) in India? Discuss its significance in providing strategic guidance and coherence to India's security policy framework.
- Q2.** The expansion of the China-Pakistan Economic Corridor (CPEC) into Afghanistan poses a strategic challenge for India. Discuss.

Answers: 1-b, 2-b, 3-a, 4-b, 5-c



BONDED LABOUR SYSTEM IN INDIA

#WELFARE MECHANISM

PRIMARY SOURCE: THE HINDU

On May 1, the world commemorates **International Labour Day** to honour the dignity of work and workers' rights. India abolished bonded labour in 1976, however, thousands of people are still trapped as bonded labourers in India.

BONDED LABOUR

- **Bonded Labour System (Abolition) Act 1976**, defines 'bonded labour system' as the system of forced labour under which a debtor enters into an agreement with the creditor that he would render service to him either by himself or through any member for a specified or unspecified period, either without wages or for nominal wages.
- **The traditional form of bondage** or forced labour in India is known as Adiyamar, Baramasia, Kuthia, Lakhari, Munji, Mat, Munish system, Nit-Majoor, Sewak, Sewakia, Seri, Vetti.

BONDED LABOUR IN INDIA

- **According to Global Slavery Index**, In 2021, around 11 million people in India were in modern slavery, which includes forced labour, debt bondage, forced marriage, other slavery and slavery-like practices, and human trafficking.
- **According to National Crime Records Bureau data** in 2021, 592 cases (96% against SC/ST) were registered under the Bonded Labour System (Abolition) Act.
- In 2021, the government stated that 12,760 bonded labourers had been rescued and rehabilitated between 2016 and 2021.

INITIATIVES TO END BONDED LABOUR

Constitutional Provisions:

- **Article 21:** Right to Life and Personal Liberty.

- **Article 23:** Prohibition of traffic in human beings and forced labour.
- **Article 39:** State to secure the health and strength of workers, men and women, and to see the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength.

GOVERNMENT INITIATIVES

- **Bonded Labour System (Abolition) Act 1976:** This Act renders bonded labour illegal in India.
 - It establishes Vigilance Committees at the district and sub-division levels to oversee the implementation of the act.
 - Vigilance committees advise District Magistrate (DM) to ensure the provisions of this Act are properly implemented.
 - State governments are responsible to identify, release and rehabilitate the bonded labourers.
- **Central Sector Scheme for Rehabilitation of Bonded Labourer 2016:**
 - District magistrates or sub-divisional magistrates (DM or SDM) provide immediate financial support of Rs 30,000 to the rescued bonded labourer.
 - Additional rehabilitation assistance includes Rs 1 lakh for a male worker, Rs 2 lakh each for woman and child, and Rs 3 lakh for transgenders, women and children rescued from ostensible sexual exploitation.
 - Beneficiaries are also entitled to non-cash assistance including land allotment for a house, allocation of agricultural land. etc.
- **Fifteen-Year Vision Document (2030)** of the Ministry of Labour & Employment on Total Abolition of Bonded Labour:
 - Release and rehabilitate estimated 1.84 crore bonded labourers across the country until 2030.
 - Strengthen the prosecution machinery and reach a 100% conviction rate.

- Address emerging forms of bonded labour such as organised begging, forced prostitution, forced marriage, forced recruitment for insurgency activities, domestic service, etc.
- **Code on Wages, 2019:** Makes universal the provisions for minimum wages and timely payment of wages for all workers in India.
- **Ratification of ILO Abolition of Forced Labour Convention, 1957:** Aimed at eliminating all forms of forced or compulsory labour.
- **Initiatives of National Human Rights Commission:** National Level Seminar and Workshops conducted in Bonded Labour prone States like Gujarat, Karnataka, Maharashtra, Haryana and Uttar Pradesh.

REASONS FOR PERSISTENT BONDED LABOUR IN INDIA

- **Migration and informal sector:** Migrant labourers often engage in an informal economy, where labour protections are often lacking, and may become vulnerable to exploitation and forced labour.
- **Low wages:** As per National Commission on Labour, 2002, if earnings and wages are below the statutory minimum wage and workers have to live by borrowing, the condition of the workers slides into bondage.
- **The deeply entrenched caste system** has contributed to social hierarchies and discrimination which makes people from marginalised sections more susceptible to bonded labour.
- **Debt bondage:** Trapped in bonded labour due to poverty leads to a cycle of bondage which passes on to family members.
- **Limited access to education** and awareness about labour rights contribute to the perpetuation of bonded labour.
- **Under-resourced judiciary & police force:** Lack the manpower, infrastructure, and training required to effectively investigate, prosecute, and adjudicate cases of bonded labour. This resource deficit creates loopholes in the implementation of anti-bonded labour laws.

MEASURES TO END THE BONDED LABOUR

- **Establish National Portal on Bonded Labour for welfare entitlements** and monitoring mechanism of rehabilitation, irrespective of the jurisdictional aspects (Parliamentary committee).

- **Increase corpus funds for sensitive districts by centre** and timely issuance of release certificates by state government to access rehabilitation assistance.
- **Regular surveys in sensitive districts** to identify and eradicate bonded labour and awareness campaigns
- Convergence of bonded labour rehabilitation scheme with other schemes like **MGNREGA, at the Union and state levels to monitor benefits to workers.**
- Encourage businesses to incorporate anti-bonded labour policies into their **Corporate Social Responsibility (CSR) initiatives.**
- **Implementing robust legal frameworks** that prohibit and penalise bonded labour practices, while also adhering to minimum wage standards.

Neerja Chaudhary vs State of M.P (1984), where the Supreme Court expressed anguish over the indifference of the government towards the rehabilitation of released bonded labourers.

Eliminating Bonded labour will help achieving Target 8.7 of UN Sustainable Development Goals, which aims to end forced labour, human trafficking, and child labour.

GROWING DIGITAL DIVIDE IN INDIAN SCHOOLS

#EDUCATION #DIGITAL DIVIDE



Recent data from the **Ministry of Education** shows that the majority of schools in rural areas in India lack robust digital infrastructure and internet access. This is leading to a growing digital divide in Indian schools.

REASONS FOR GROWING DIGITAL DIVIDE

- **Lack of infrastructure:**
 - As per UDISE+ 2023-24 report functional computers are available in only ~52% of Indian schools. The Internet is accessible in only 54% of schools.
 - Even though 89.7% of schools have access to functional electricity (UDISE+ 2023-24), frequent power outages especially in rural areas due to transmission and distribution losses often render digital infrastructure redundant and unusable.

- Digital India School programme under Digital India Campaign has failed to make any impact in rural schools due to poor internet connectivity.
- **Shortage of qualified teachers:** Limits the quality and reach of computer literacy programs.
- **Gaps in education system:** Although computer education is part of the school curriculum, there are disparities in access and instructional standards, particularly in rural and economically disadvantaged areas. **E.g.,** Assam (17.6%), Bihar (20.4%), Madhya Pradesh (21%).
- **Unequal distribution of resources:** There is a significant disparity in resource allocation for computer literacy initiatives, leading to unequal progress across different states and regions.
- **Limited access for older demographics:** Older age groups often lack motivation or access to learning resources for computer literacy.
- **Delays in BharatNet Project:**
 - The persistent digital divide is partly due to delays in the BharatNet Project, which aimed to connect 6 lakh villages with broadband by 2023. As of 2024, only 2.14 lakh villages were connected, pushing the deadline to 2025.
 - Urban tele-density and rural tele-density stood at 134% and 59% respectively in 2024, highlighting a substantial difference in rural and urban areas.

GOVERNMENT INITIATIVES TO PROMOTE DIGITAL LITERACY

- **Digital India Campaign 2015:** To transform the country into a digitally empowered society.
- **Education Integration:** Computer education is being integrated into the formal education system from an early age. **E.g.,** Sarva Shiksha Abhiyan.
- **Skill Development:** Various programs target underprivileged communities to bridge the digital divide. **E.g.,** Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA).

The Supreme Court in its recent judgement (2025) has held that the **Right to Digital Access** is an instinctive component of the Right to Life and Personal Liberty under **Article 21** of the Indian Constitution.

Digital deprivation continues post-pandemic despite the adoption of hybrid learning to improve access to quality education. Only after addressing these foundational

gaps will the education system become truly inclusive and effective.

PRADHAN MANTRI SCHOOLS FOR RISING INDIA (PM-SHRI) SCHEME

#EDUCATION #GOVERNMENT SCHEMES



Kerala has decided to approach the Supreme Court against the Centre's decision to withhold the release of ₹1500 crore to the state in education fund. These funds, primarily under the Samagra Shiksha Abhiyaan, have reportedly been withheld due to Kerala's refusal to sign the **PM-SHRI scheme** memorandum.

PRADHAN MANTRI SCHOOLS FOR RISING INDIA (PM-SHRI) SCHEME

- **Type of scheme:** Centrally sponsored scheme.
- **Aim:** To upgrade select (14500) existing schools across India to provide high-quality education in an equitable, inclusive and joyful school environment.
- **Implemented:** Through the existing administrative structure available for Samagra Shiksha, KVS & NVS.

KEY FEATURES OF PM-SHRI SCHOOL

- The schools are to be developed as '**Green School**', that will incorporate environment friendly aspects like Solar panels and LED lights, nutrition gardens with natural farming, water conservation and harvesting, climate change related hackathon etc.
- The schools will **adopt pedagogy** that will be more experiential, holistic, inquiry-driven, discovery oriented, and learner-centred.
- **School Quality Assessment Framework** (SQUAF) will be developed to evaluate the schools at regular intervals which will specify performance indicators.
- Under RTE Act, beneficiary-oriented entitlements will be provided. 100% of PM-SHRI schools will receive Science and Math kits. Focus will also be on early childhood care and education, that will also include Balvatika and Foundational Literacy and Numeracy.
- 100% of the PM SHRI Schools will be covered under ICT, smart classrooms and digital initiatives.

- Local languages/mother tongue are to be encouraged as medium of instructions and use of technological interventions to help bridge language barriers.
- The scheme aims to **provide linkage** with the sector skill councils and local industry to enhance employability and to provide better employment opportunities.
- The scheme also envisions to converge with existing schemes/ Panchayati Raj Institutions/Urban Local Bodies and community participation for infrastructure upgradation of the school.

CBSE INTRODUCES SUGAR BOARDS

#HEALTH #EDUCATION

PRIMARY SOURCE THE HINDU

Central Board of Secondary Education (CBSE) has made it mandatory for schools to set up sugar boards in schools to educate students on the risks of high sugar intake.

The National Commission For Protection of Child Rights has pushed for the introduction of a 'sugar board' in all schools- not only CBSE affiliated but affiliated to various State boards.

ABOUT SUGAR BOARDS

- **Sugar board is a visual representation** of the quantity of sugar contained in commonly consumed foods and drinks.
- **Objective:** To educate students about the risks of excessive sugar intake.
- It provides essential information including- recommended sugar intake, sugar content in commonly consumed foods (such as junk food and cold drinks), health risks associated with high sugar consumption and healthier dietary alternatives.
- It is a significant initiative towards nutritional literacy and preventive healthcare to create awareness in nearly 2 crore students and their families.

SUGAR INTAKE AND PREVALENCE OF TYPE 2 DIABETES

- There has been a **significant increase in Type 2 Diabetes** among children, a condition primarily seen in adults. Incidence of Type 2 diabetes among

children and adolescents is 397 per lakh population, next only to China.

- Sugar constitutes 13% of daily calorie intake for children aged 4-10 years, substantially exceeding the recommended limit of 5% by WHO.

This alarming trend is attributable to high sugar intake and easy availability of sugary snacks, beverages and processed foods within school environments.

NATIONAL SCHEME FOR UPGRADATION OF ITIS

#EDUCATION #GOVERNMENT SCHEMES

PRIMARY SOURCE The Indian EXPRESS

The Union Cabinet has approved the scheme for upgradation of 1,000 government Industrial Training Institutes (ITIs), and the setting up of five National Centers of Excellence (NCOE) as a Centrally Sponsored Scheme for transforming vocational education in India.

NATIONAL SCHEME FOR UPGRADATION OF ITIS AND SETTING UP OF NATIONAL CENTRES OF EXCELLENCE

- Centrally Sponsored Scheme. **Outlay:** Rs. 60,000 crore (Central Share: Rs 30,000 crore, State: Rs 20,000 crore and Industry: Rs 10,000 crore).
- **The scheme will focus on:**
 - Upgradation of 1,000 Government ITIs in hub and spoke arrangement with industry aligned revamped trades (courses)
 - Capacity Augmentation of 5 National Skill Training Institutes (NSTIs) and setting up of 5 National Centres of Excellence for Skilling in these institutes.

KEY FOCUS AREAS

- **Position existing ITIs** as government-owned, industry-managed aspirational institutes of skills, in collaboration with State Governments and industry.
- **Adopt an industry-led Special Purpose Vehicle** model for an outcome-driven implementation strategy.
- **Skill 20 lakh youth** through industry-aligned training programs over a five-year period. Ensure alignment between local workforce supply and industry demand, thereby facilitating industries, including MSMEs, in accessing employment-ready workers.

- **Strengthen Training of Trainers** by upgrading infrastructure in the five NSTIs and offering pre-service and in-service training to 50,000 trainers.

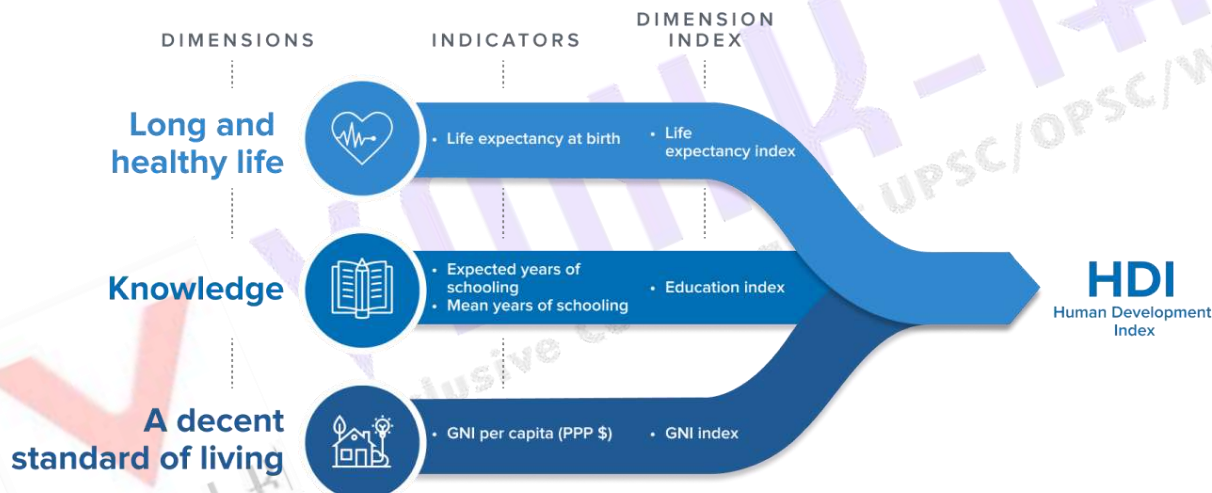
India has only 42% of Indian graduates considered employable. Hence there is an urgent need for aligned government, academia, and industry action.

HUMAN DEVELOPMENT REPORT 2025

#INCLUSIVE DEVELOPMENT

PRIMARY SOURCE: THE HINDU

India has ranked 130 out of 193 countries in the recently released **Human Development Report 2025**, 'A Matter of Choice: People and Possibilities in the Age of AI'. India has improved its ranking from 2022.



- **Based on the scores, the countries are classified into:** Very High Human Development, High Human Development, Medium Human Development, Low Human Development.

Cutoff Score	Performance Tier
Below 0.600	Low Human Development
0.600 to 0.699	Medium Human Development
0.700 to 0.799	High Human Development
0.800 to 1.000	Very High Human Development

HUMAN DEVELOPMENT REPORT

- **Annual report** published by: United Nations Development Programme (UNDP).
- The first HDR was launched in 1990 by the Pakistani economist Mahbub ul Haq and Indian Nobel laureate Amartya Sen.
- The report provides **Human Development Index** (HDI) which measures a country's performance across three dimensions:
 - **Health:** Life expectancy at birth
 - **Education:** Mean & expected years of schooling
 - **Standard of living:** Gross National Income (GNI) per capita.
- **HDI Score Range:** 0 (lowest) to 1 (highest).

KEY HIGHLIGHTS OF HUMAN DEVELOPMENT REPORT 2025

- **Theme:** A Matter of Choice: People and Possibilities in the Age of Artificial Intelligence.
- The report highlights AI's potential to reignite human development, provided that policies are people-centered and focus on enhancing human capabilities.
- **Ireland** secured the first spot in the Index with a score of 0.972.

INDIA'S PERFORMANCE

- India has ranked **130th** out of 193 countries, moving up three places from 133 in 2022.
- **India's HDI value has increased** from 0.676 (2022) to 0.685, showing an improvement in areas like health,

education, and income. India still falls under the **medium human development category**.

INDIA'S ACHIEVEMENTS OVER THE YEARS (AS HIGHLIGHTED IN THE REPORT)

- **Gross National Income per capita** has risen over four times to \$9,046 in 2023 from \$2,167 in 1990.
- **135 million Indians have escaped multidimensional poverty** between FY16 and FY21.
- **India's life expectancy** at 72 years in 2023, is the highest level it has reached since the inception of the index in 1990 (58.6 years).
- **Children are expected to stay in school** for 13 years on average, up from 8.2 years in 1990.

It is a result of programmes such as MGNREGA, the Right to Education Act, the National Rural Health Mission and other initiatives.

CHALLENGES HIGHLIGHTED IN THE REPORT

- Income and gender inequalities have lowered India's overall HDI by 30.7%.
- Women's participation in the workforce and politics still remains low. As per Economic Survey of 2024-25: Female labour participation rate has risen to 41.7% in FY24.

TOTAL FERTILITY RATE REMAINS CONSTANT AT 2.0 IN 2021: SRS REPORT

#POPULATION AND ASSOCIATED ISSUES

#HEALTH

PRIMARY SOURCE THE HINDU

Registrar General of India (RGI) has recently released the Sample Registration System (SRS) Report for 2021. Among other data, the report provides insights about the key trends of Total Fertility Rate in India.

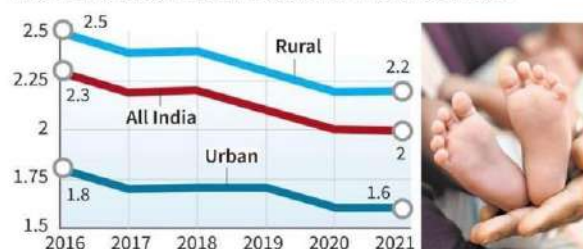
ABOUT TOTAL FERTILITY RATE AND REPLACEMENT LEVEL FERTILITY

- TFR of a population is the average number of children that are born to a woman throughout her reproductive age, which the survey defines between 15 and 49 years if:

- They were to experience the exact current age-specific fertility rates through their lifetime.
- They were to live from birth until the end of their reproductive life.

- **Replacement level fertility** is the level at which a population exactly replaces itself from one generation to the next. It is considered to be 2.1 children per woman.

The Total Fertility Rate (TFR) for the country has remained at 2.0 in 2021 and 2020. The chart shows the TFR for 2016-2021



Source: SRS Statistical Report 2021

- **If the TFR of a population goes down below 2.1** - it indicates that a generation is not producing enough children to replace itself. Thus, indicative of reduction in population in general and depletion of working age population in particular.

MAJOR HIGHLIGHTS OF THE SRS REPORT

- **TFR in India has remained constant at 2.0** in 2021, same as 2020. Just 6 states had TFR above the replacement level of 2.1. These were Bihar (3.0), Madhya Pradesh, Jharkhand, Uttar Pradesh, Chhattisgarh, and Rajasthan. Delhi and West Bengal reported the lowest TFR of 1.4.
- **Mean age at effective marriage for females** has increased to 22.5 years in 2021 from 19.3 in 1990.
- **Elderly population has gone up** to 5.9% for the 65+ age group during 1971-2021.

Sample Registration System (SRS) Report is the largest demographic survey in the country mandated to provide annual estimates of fertility and mortality indicators at the State and national level.

AYUSHMAN BHARAT VAYA VANDANA YOJANA

#WELFARE INITIATIVES #SOCIAL SECURITY

PRIMARY
SOURCE THE HINDU

Delhi government flagged off registration vans for doorstep registration of beneficiaries of the *Vaya Vandana Yojana*.

Ayushman Bharat Vaya Vandana Yojana:

- **Initiative of:** Delhi government.
- **Aim:** To provide cashless treatment of up to ₹10 lakh for senior citizens aged 70 and above for secondary and tertiary care hospitalisation across public and private empanelled hospitals in Delhi.

- Every citizen aged 70 or more can obtain the Ayushman Vaya Vandana Health Card simply by providing their Aadhaar and Delhi residence proof for registration.
- The initiative combines ₹5 lakh coverage from the central government's Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) with an additional ₹5 lakh provided by the Delhi government.
 - PMJAY is the largest health assurance scheme in the world. It offers health insurance worth ₹5 lakh per year per family for secondary and tertiary care hospitalisation across public and private empanelled hospitals in India.

All eligible beneficiaries can avail benefit regardless of their financial background.

PRACTICE QUESTIONS

MCQS

Q1. With reference to the PM-SHRI scheme consider the following statements:

1. All schools under this scheme would showcase the components of the New Education Policy of 2020.
2. The aim of the scheme is to achieve a 100 per cent literacy rate across poor states.
3. The scheme would focus on all government schools and small private schools.

Which of the statements given above are incorrect?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Q2. Consider the following statements:

1. Total Fertility Rate (TFR) of a population is the average number of children that are born to a woman over her lifetime.
2. Replacement level fertility is the level of fertility at which a population exactly doubles itself from one generation to the next.

3. If TFR goes below Replacement level fertility it is indicative of a rising working-age population.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Q3. With reference to the CBSE's 'Sugar Board' initiative, consider the following statements:

1. It was launched by the Ministry of Health and Family Welfare.
2. It is aimed at educating students about the sugar content in commonly consumed packaged foods.
3. FSSAI has already finalised national HFSS standards for school meals.

Which of the statements is/are correct?

- (a) 2 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

Q4. Consider the following statements:

1. The Human Development Report is published annually by the World Economic Forum.
2. Human Development Index evaluates a country's performance across Health, Education and Standards of living.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q5. Consider the following statements with reference to Ayushman Bharat Vaya Vandana Yojana:

1. It aims to provide cashless treatment of up to ₹5 lakh for senior citizens aged 70 and above.
2. The treatment would be provided for secondary and tertiary care hospitalisation in Delhi.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

DESCRIPTIVE QUESTIONS

- Q1.** India has legally abolished bonded labour but the practice continues to exist in various forms across the country. Examine the key challenges in eradicating the bonded labour system.
- Q2.** Despite rising digital penetration, the digital divide in Indian schools continues to widen. Discuss the key reasons behind this divide and suggest measures to bridge it.

Answers: 1-b, 2-a, 3-a, 4-b, 5-b



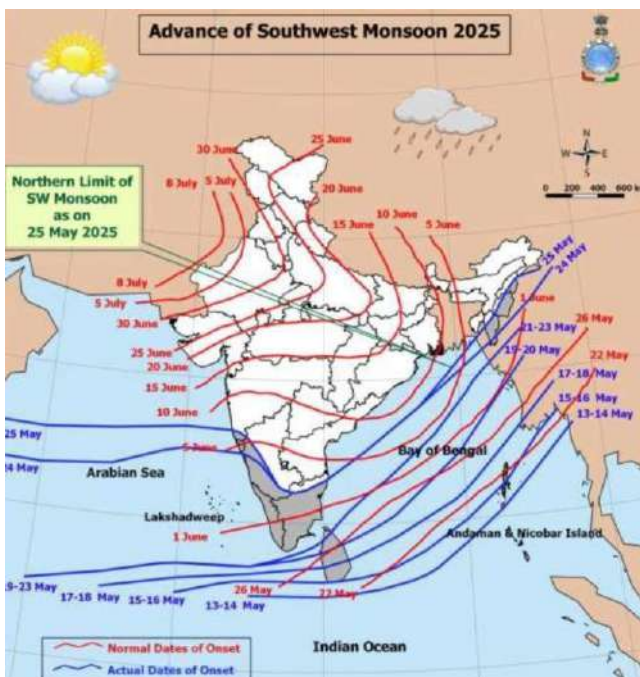
EARLY ONSET OF MONSOON IN INDIA

#PHYSICAL PHENOMENON

PRIMARY
SOURCE

The Indian
EXPRESS

India Meteorological Department (IMD) has **declared the monsoon onset over Kerala on May 24**, eight days ahead of its normal date schedule of June 1. Monsoon arrived over the south Andaman Sea and neighbourhood areas on May 13, against a normal of May 21.



Monsoon advance, as of the afternoon of May 25. (IMD)

The onset of monsoon marks the beginning of the 4 month (June-September) **southwest monsoon season over India**, which brings over 70% of the country's annual rainfall.

WHAT FACTORS CONTRIBUTED TO THE EARLY ONSET OF MONSOON?

- **Madden-Julian Oscillation (MJO):** One of the most complex ocean-atmospheric phenomena influencing Indian monsoons with origins in the Indian Ocean. A disturbance of clouds, wind and pressure moves eastwards at a speed of 4-8 metres per second. Within 30 to 60 days, MJO winds can travel around the world and cause significant weather changes. In a favourable phase, it can enhance rainfall over India.
- **Mascarene High:** High-pressure area found around Mascarene Islands (in south Indian Ocean) during monsoon period. Variation in the intensity of high pressure is responsible for heavy rains along India's west coast.
- **Convection:** An increase in the convective activity, i.e., the vertical transport of heat and moisture in the atmosphere also brings rainfall. **E.g.,** a convective system over Haryana moved south-eastward and led to rains in the Delhi region (in mid May).
- **Somali Jet:** Low-level, inter-hemispheric cross-equatorial wind band originating near Mauritius and north Madagascar. During May, after crossing the east coast of Africa, it reaches the Arabian Sea and the west coast of India. A strong Somali jet is associated with the strengthening of monsoon winds.

- **Heat-low:** In the summer season, a low-pressure area develops in the Arabian Sea. Development of a heat-low pressure zone over Pakistan and adjoining areas act as a suction device for moist air along the monsoon trough, and its strong presence influences good monsoon rainfall.
- **Monsoon Trough:** Elongated low-pressure area extending from the heat low to north Bay of Bengal. North-South swinging of this trough causes rainfall during June-September period across the core monsoon zone. Pressure gradient and monsoon onset vortex, a cyclonic formation in the Arabian Sea, also play a role in good monsoon.
- **Neutral El Nino-Southern Oscillation (ENSO) conditions** were observed during the period, which typically support a normal or stronger monsoon, unlike El Niño years that often suppress rainfall over India.
- The advancement is expected to benefit key sectors reliant on the monsoon, such as agriculture, fisheries, and livestock.

CHANGES IN MONSOON AFFECT MARINE PRODUCTIVITY

#CLIMATE CHANGE

PRIMARY SOURCE THE HINDU

A recent study has found that both strong and weak monsoons can **influence (disrupt) marine productivity** in the Bay of Bengal.

MAJOR HIGHLIGHTS OF THE STUDY

The researchers reconstructed the past 22,000 years of monsoon history by comparing ancient patterns (chemical signatures and fossil records) with modern ocean data and climate model projections.

- **Extreme monsoon conditions** (abnormally strong or weak monsoons) cause major disruptions in ocean mixing. They interfere with the vertical movement of nutrient-rich waters from the deep ocean to the surface.
- **Consequences:** This can lead to ~50% reduction in food for marine life (like planktons) in the surface waters. This will directly result in decline in the growth of plankton, and thus, impact the entire aquatic food chain.

If ocean productivity declines, it will affect the ecosystem, ultimately reducing fish stocks. This in turn will threaten food security for coastal communities and risk their livelihoods.

MARINE POLLUTION: MSC ELSA 3 SINKS OFF KERALA COAST

#POLLUTION

PRIMARY SOURCE The Indian EXPRESS

Recently, a Liberian container ship 'MSC ELSA 3' sank off the **Kerala coast** near Alappuzha with hazardous cargo on board. This has exaggerated the risk of oil spill, plastic pollution (due to nurdles/plastic pellets), and spread of hazardous chemicals.

Kerala has declared the wreckage as a **state-specific disaster** considering the potentially serious environmental, social and economic impact.

OIL SPILL

- Oil spill is the accidental release of petroleum or its products into the sea or coastal waters.
- **Oil spills are dangerous** as oil floats on water, forming a slick that spreads quickly with wind and currents. Some components can stay suspended causing long-term harm.
- **Impacts:**
 - Severely damage marine ecosystems- result in death of fish and other organisms.
 - Destroy mangroves and coral reefs.
 - Oil can coat the feathers of birds- may lose their insulation abilities, leading to hypothermia and drowning.
 - Bioaccumulation of toxic substances in the food chain.
 - Affect livelihood of fishermen and disrupt local economy.

METHODS USED TO CLEAN UP OIL SPILLS

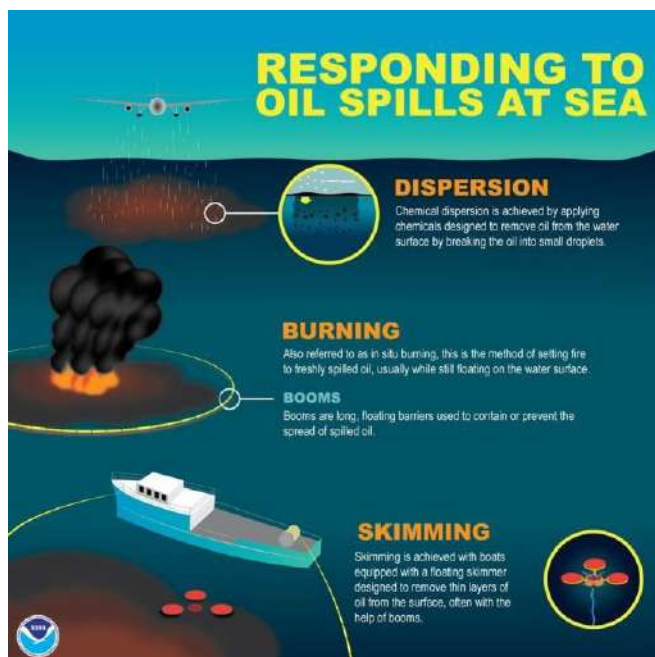
Oil spreads quickly and rough seas and strong currents complicate cleanup efforts. Some methods include-

- **Skimming** involves removing oil from the sea surface before it can reach sensitive areas along the coastline.

E.g., Using pillows made of oleophilic (oil-attracting) materials which act like a sponge and absorb oil from the surface.

- **In situ burning** means burning a particular patch of oil after it has concentrated in an area.
- **Releasing chemical dispersants** helps break down oil into smaller droplets, making it easier for microbes to consume and further break it down into less harmful compounds.

The methods can have some drawbacks, such as chemical dispersants can harm marine life. Manual cleanup is labour-intensive and often ineffective in remote areas.



LEGAL AVENUES FOR INDIA IN KERALA SHIP SPILL

MARPOL and SOLAS Conventions:

- India is signatory to **MARPOL** (International Convention for the Prevention of Pollution from Ships) and **SOLAS** (International Convention for the Safety of Life at Sea).
- **MARPOL Annex III** deals with pollution from harmful substances. The primary liability for pollution damage is with the shipowner and the flag state, which can extend to covering the cost of cleanup and other damages to the environment.
- **International Maritime Dangerous Goods Code** under SOLAS requires strict controls for transportation of hazardous cargo like calcium carbide. Improper stowage or labelling of dangerous cargo may violate these rules.

- Under SOLAS, **India is obligated to investigate** whether the vessel met seaworthiness, stability, and hazardous cargo handling standards under the IMDG Code.

MERCHANT SHIPPING ACT, 1958

- India's **Director General of Shipping** has the territorial jurisdiction to investigate the marine accidents under the provisions of the **Merchant Shipping Act, 1958**.
- DGS can demand the records, vessel's safety certificates and maintenance logs to inspect compliance about its structural integrity, maintenance and compliance with safety standards.
- DGS can **assess compliance with IMDG Code** standards for hazardous cargo and verify the vessel's seaworthiness certification.

ENVIRONMENT PROTECTION ACT, 1986

- **'Polluter Pays' principle** upheld by the **National Green Tribunal** can be invoked to claim compensation for ecological harm.
- India may also seek **criminal liability** under the Indian Penal Code and environmental laws, and claim additional costs for public health impacts and tourism losses.

PLASTIC POLLUTION FROM TYRES OF EVs

#POLLUTION

PRIMARY SOURCE *The Indian EXPRESS*

In India, around 2.5% of new cars sold in 2024 were EVs, and the government plans to increase this to 30% by 2030. However, recent research reveals negative impacts of the deployment of EVs.

PLASTIC POLLUTION FROM TYRES OF EV

- EV is at least 15-20% heavier than a comparable conventional vehicle, majorly due to the weight of batteries. As a result, EVs experience higher wear and tear in their tyres and release large numbers of **small plastic particles** in the atmosphere.
- EVs are able to accelerate more rapidly. This leads to additional stress on the tyres due to increased friction and heat generation. Tyres of heavier and faster-moving vehicles produce a higher proportion of smaller

particles (about 1-10 micrometres) that remain suspended in the air.

Current air quality regulations focus on PM2.5 and PM10, but with the rise of EVs and increased emission of even smaller tyre fragments, these standards need to be expanded to cover ultra-fine particulate pollution.

INDIA BEGINS BOOSTING RESERVOIR CAPACITY IN INDUS RIVER SYSTEM

#GEOGRAPHICAL LOCATIONS

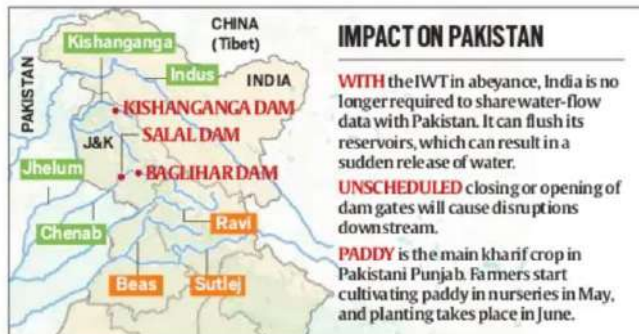
PRIMARY SOURCE *The Indian EXPRESS*

Following the suspension of the Indus Waters Treaty, **India has commenced reservoir flushing and maintenance work at the Baglihar and Salal hydroelectric projects on Chenab river in Jammu and Kashmir.**

These operations aim to **boost reservoir holding capacity** and improve power generation efficiency. This has resulted in reduction of downstream water flow to Pakistan by nearly 90%.

INDUS RIVER SYSTEM

- **Nature:** Antecedent
- **Source:** near Mansarovar lake in Tibet.
- **Flow direction:** First north-west in India, and then sharp bend towards south-west into Pakistan.
- **Important locations:** Enters India near Damchok, forms a deep gorge by cutting Ladakh range at Bunzi, north of Nanga Parbat. Enters Pakistan near Chillas.



TRIBUTARIES OF INDUS RIVER

- Panjnad refers to five rivers of Punjab which are tributaries of the Indus – Jhelum, Chenab, Ravi, Beas and

Satluj. Jhelum and Ravi join Chenab, Beas joins Sutlej, and then Sutlej and Chenab join to form Panjnad.

Jhelum	Origin from Sheshnag lake near Verinag (SE Kashmir). Flows through Wular lake. Joins Chenab near Jhang in Pakistan.
Chenab	Formed by the confluence of two rivers- Chandra and Bhaga at Tandi near Keylong in Himachal Pradesh. Largest tributary of Indus river.
Ravi	It originates from Rohtang pass in Kullu hills of Himachal Pradesh. Flows between the Dhauladhar and Pirpanjal ranges.
Beas	It originates from Beas kund near Rohtang pass in Himachal Pradesh. Joins Satluj within India at a place called Harike in Punjab.
Satluj	It originates in the ' Rakshas tal ' near Mansarovar in Tibet, where it is known as Langchen Khambab. Antecedent river which cuts through the Himalayas at Shipki La and enters India. Feeds the canal system of the Bhakra Nangal project.

RIVER VALLEY PROJECTS ON INDUS SYSTEM

Bhakra Nangal project	On river Satluj India's largest multipurpose project Reservoir- Gobind Sagar
Naptha Jhakri project	On Satluj in Himachal Pradesh
Indira Gandhi Project	Also known as Rajasthan canal. Drawn out from Harike barrage. Goes up to Jaisalmer and Barmer.
Pong project	On Beas Reservoir- Maharana Pratap Sagar

Pandoh project	On Beas
Chamera project	On Ravi in Himachal Pradesh
Thein project	On Ravi in Punjab
Salal project	On Chenab in Jammu & Kashmir
Baglihar project	On Chenab in Jammu & Kashmir
Dulhasti project	On Chenab in Jammu & Kashmir
Tulbul project	On Jhelum in Jammu & Kashmir Dam is built on Wular lake Also known as Wular barrage.
Uri project	On Jhelum in Jammu & Kashmir

UPPER BHAVANI PUMPED STORAGE PROJECT

#CONSERVATION #INFRASTRUCTURE

PRIMARY
SOURCE

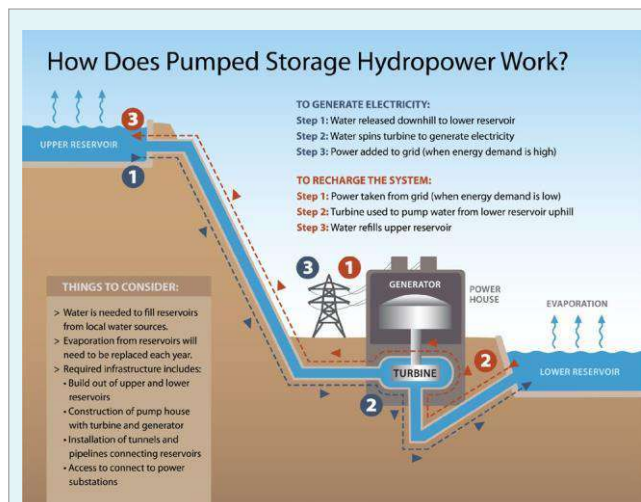
The Indian
EXPRESS

The Expert Appraisal Committee of the Ministry of Environment, Forest and Climate Change has granted initial approval for conducting an Environmental Impact Assessment (EIA) of the 1000 MW Upper Bhavani Pumped Storage Project in the Nilgiris, **Tamil Nadu**.

UPPER BHAVANI PUMPED STORAGE HYDROPOWER PROJECT

- **Location:** Near Upper Bhavani dam and Avalanche-Emerald reservoirs, within 1 km of Mukurthi National Park.
- The pumped hydropower project aims to harness the waters of the Upper Bhavani Dam and Avalanche-Emerald reservoirs in the Nilgiris to generate **1000 MW of power**.

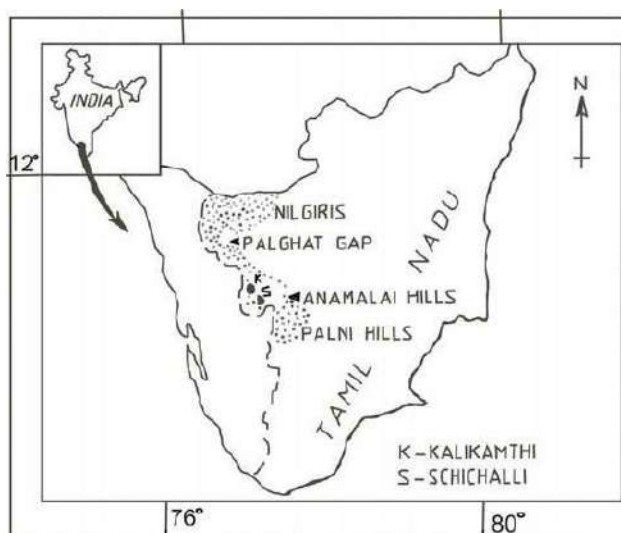
- **Concerns:** The area is part of the Western Ghats, a biodiversity hotspot. These hills host unique ecosystems like Shola forests and are home to several rare and endangered species.



- **Pumped storage plants** use the principle of gravity to generate electricity using water that has been previously pumped from a lower source to an upper reservoir.
- Operation of pumped storage power plants requires two reservoirs viz. upper and lower reservoir. Water in the upper reservoir is used for generating power during peak demand hours. Water in the lower reservoir is pumped back to the upper reservoir during the off-peak hours and the cycle continues.
- **Energy storage capacity** of a pumped hydro facility depends on the size of its two reservoirs, while the amount of power generated is linked to the size of the turbine.

BHAVANI RIVER

- Interstate Indian river which flows through Kerala and Tamil Nadu.
- **Origin:** Western Ghats from Nilgiri hills, Tamil Nadu. It enters the Silent Valley National Park in Kerala and re-enters Tamil Nadu.
- Bhavani is one of the main tributaries of **Cauvery River**.
- Upper Bhavani dam is located in Nilgiri district, Tamil Nadu.



ENVIRONMENT IMPACT ASSESSMENT (EIA)

- EIA is a tool used to assess the environmental, social, and economic impacts of a proposed project before it is given clearance to proceed.
- It aims to predict environmental impacts, find ways to reduce adverse effects, and help decision-makers choose environmentally sustainable options.
- If a project fails the EIA process, it is denied environmental clearance and cannot proceed further unless revised and approved.
- Governed under the Environment Protection Act, 1986.
- Administered by the Ministry of Environment, Forest and Climate Change (MoEFCC).
- EIA Notification 2006 outlines the procedure, including public hearings.

SIANG HYDROPOWER PROJECT OF ARUNACHAL PRADESH

#PHYSICAL GEOGRAPHY #LOCATIONS IN NEWS

PRIMARY SOURCE The Indian EXPRESS

*Protests broke out at the Upper Siang district in Arunachal Pradesh after the government initiated a pre-feasibility study for the proposed **Siang Upper Multipurpose Project**. Locals*

are protesting citing concerns over its environmental and social impacts.

SIANG UPPER MULTIPURPOSE PROJECT

- Proposed 11,000 MW Multipurpose Project in Siang river.
- **Location:** Upper Siang district, Arunachal Pradesh.

NEED FOR THE PROJECT

- Handle possible threats from a **60,000 MW power project** (the world's biggest hydropower dam) being constructed by China in the upper reaches of Yarlung Tsangpo river in Tibet. China is not a signatory to the International Water Conventions. It intends to divert the water from the multiple water reservoirs to dry regions of Tibet.
- **Siang Upper Multipurpose Project aims** to maintain natural flow of water in the Siang river throughout the year, and flood modulation in case of sudden water release by China.

CONCERNS

- The project has environmental concerns and is estimated to affect at least 100,000 local residents (in the upper Siang district) who fear displacement.



ABOUT SIANG RIVER/BRAHMAPUTRA

- Tsangpo-Yarlung Zangbo river (as it is known in China) enters Arunachal Pradesh where it is known as the Dihang (or Siang) River.
- It traverses more than 1000 kms eastward, before forming a horseshoe bend around the towering Namcha Barwa peak, and enters Arunachal Pradesh as the Siang (or Dihang).
- It turns towards the south and enters Assam, where it is joined by two mountain streams, the Lohit and the Dibang, and thereafter it is known as the Brahmaputra.
- River Teesta joins Jumna (Brahmaputra in Bangladesh) as a right bank tributary.

- Jumna moves further and joins Padma which then joins Meghna. Meghna flows into the Bay of Bengal.
- The sub-basin lies in the states of Arunachal Pradesh (Subansiri, Kameng, and Bhareli rivers), Assam (Manas, Kopili, Sankosh, and Dikhow rivers), Nagaland (Doyang (flows into Dhansiri)), Meghalaya (Umngot and Kynshi rivers), West Bengal and Sikkim (Teesta)
- It meanders through the heartland of Arunachal Pradesh, inhabited by the Adi tribes.

Left/ South bank Tributaries of Brahmaputra	Right/ North bank Tributaries of Brahmaputra
Dibang	Subansari
Lohit	Kameng
Burhi Dihang	Manas
Kopilli	Sankosh
Dhansiri (South)	Dhansiri (North)
Kelang	Teesta (Sikkim, WB)
Noadehing	Ronganadi

ABOUT ADI TRIBES

- One of the major tribes of Northeast India. It consists of 14 sub-tribes predominantly inhabited in sub-tropical regions of Siang belt and Dibang valley of Arunachal Pradesh.
- They have Mongoloid features, patriarchal society, and possess a strong base of traditional knowledge about forest structure and ecosystem function.
- They mostly follow the age-old tradition of Animism known as Donyi Polo, and practice jhum for their agriculture.

KALESHWARAM LIFT IRRIGATION PROJECT

#INFRASTRUCTURE #LOCATIONS

PRIMARY SOURCE: **The Indian EXPRESS**

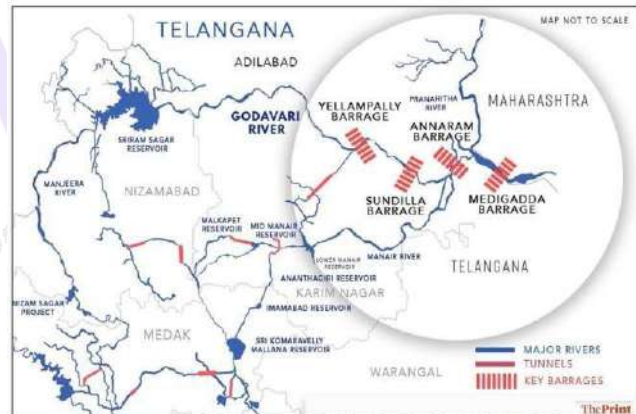
Kaleshwaram Lift Irrigation Project in Telangana is under scrutiny due to structural failures and design flaws, raising concerns over dam safety, governance, and financial viability.

KALESHWARAM LIFT IRRIGATION PROJECT

- World's largest multi-stage lift irrigation project built on Godavari river in Telangana.
- **Purpose:** To ensure irrigation, drinking water, and industrial water supply to drought-prone and water-scarce areas in Telangana by lifting water from Godavari River and distributing it across districts.
- **Lift irrigation:** Unlike traditional gravity-based irrigation systems, water does not rely on gravity to flow in canals from higher ground to lower; rather pumps or surge pools are used to lift water to a higher elevation, from where it is distributed to fields via a canal system.
- The project sprawls over approximately 500 km in 13 districts, with a canal network of 1800 km. The project started in 2019.

KALESHWARAM PROJECT

Commissioned in 2019, the Kaleshwaram Lift Irrigation project comprises three barrages constructed across Godavari river. The first barrage is at Medigadda near Kaleshwaram (on the confluence of Pranahita river, a tributary of Godavari). Two more barrages are located at Annaram and Sundilla villages between Medigadda and Sripada Yellampally irrigation project.



TAPTI BASIN MEGA RECHARGE PROJECT

#RIVER INTERLINKING #WATER CONSERVATION

PRIMARY SOURCE: **THE HINDU**

Madhya Pradesh and Maharashtra have signed an MoU to jointly implement **Tapti Basin Mega Recharge Project**. It is aimed at enhancing regional water security by using Tapti river water for drinking and irrigation needs in both states.

TAPTI BASIN MEGA RECHARGE PROJECT

- One of the largest water recharge projects globally with no displacement involved.
- Water from the Tapti river will be diverted to cater to:

- drinking water needs of north-eastern Maharashtra, including Nagpur.
- provide irrigation support to southern and south-eastern districts of Madhya Pradesh such as Burhanpur and Khandwa.
- **Total planned utilisation of water** stands at 31.13 thousand million cubic feet (TMC), with 11.76 TMC allocated to MP and 19.36 TMC to Maharashtra.
- **Centre is expected to fund 90% of the project cost** and the proposals will be submitted to classify it as a national water project.

This is the third major river-linking initiative undertaken by the Madhya Pradesh government in the past year, following the Ken-Betwa link project with Uttar Pradesh and Parvati-Kalisindh-Chambal link project with Rajasthan.



ABOUT TAPTI RIVER

- One of the major west-flowing rivers.
- **Origin:** Multai in Betul district, Madhya Pradesh.
- **States Covered:** Madhya Pradesh, Maharashtra, Gujarat.
- **Major Tributaries of Tapti:**
 - Right Bank: Vaghur, Bori, Purna
 - Left Bank: Aner, Girna, Panjhra
- **Dams and Projects:** Ukai Dam (Gujarat), Hathnur Dam (Maharashtra)

ASIATIC LION CENSUS 2025

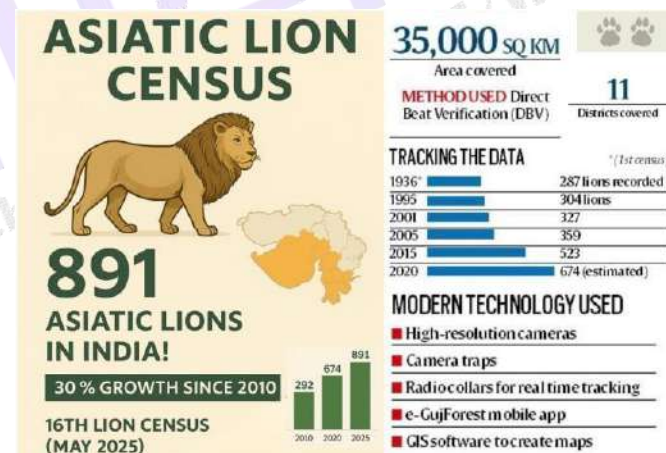
#CONSERVATION #SPECIES IN NEWS

PRIMARY SOURCE: THE HINDU

The latest Asiatic Lion Census 2025 shows a significant increase in the lion population, reaching an estimated **891 individuals in Gujarat**.

ASIATIC LION CENSUS 2025

- 16th edition of Lion Census. The last census was conducted in 2020 which recorded 674 Asiatic lions.
- **Estimated lion population:** 891 in Gujarat. Gir forest in Gujarat is the only remaining natural habitat of Asiatic lions.
- The census used advanced methodologies such as direct beat verification (high accuracy and minimal margin of error), supported by modern tools including high-resolution cameras, camera traps and GPS-enabled radio collars.
- **Concerns:** ~57% of the 891 individuals have been recorded in areas outside protected forest areas. This poses an increased threat of man-wildlife conflict.



ASIATIC LIONS

- Big cat of the subspecies *Panthera leo*.
- **Range:** Gir forest, a dry deciduous forest ecosystem in the Saurashtra region of Gujarat.
- **Conservation Status:**
 - **IUCN Status:** Endangered
 - **CITES:** Appendix I
 - **Wildlife Protection Act 1972:** Schedule I
- **Concerns:** Lions remain geographically isolated in Gir. This risks the spread of epidemic or disease; risk due to decline in prey or natural disasters. **E.g.,** In 2018, 27 lions in Gir died due to canine distemper virus (CDV).

CANINE DISTEMPER VIRUS

- **Highly contagious viral** disease caused by a single-stranded RNA virus. Affects a wide range of carnivores.
- Impacts several body systems, including gastrointestinal and respiratory tracts, the spinal cord, and the brain.
- **Symptoms:** Dullness, lacrimation, cough, diarrhea, and seizures. It has a high mortality rate.

CONSERVATION INITIATIVES

- **Project Lion (2020):** Infrastructure development for protection and security of Indian lions, especially health infrastructure. Focus on conflict mitigation, habitat improvement, radio-collar monitoring, and camera traps, and addressing human-wildlife conflict.
- **International Big Cats Alliance (2023):** Foster international cooperation among 97 range countries for conservation of big cats.

INDIAN GREY WOLVES HEADING TOWARDS EXTINCTION

#SPECIES IN NEWS

PRIMARY SOURCE: THE HINDU

In the Kadbanwadi grasslands of Pune district (Maharashtra), Indian grey wolf is rapidly disappearing. About 10 years ago, there were around 70 adult wolves, but now only 6 have been spotted.



INDIAN GREY WOLVES IN KADBANWADI:

- Indian Grey wolf is the apex predator in Kadbanwadi grasslands.
- It is brown in colour with black-and-white markings on their backs.
- It was considered as the **grassland's guardians** as they ensure a healthy ecosystem by regulating the numbers of smaller predators and herbivores.
- **Conservation Status:**
 - **Wildlife Protection Act, 1972:** Schedule I
 - **IUCN Status:** Endangered
 - **CITES:** Appendix I
- **Significant threats:** Attacks by feral dogs, spread of Canine Distemper Virus (CDV) from stray dogs, genetic dilution due to crossbreeding with feral dogs, shrinking prey base caused by the decline in shepherding practices, and habitat disruption from urban waste and encroachment.

KADBANWADI GRASSLANDS

- **Location:** Pune district, Maharashtra.
- **Area:** 2000 hectares
- **Fauna:** Indian grey wolf, Bengal fox, striped hyena, and Brahminy kite.

PRACTICE QUESTIONS

MCQS

Q1. With reference to the Brahmaputra river, consider the following statements:

1. The river forms a horseshoe bend around the Namcha Barwa peak.

2. The river basin extends in three states of India.
3. Teesta is a left-bank tributary of the Brahmaputra River.

Which of the statements given above is/are correct?

- (a) 1, 2 and 3 (b) 1 only
(c) 2 and 3 only (d) 3 only

Q2. With reference to the Indus river system, of the following four rivers, three of them pour into one of them which joins the Indus directly. Among the following, which one is such a river that joins the Indus directly?

- (a) Chenab (b) Jhelum
(c) Ravi (d) Sutlej

Q3. Consider the following:

- I. Cigarette butts
II. Eyeglass lenses
III. Car tyres

How many of them contain plastic?

- (a) Only one
(b) Only two
(c) All the three
(d) None

Q4. Consider the following techniques used for oil spill remediation:

1. Use of booms to contain the spread
2. Deployment of oleophilic absorbents
3. Application of dispersants
4. Spraying of saline water to dilute the oil

Which of the above are scientifically valid methods for managing an oil spill?

- (a) 1, 2 and 3 only
(b) 1 and 4 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4

Q5. Consider the following statements about Electric Vehicles (EVs) and Pollution:

1. EVs produce no greenhouse gas emissions during operation.
2. EVs do not contribute to any form of air pollution.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

DESCRIPTIVE QUESTIONS

Q1. What is oil pollution? What are its impacts on the marine ecosystem? In what way is oil pollution particularly harmful for a country like India?

Answers: 1-b, 2-d, 3-c, 4-a, 5-a

INDIA'S FIRST GENE-EDITED SHEEP

#BIOLOGY AND BIOTECHNOLOGY

PRIMARY SOURCE THE HINDU

A university in Kashmir has created **India's first gene-edited sheep**. It is a major milestone in India's push for innovation in animal biotechnology.

GENE-EDITED SHEEP

- The sheep's DNA was carefully altered using **CRISPR-Cas9 technology**. A particular gene- **myostatin gene** (natural brake on muscle growth) **was edited** in the sheep.
- By altering this gene, researchers were able to increase muscle mass by 30%. Such a feature exists naturally only in some European breeds like the Texel, not in Indian sheep.

SIGNIFICANCE

Gene editing allows precise changes without foreign genes which makes it more acceptable for regulators and consumers alike. This can have applications in:

- Production of gene-edited species (increased muscle mass) for meat consumption.
- Increasing output in cattle (E.g., Milk, wool etc.)
- Elimination of disease causing genes in cattle (disease-resistant animals).

GENE EDITING IS DISTINCT FROM CROSSBREEDING AND GENE MODIFICATION

- Crossbreeding** is the traditional breeding of two different breeds from the same species to create a new breed. Generally, breeds chosen have complementary traits that will enhance the offsprings' economic value. However crossbreeding is a slow process, with viable traits visible after a few generations.

- Gene editing** involves using technologies like CRISPR-Cas9 which enable the addition, removal, or alteration of genetic material at specific locations within an organism's genome. Unlike genetic modification no foreign DNA is introduced. It offers faster and safer results and aligns with India's current biotech regulations.
- Gene modification** involves inserting news from one species into the other to create a transgenic organism.

INDIA PRODUCES WORLD'S 1ST GENE EDITED RICE VARIETIES

#BIOLOGY AND BIOTECHNOLOGY

PRIMARY SOURCE The Indian EXPRESS

India has become the first country in the world to develop rice varieties using genome editing technology. Scientists have used Site-Directed Nuclease 1 and Site-Directed Nuclease 2 (SDN-1 and SDN-2) genome editing techniques to develop the seeds.

GENETICALLY EDITED RICE VARIETIES- (KAMALA AND PUSA DST RICE 1)

- Scientists have developed two-genome-edited, climate resilient, improved rice varieties- '**DRR Dhan 100 (Kamala)**' and '**Pusa DST Rice 1**'.
- Developed by scientists from:** Indian Agricultural Research Institute, New Delhi and the Indian Rice Research Institute, Hyderabad.

The Process:

- Scientists selected two widely cultivated mega rice varieties - Samba Mahsuri (BPT5204) and MTU1010 (Cottondora Sannalu).

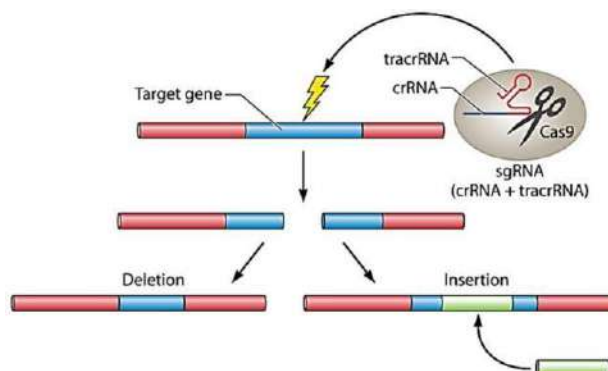
- **Samba Mahsuri** is known for its fine grain quality and premium market value, but it falls short in terms of climate resilience. It is vulnerable to pests, diseases, and climate stress.
- **MTU1010** is a high yielding early-duration variety (125-130 days) well-suited to Rabi season cultivation in southern India. But it too suffers from sensitivity to drought and soil salinity.
- **Using the CRISPR-Cas9 system**, these varieties were enhanced with better stress tolerance, improved yield, and climate adaptability without compromising their existing strengths.

BENEFITS OF THE NEW VARIETIES

- The crops need shorter time, and thus save water used for irrigation
- Enhance production (25% more yield)
- Reduces greenhouse gas emissions (by 20%)
- **Not GM Crop**: Free of foreign DNA, so they are not genetically modified (GM). Hence the apprehensions about GM foods does not apply in this case.

REGULATION OF GENE EDITING IN AGRICULTURE IN INDIA

- Genetically modified organisms (GMOs) are regulated in India by the 'Rules for the Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms/ Genetically Engineered Organisms or Cells, 1989'. The rules are notified under the Environment Protection Act 1986 to regulate GMOs.
- **There is no explicit mention of the term gene editing**. Recently, an amendment was introduced to the aforesaid regulation in order to encourage gene editing in agriculture.
- Gene editing techniques using native genome are allowed in India. However, gene editing techniques using foreign genomes are not allowed.
- **Gene editing techniques** called SDN 1 and 2 use native genome and hence, are allowed under the Rules under EPA, 1986.
- **Gene editing techniques using foreign genomes** like SDN 3, 4 and 6 are placed under GMO regulation, and therefore not allowed in India.



COMMON TYPES OF GENE EDITING TECHNIQUES

- **SDN-1**: Site-Directed Nuclease (SDN) 1 is a site-directed mutagenesis (production of genetic mutations) without using a DNA sequence template. SDN1 introduces a precise cut in the DNA at the targeted location and the cell's natural repair mechanisms fix these breaks without introducing any foreign genetic material.
- **SDN-2**: In SDN 2, the edit involves a precise cut in the DNA at a target location and a small template from the same species is provided to guide the repair process.
- **SDN-3**: Involves the insertion of foreign DNA and falls under the category of GMOs. **E.g.**, Bt cotton has a gene from the bacterium *Bacillus thuringiensis* (Bt) inserted into cotton plants.

FIRST PANGENOME OF ASIAN RICE

#BIOLOGY AND BIOTECHNOLOGY

PRIMARY SOURCE THE HINDU

An international team of scientists have assembled the first 'pangenome' of Asian rice. It was developed by integrating key parts of genomes from 144 varieties of rice, including wild and cultivated varieties of rice from Asia.

WHAT IS A PANGENOME?

- Pangenome refers to the entire set of genes present in a species, including both the core genome (genes present in all individuals) and the accessory genome (genes present in only some individuals or strains).
- Pangenome map typically involves identification and annotation of genes and their genomic locations within a species. It provides insights into genetic diversity and variability within a species, as well as presence of

specific genes or gene variants in different individuals or populations.

FIRST PANGENOME OF ASIAN RICE

- **PacBio high-fidelity (HiFi) sequencing technology** and computational methods were used to create the pangenome.
- The study identified 69,531 genes collectively spanning the pangenome, with 28,907 core genes and 13,728 wild-rice-specific genes. Of the 69,531 genes identified, about 20% were specific to wild rice.

SIGNIFICANCE

- The study reinforced support for the hypothesis that all Asian cultivated rice has an evolutionary origin from a wild variety called Or-Illa, the ancestor of japonica.
- **Rice pangenome allows researchers to:**
 - Develop new rice cultivars with high yield capacity
 - Introduce new traits for disease-tolerance.
 - Enhance resilience to rapid environmental changes.
 - Develop region-specific varieties suited to local agro-climate.

These genetic resources can improve understanding of rice environmental adaptation, phenotypic plasticity and regeneration potential.

RESEARCHERS UNLOCK INDIAN YAK'S GENETIC SECRETS

#BIOLOGY AND BIOTECHNOLOGY

PRIMARY SOURCE THE HINDU

Specialists from four institutions of the Indian Council of Agricultural Research (ICAR) have successfully assembled the **first-ever chromosome-level genome of the Indian Yak.**

CHROMOSOME-LEVEL GENOME OF INDIAN YAK

- Researchers have assembled the **first-ever chromosome-level genome** of Indian Yak (*Bos grunniens*) i.e., not only the entire Yak genome was sequenced (decoded), rather the genes were also accurately mapped to their physical locations on the chromosomes.

- **Technologies used:** Long-read sequencing technology and bioinformatics tools to generate the chromosome-level assembly.

GENOME SEQUENCING

- **Genome sequencing** is the decoding of the entire DNA present in the human cell. In simple words, it is reading the entire book of genome letter by letter (base by base). It determines the precise order of the four nucleotide bases (A,T,C,G) in DNA.
- **Long-read sequencing (LRS) technology** is a third-generation DNA sequencing method that can sequence longer fragments of nucleotides compared to traditional short-read methods. **E.g.,** LRS can read thousands to even millions of DNA bases in a single read, as compared to short-read methods which can only read 100-300 at a time.

SIGNIFICANCE

The research marks a leap for yak genomic science that can help in:

- Understanding of the genetic complexities of the species. **E.g.,** identifying genetic markers for traits like cold tolerance, disease resistance, and milk production.
- Revolutionising yak breeding programmes.
- Conservation efforts- how to sustain yak populations across the Himalayan belt.

A comparative genomics between other bovine species with the generated data will open up allele mining for useful genes contributing to biotic and abiotic stresses and quality traits.

INDIGENOUS VACCINE DEVELOPED FOR LUMPY SKIN DISEASE

#BIOLOGY AND BIOTECHNOLOGY

PRIMARY SOURCE THE HINDU BUSINESS LINE

*Biovet, a subsidiary of Bharat Biotech has indigenously developed the world's first lumpy skin disease (LSD) vaccine- **Biolumpivaxin.***

LUMPY SKIN DISEASE

- **Highly contagious viral disease** that primarily affects cattle. It is caused by the lumpy skin disease virus (LSDV), which belongs to the Capripoxvirus genus.
- **Transmission**- Can spread through:
 - **vectors** (like mosquitoes, some biting flies, and ticks)
 - **direct contact** to skin lesions, saliva, nasal discharge, milk, or semen of infected animals.
 - **contaminated fodder and water** through oral and nasal secretions of infected animals
 - **during artificial insemination** using contaminated semen.
- **It is not a zoonotic virus** i.e., the disease cannot spread to humans. It is safe to consume milk from the infected cattle, as it is a non-zoonotic disease.



LUMPY SKIN DISEASE VACCINE

- **Biolumpivaxin** is the world's first and an indigenously developed LSD Vaccine.
- **Developed by:** Biovet, a subsidiary of Bharat Biotech.
- It is a live-attenuated DIVA (Differentiating Infected from Vaccinated Animals) marker vaccine developed using the LSD virus. This is a single vaccination regimen given once in a year to cattle and buffaloes of all ages.
- It is approved by the Central Drugs Standard Control Organisation (CDSCO).

ORAL CHOLERA VACCINE HILLCHOL

#BIOLOGY AND BIOTECHNOLOGY #DISEASES

PRIMARY SOURCE THE HINDU BUSINESS LINE

Bharat Biotech's oral cholera vaccine- Hillchol has successfully completed Phase III clinical trials demonstrating efficacy against both Ogawa and Inaba serotypes.

ABOUT CHOLERA

- **Acute diarrhoeal infection** caused by ingesting food or water contaminated with **bacterium** vibrio cholerae bacteria. Ogawa and Inaba are two serotypes of Vibrio cholerae O1.
- **Symptoms:** Severe watery diarrhoea, vomiting and dehydration.
- **Transmission:** Highly contagious and can spread rapidly in areas with poor sanitation and hygiene.
- **Prevalence:** Estimated to cause over 2.86 million cases and around 95,000 deaths globally every year. Global demand for oral cholera vaccine (OCV) is close to 100 million doses a year.

HILLCHOL- ORAL CHOLERA VACCINE

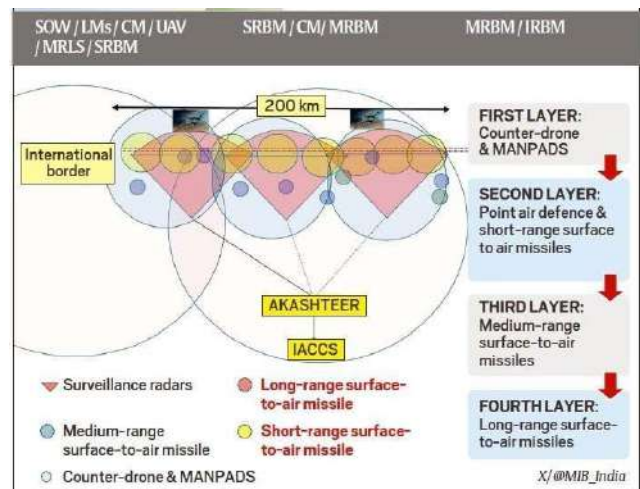
Hillchol has demonstrated efficacy against both Ogawa and Inaba serotypes. It features a simplified single stable O1 Hikojima strain, which enhances production efficiency and affordability, and is particularly beneficial for lower- and middle-income countries.

KEY TECHNOLOGIES USED IN OPERATION SINDOOR

#DEFENCE TECHNOLOGY

PRIMARY SOURCE THE HINDU BUSINESS LINE

Amid ongoing India-Pakistan face-off, India used **new-age weapons to carry-out precision strikes** to hit terrorist infrastructure inside Pakistan and in Pakistan-occupied Kashmir (PoK). Operation Sindoor has highlighted India's military might and indigenous weapons.



KEY TECHNOLOGIES USED IN OPERATION SINDOOR
1. Akashteer:

- **Indigenous** AI-powered Air Defence System (India's own Iron Dome).
- Designed and manufactured jointly by: DRDO, ISRO and Bharat Electronics Limited (BEL).
- **Part of India's overall C4ISR** (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) system.
- Akashteer works in coordination with ISRO satellites and Indian Regional Navigation Satellite System (NAVIC) GPS.
- Integrates data from radars and sensors, and provides real-time situational awareness and enables swift responses to aerial threats (drones, missiles, UAVs and other loitering munitions).
- Through automated detection-and-response mechanisms, Akashteer can neutralise hundreds of incoming threats with unmatched precision. Its vehicle-based, mobile configuration guarantees flexibility in high-risk areas.

2. Akash Missile Defence System:

- **Indigenously developed** by DRDO.
- **Medium-range, mobile surface-to-air missile** (SAM) designed to neutralise aerial threats such as fighter jets, drones, cruise missiles, and air-to-surface missiles.
- Operates on a command-guidance system with datalink for mid-course corrections and switches to active radar homing in the terminal phase.
- **Propulsion:** Propelled by an integrated ramjet-rocket engine, allowing it to maintain supersonic speeds (Mach 1.8 to 2.5) throughout its flight.
- **Range:** up to 25–45 km, with the ability to intercept targets at altitudes up to 20 km. It carries a 60 kg high-explosive, pre-fragmented warhead, detonated by a digital proximity fuse for maximum impact.
- **Supported by a sophisticated radar network.** Real time multi-sensor data processing enables simultaneous engagement of multiple targets from any direction.
 - **Rajendra phased array radar** can track up to 64 targets and guide eight missiles simultaneously.
 - **3D Central Acquisition Radar** (3D CAR) provides long-range surveillance and target acquisition.

- **Akash has variants** like Akash-1 (25 km range), Akash-NG (up to 30 km with improved guidance), and Akash Prime (up to 35 km, optimised for low-altitude threats).

Akash's integration with advanced command-and-control systems like Integrated Air Command and Control System (IACCS) enabled real-time threat neutralisation.

3. S-400 Missile System:

- Surface-to-air missile system (SAM) and one of the most advanced **anti-aircraft systems** developed by Russia.
- Defends against a wide range of air threats- aircrafts, ballistic, cruise missiles and unmanned aerial vehicles (UAVs).
- **The missile defence system includes-** multifunctional radars, automated command centres, four types of missiles, and mobile launchers.
- **Capability:** Maximum range of up to 400 km.
 - Can destroy aerial targets at a height of 10 m to 30 km, including stealth aircraft, drones, and ballistic missiles.
 - Can track up to 80 targets simultaneously, engaging up to 36 of them at once.
 - Can intercept targets moving at speeds of up to 4.8 km per second.
 - Capable of firing different types of missiles to **create a layered defence shield.**
- The S-400 system is mobile, can be mounted on trucks, and thus allows for easy repositioning and deployment in different terrains.
- **Known as Sudarshan Chakra**, India has strategically deployed four S-400 squadrons with key installations in Pathankot, Rajasthan, and Gujarat.

4. BRAHMOS:

- **Supersonic cruise missiles** built by BrahMos Aerospace, a joint venture between India's Defence Research and Development Organisation (DRDO) and Russia's NPO Mashinostroyeniya.
- Range: ~450 km (earlier 290 km)
- Operates at close to Mach 3 speed in the cruise phase, which ensures reduced flight time, lower dispersion of targets, and quicker engagement time and non-interception.
- **Operates on a 'Fire and Forget Principle'**, adopting varieties of flights on its way to the target.

- Terminal Altitude: 10- 15 km
- The missile carries a conventional warhead weighing 200-300 kg.

5. HAMMER (Highly Agile and Manoeuvrable Munition Extended Range):

- Air-to-ground **precision-guided weapon system** for the Rafale fighter aircraft.
- **Built by:** Safran Group, France
- Range of up to 70 km. Integrated with Rafale fighter Aircraft.
- Autonomous guidance system (Inertial Navigation System (INS), Global Positioning System (GPS) and laser).
- Used for precision strikes against a range of targets in medium-range tactical operations.
- Can be launched from low altitude over rough terrain.
- Can also be fitted to bombs and various guided systems.
- All-weather and insensitive to jamming.

6. SCALP (SCALP-EG or Storm Shadow):

- **Air-launched cruise missile** designed for long-range deep strikes.
- **Manufactured by:** MBDA (European multinational group)
- Range of 450 km. Has stealth features. Can be operated at night and in all weather conditions.
- Integrated with Rafale fighter Aircraft.
- Difficult to detect due to its low-flying capability when fired from an aircraft. Can penetrate bunkers and ammunition stores.
- Has advanced and highly accurate navigation system, which uses Inertial Navigation System (INS), Global Positioning System (GPS) and terrain referencing.

7. METEOR:

- **Beyond Visual Range Air-to-Air Missile (BVRAAM) system** designed to deliver unmatched performance in complex electronic-warfare environments.
- Manufactured by: MBDA (European multinational group)
- Equipped with a solid-fuel ramjet engine. Sustains thrust throughout the flight, unlike conventional rocket-powered missiles.

- Offers the largest 'No Escape Zone' of any air-to-air missile system (i.e., a much greater area within which the target cannot evade the missile).
- Range over 100 kilometres. Integrated into Rafale aircrafts. Highly resistant to jamming.

8. D-4 Anti-Drone System:

- **Anti-drone system** developed by DRDO.
- Capability to neutralise hostile drones by disrupting GPS signals.
- Equipped with advanced radar, RF jammers, and laser-based kill mechanisms, the D4 system can disrupt and disable enemy UAVs mid-flight.
 - Can be utilised for other purposes like- real-time battlefield monitoring and surveillance.

9. SkyStriker Loitering Munitions:

- **Suicide drones** developed by Bengaluru-based Alpha Design Technologies in collaboration with Elbit Systems (Israel).
- The precision-striking drone can carry a 5-10 kg warhead and has a range of 100 km.
- Its electric propulsion system helps reduce noise, making it suitable for covert missions at low altitudes.
- Cost-effective solution for long-range precision strikes. The drone supports direct aerial fire missions and enhances operational awareness and survivability for ground forces.

10. Harop Drones:

- **Developed by:** Israel Aerospace Industries.
- Loitering munition - cross between a drone (UAV) and a missile. This category of weapons loiter in the air close to the designated target.
- Launched from canister-based systems mounted on mobile ground vehicles or naval platforms.
- Capable of independently identifying and destroying high-value targets, particularly radar systems and air defence platforms.
- **Designed for deep precision attacks**, the Harop can loiter over target zones for up to 9 hours using an electro-optic seeker to locate, identify, and strike from multiple angles.
- Cause destruction by crashing into their targets with the explosive payload that they carry, earning names such as "suicide drones" and **"kamikaze drones"**.

- Its immunity to satellite jamming (GNSS) and real-time human oversight give it both autonomy and flexibility in complex battlefield environments.

AMCA- INDIA'S FIFTH GENERATION FIGHTER JET

#DEFENCE TECHNOLOGY

PRIMARY SOURCE: THE HINDU

The Ministry of Defence has **formally approved the execution model** for India's ambitious **Advanced Medium Combat Aircraft (AMCA)** programme. It opens the door for private sector participation alongside Hindustan Aeronautics Limited (HAL).

AMCA DEVELOPMENT

- 2024: Cabinet Committee on Security gave in-principle approval to the AMCA programme, with an estimated development cost of around ₹15,000 crore.
- 2025: Execution model for AMCA programme formally approved. The AMCA programme is now open to competitive bidding. HAL can now bid either independently or in partnership with private firms.
- DRDO has committed to **delivering AMCA prototype by 2035**.



ABOUT ADVANCED MEDIUM COMBAT AIRCRAFT (AMCA)

- **5th-generation fighter aircraft.** It is currently the only 5th generation fighter under development in India.
- **Indigenous development:**
 - Designed by: Aeronautical Development Agency under Defence Research and Development Organisation (DRDO) will lead the project.

- Manufactured by: state-owned Hindustan Aeronautics Limited (HAL) and private companies.

KEY SPECIFICATIONS OF AMCA

- 25-tonne twin-engine aircraft, medium-weight multirole fighter jet
- **Max speed:** Nearly 2600 kilometres per hour (Mach 2.15)
- **Combat range:** 1620 kms
- Can carry armament weighing 6500 kg (1.5 tonnes internal payload capacity).

KEY FEATURES

- **Designed for multi-role missions-** including air-to-air and air-to-ground operations, Suppression of Enemy Air Defences (SEAD), and electronic warfare (EW).
- **Stealth aircraft** (capable of avoiding enemy radars and air defence mechanisms). The stealth fighter uses:
 - specialised paint coating and radar-absorbing material to reduce radar bounce-off
 - exhaust nozzles that reduce infrared radiation emitted by the engine
 - exhaust plume and fuselage technology that reduces the heat signature of the engine.
- **Based on First look first kill concept:** AMCA pilot spots an enemy plane, fires a missile and destroys it, before the latter can react.
- AMCA will have a concealed internal fuel tank of 6.5-tonne capacity.

Engine:

- **AMCA Mk1 variant** will have the US-built GE-F414 engine of the 98 kilonewton (kN) class.
- **AMCA Mk2** will have a more powerful 110kN engine to be developed indigenously by DRDO's Gas Turbine Research Establishment in collaboration with foreign collaboration.

Weapons: AMCA will carry:

- **BrahMos-NG** (next generation) air-to-ground missiles
- **Astra** air-to-air missiles
- **Rudram** air-to-ground anti-radiation missiles
- Anti-tank missiles, laser-guided bombs and precision munitions.

STRATEGIC SIGNIFICANCE OF AMCA

- **Fulfil operational gap in IAF:** Indian Air Force has 31 fighter squadrons as against the sanctioned strength of

42 squadrons, significantly below the optimal readiness requirements. Tejas LCA-Mk2 and **AMCA** are critical for IAF's modernisation plans.

- **Counter regional threats:** Pakistan is expected to procure over 40 J-35A fifth-generation fighters from China. China is developing sixth-generation prototypes like the Chengdu J-36 and Shenyang J-50.

India's entry into the fifth-generation fighter club, currently limited to the US (F-22 and F-35), Russia (Su-57), and China (J-20), reflects its growing defence ambitions amid evolving regional security challenges.

CHANDRAYAAN 5 MISSION

#ASTRONOMY & SPACE TECHNOLOGY



Indian Government has **approved the Chandrayaan 5 Mission** which will be jointly conducted by the Indian Space Research Organisation (ISRO) and the Japan Aerospace Exploration Agency (JAXA).

CHANDRAYAAN 5 MISSION

- Chandrayaan-5 or LUPEX (Lunar Polar Exploration) aims at deeper exploration of the Moon's surface to study water and water-ice both on the lunar surface and the subsurface.
- **To be launched from:** Tanegashima Space Center, Japan by Japanese rocket (H3 Launch Vehicle). H3 is a three-stage launch vehicle powered by solid-fuels and cryogenic fuels (Liquid hydrogen and liquid oxygen).
- **Tentative launch:** 2027-28. The mission would have a timeline of over 100 days after the lunar landing, or for a maximum of one year.

JOINT PROJECT BETWEEN ISRO AND JAXA

ISRO will build the lunar lander, while Japan will build the rover.

- LUPEX spacecraft would weigh 6500 kg approximately, including a 350 kg rover.
- The rover will drive on its own to search for areas where water is likely to be present and sample the soil by digging into the ground with a drill. The collected samples will be analysed in detail with observation equipment mounted on the rover.

SCIENTIFIC PAYLOADS THAT LUPEX WILL BE CARRYING

- LUPEX will be carrying a total of 10 scientific payloads. These include five payloads from JAXA, three payloads from ISRO, and one payload each from NASA and the European Space Agency.
- **The payloads are:** Resource Investigating Water Analyzer (REIWA), Lunar Thermogravimetric Analyzer (LTGA), Triple-reflection Reflectron (TRITON), Aquatic Detector using Optical Resonance (ADORE), International Symposium of Antennas and Propagation (ISAP), Advanced Lunar Imaging Spectrometer (ALIS), Neutron Spectrometer, Ground Penetrating Radar, Exospheric Mass Spectrometer for LUPEX (EMS-L), Mid-Infrared Imaging Spectrometer (MIR).

WHY IS THERE A LOT OF INTEREST IN WATER ON THE MOON ?

- **Water can be electrolysed** (split) to produce rocket fuel (oxygen and hydrogen). If there is enough water, it will be an important resource for future crewed space activities because it will eliminate the need to transport large quantities of fuel from the earth.

LUPEX will land in an area where past remote sensing observations indicate the high possibility of the existence of water (ice). LUPEX rover will directly measure the water content by in-situ observation.

PSLV-C61: ISRO'S 101ST SATELLITE LAUNCH MISSION FAILED

#ASTRONOMY AND SPACE TECHNOLOGY



Indian Space Research Organisation could not complete its **101st satellite launch mission, PSLV-C61/EOS-09, due to a technical glitch.**

ISRO'S 101ST SATELLITE LAUNCH MISSION

- **PSLV-C61 rocket** was carrying the Earth Observation Satellite (EOS-09). However, a few minutes after the liftoff, the rocket suffered an issue in its third stage and the PSLV-C61 mission ended in a failure. (The chamber pressure in the casing that contained the third-stage motor fell during the flight)
- The 1,700-kg **Earth observation satellite** was intended to be placed at an altitude of about 597 km in a sun-synchronous polar orbit (the satellite was to pass over a given place at the same time every day).

- The EOS-09 satellite carried a **Synthetic Aperture Radar (SAR) payload**, capable of providing images of the Earth in all weather conditions. It was designed to produce high-quality radar images for civilian applications (such as land-use mapping and hydrology studies) and also for defence surveillance.

Since their introduction in the 1990s, **PSLV rockets have only failed thrice**- first during the inaugural flight in 1993, once in 2017 and the latest in 2025. ISRO will assess the reasons for the loss of pressure and subsequently reattempt the mission EOS-09.

TIANWEN-2 MISSION

#ASTRONOMY AND SPACE TECHNOLOGY



China has launched a space mission **Tianwen-2** to explore a small asteroid named **Kamo'oalewa**.

TIANWEN-2 MISSION

- Aim:** To explore a near Earth asteroid named **Kamo'oalewa**.
- The mission will use touch-and-go technique**- the spacecraft hovers close to the surface of the asteroid, while a robotic arm fires an object or burst of gas to knock fragments into a collection chamber. This has been successfully implemented by the US' OSIRIS-Rex and Japan's Hayabusa2 missions.
- It might also use anchor and attach technique**- four robotic arms extend and drill into the surface to retrieve material. After collecting the samples, the **mission will drop them on Earth**. The fragments will return to Earth about 2.5 years after the launch.
- It will then head towards the main asteroid belt for another mission (towards comet 311P/PANSTARRS).
- If successful, China will join the US and Japan as the third country to bring back asteroid samples to Earth.

KAMO'OALEWA ASTEROID

- Near-Earth asteroid discovered in 2016 by the Pan-STARRS 1 telescope in Hawaii.
- Measures just 40 to 100 metres in diameter.
- Belongs to a rare class called **quasi-satellites**- celestial bodies that **orbit the Sun** but remain gravitationally close to Earth. It appears to follow Earth's orbit in a "leading and trailing" motion due to its highly elliptical

path. This gives the impression the asteroid orbits Earth.

SOVIET SPACECRAFT KOSMOS 482 CRASHES TO EARTH

#ASTRONOMY & SPACE TECHNOLOGY



A piece of a Soviet spacecraft Kosmos 482 crashed back to Earth splashing into the Indian Ocean off Jakarta's western coast, Indonesia.

KOSMOS 482 MISSION

- The mission was launched in 1972 with the purpose of **landing on Venus**.
- Soon after the launch, a malfunction took place in the rocket. The upper rocket stage/engine (that was meant to propel the Kosmos 482 out of the Earth orbit) shut off too early.
- As a result, the spacecraft was **left stranded in an orbit** around the Earth. The lander module kept orbiting the Earth for over 50 years. The main spacecraft, which was large and heavy, burned up in the (Earth's) atmosphere.
- Within the period of over 50 years, the spacecraft's orbit decayed slowly as the atmospheric drag slowly pulled it towards the Earth, **leading to its re-entry into the Earth**.

Kosmos 482's reentry into the Earth serves as a reminder of the growing issue of space junk. Satellite and space reentry can discharge harmful pollutants into Earth's atmosphere and destroy the ozone layer.

SCIENTISTS FIND SECOND NATURAL SOURCE OF GOLD

#ASTRONOMY AND SPACE TECHNOLOGY



Researchers have reported the **first direct observational evidence of a process called r-process nucleosynthesis** in

a powerful flare emitted by a magnetar in 2004. This is another way to produce the element gold, apart from collision of neutron stars.

KNOWN SOURCE OF GOLD- NEUTRON STAR COLLISIONS

- **Neutron Stars:** Incredibly dense remnants of supermassive stars (with masses around 10^{25} times the mass of the Sun) that have exploded as supernovae.
- Gold is predominantly produced in violent collisions and mergers of ultra-dense neutron stars. Such events are detected using space telescopes and gravitational wave detectors (E.g., LIGO).

NEW DISCOVERY- MAGNETAR FLARES PRODUCE GOLD

- **Magnetars:** Types of neutron stars with much more powerful magnetic fields than normal neutron stars. Most powerful known magnetic objects in the universe with magnetic fields in the range of 10^{15} gauss.
- **Magnetar Flares:** Magnetar occasionally release large bursts of energy in flares (much powerful than solar flares).
- **Observation:**
 - A powerful flare emitted by a magnetar in 2004 was recorded by NASA's Compton Gamma Ray Observatory. Almost a day after the flare, a delayed burst of high-energy gamma rays was released.
 - The delayed emission was inconsistent with standard flare afterglows and contained evidence of radioactive decay from **r-process nucleosynthesis**.
- **r-process nucleosynthesis:** The rapid neutron capture process is the major nucleosynthesis process responsible for the synthesis of heavy nuclei, including gold.
- The study concludes that some magnetar flares can eject neutron-rich matter into space, where it goes through r-process nucleosynthesis to create heavy elements like gold.

THORIUM FUELLED NUCLEAR REACTORS

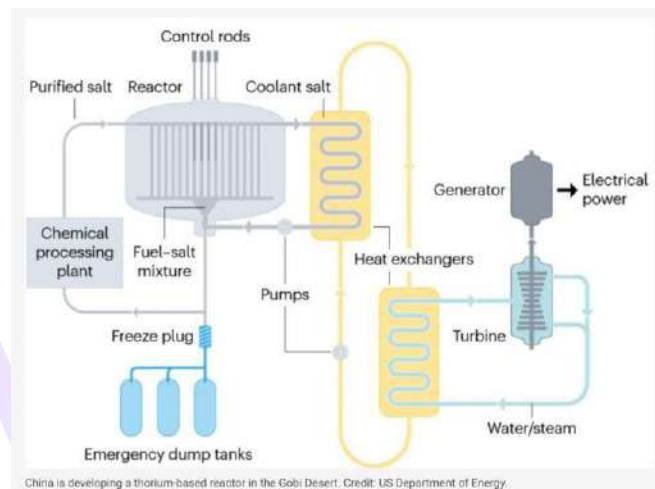
#NUCLEAR TECHNOLOGY

PRIMARY SOURCE THE HINDU BUSINESS LINE

Recently, China has successfully refuelled a working **2MW Thorium-fuelled molten salt reactor** without causing a shutdown.

THORIUM REACTOR IN CHINA

- China has developed a small, 2MW experimental Thorium Nuclear Reactor in the Gobi Desert, near the Mongolian border. It is operational from 2024.
- China is working towards developing a 10 MW Thorium Nuclear Reactor for commercial use by 2030.



THORIUM BASED NUCLEAR REACTORS

- **Thorium (Th-232)** is a fertile material that has to be converted to fissile material **Uranium 233**. The naturally occurring isotope Th-232 cannot be fissioned, but when irradiated in a reactor it absorbs neutrons and forms uranium-233, a fissile material that generates heat.
- **Coolant:** Molten salt. China's reactors use fluoride-based salts which melt into a colourless, transparent liquid when heated to about 450 °C. The salt acts as a coolant to transport heat from the reactor core.
- **Rather than solid fuel rods,** molten-salt reactors use the liquid salt as a substrate for the fuel, such as thorium, to be directly dissolved into the core.
- **Compared to light water reactors** in conventional nuclear power plants, molten salt reactors work at significantly higher temperatures. The result is that it can generate electricity much more efficiently.

THORIUM REACTORS OFFER MULTIPLE ADVANTAGES

As the world confronts the twin challenges of climate change and energy security, **Thorium** is making a comeback.

- Less radioactive waste (burning thorium does not create plutonium, a highly toxic chemical element)
- Cheaper alternative to Uranium and More fuel-efficiency
- Far safer (because the fuel is already dissolved in liquid and they operate at lower pressures than do conventional nuclear reactors, which reduces the risk of explosive meltdowns)
- Lower risk of nuclear weapons proliferation (its waste products are less weapons-grade than Uranium)
- Does not need to be built near watercourses, since the molten salts serve as a coolant. (Conventional uranium power plants that need huge amounts of water to cool their reactors).

INDIA AND ITS PLAN TO USE THORIUM REACTORS

- India has the world's largest reserves of thorium (a million tonnes), particularly in its monazite-rich coastal sands.
- As per the three-stage nuclear programme envisioned by nuclear scientist Dr Homi Bhabha, India would use thorium reactors in the third stage. However, India has commenced its second stage of nuclear programme only in 2024.

REGENERATIVE BRAKING SYSTEM

#ENERGY TECHNOLOGY

PRIMARY SOURCE: THE HINDU

India has launched the country's first 9000 HorsePower (HP) electric freight locomotive engine at Dahod, Gujarat with regenerative braking capability.

DAHOD-9000 ELECTRIC ENGINE

- **Manufactured in:** Dahod, Gujarat in collaboration with German engineering firm **Siemens**.
- 9000 horsepower (HP) locomotive engine. Haulage capacity- 5800 tonnes.
- **Has regenerative braking capability**, i.e., when the engine brakes, it becomes a generator and produces power.
- Six-axle electric engine with an average speed of 75 km/h (max speed of 120 km/h). No noise or vibration (in this engine).

- **Advantages:** High quality; low cost; high export potential; boost freight movement; reduce CO2 emissions.

ABOUT REGENERATIVE BRAKING SYSTEM

- Technology used in electric and hybrid vehicles to **recover the kinetic energy** of the vehicle that would otherwise be lost during braking. Braking is the mechanism by which an automotive vehicle in motion slows down. A vehicle moving faster has more kinetic energy than a vehicle moving slower, so the **process of braking removes (mostly) kinetic energy** from the vehicle.
- **In the traditional braking systems**, when the brakes are applied the kinetic energy from the vehicle is converted into heat, which is then dissipated into the environment.

WORKING OF REGENERATIVE BRAKING SYSTEM

- **Kinetic Energy Conversion:** When a vehicle is in motion, it possesses kinetic energy. When the driver applies the brakes, the regenerative braking system starts working.
- **Motor as a Generator:** Electric motor which normally drives the wheels, operates in reverse during braking. It starts acting as a generator, converting the vehicle's kinetic energy into electrical energy.
- **Energy Storage:** Electrical energy generated during braking is directed to the vehicle's battery or a supercapacitor for storage, which can be used later to power the vehicle.

BENEFITS OF REGENERATIVE BRAKING

- **Energy Efficiency & reduced emissions:** By recovering and reusing energy, regenerative braking reduces the overall energy consumption and reduces emission of heat.
- **Reduced Wear and Tear:** Regenerative braking reduces reliance on traditional friction brakes, it can decrease wear and tear on brake components, leading to lower maintenance costs.

LIMITATIONS

- **Efficiency Variations:** The efficiency of energy recovery decreases as the vehicle's speed drops. (Lesser the speed of vehicle, lesser kinetic energy is available for conversion to electrical energy and storage)

- **Not Complete Replacement:** Regenerative braking often cannot bring a vehicle to a complete stop on its

own and must be supplemented with conventional braking systems.

PRACTICE QUESTIONS

MCQS

Q1. Consider the following statements with reference to gene editing techniques:

1. Site-Directed Nuclease (SDN)-1 technique facilitates genetic mutations without using a DNA sequence template.
2. The SDN-2 process involves using genes of foreign origin to generate specific changes in the genome.
3. SDN 1 and 2 methods are restricted in India under the Environment Protection Act, 1986.

Which of the statements given above is/are correct?

- (a) 1 and 2 only (b) 1 only
(c) 1 and 3 only (d) 2 and 3 only

Q2. With reference to lumpy skin disease, consider the following statements:

1. It is a bacterial skin disease affecting cattle and buffaloes only.
2. It spreads by blood-feeding insects including mosquitoes, flies, and lice.
3. It infects humans through the consumption of milk or meat.

Which of the statements given above is/are correct?

- (a) 1 only (b) 1 and 2 only
(c) 2 only (d) 2 and 3 only

Q3. Consider the following:

1. Typhoid
2. Cholera
3. Dengue
4. Hepatitis C

Which of the above are common types of enteric diseases?

- (a) 1 and 2 only (b) 2, 3 and 4 only
(c) 1 and 3 only (d) 1, 2, 3 and 4

Q4. Tianwen-2 Mission, recently in news, is related to:

- (a) Solar flare observations
(b) Sampling a quasi-satellite asteroid
(c) Manned mission to the Moon
(d) Deployment of a space telescope

Q5. Consider the following statements with reference to the regenerative braking system:

1. Regenerative braking converts the kinetic energy of the moving vehicle into mechanical energy.
2. Regenerative braking reduces overall energy consumption of vehicles and reduces heat emission.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

DESCRIPTIVE QUESTIONS

- Q1.** The creation of gene-edited organisms, including both plants and animals, holds transformative potential across multiple fields. Comment.
- Q2.** Explain the key concept of Thorium-based Nuclear Reactors. How does it offer advantages over Uranium reactors?

Answers: 1-b, 2-c, 3-a, 4-b, 5-b

HISTORY, HERITAGE & CULTURE

AHILYA BAI HOLKAR

#MEDIEVAL INDIA

PRIMARY SOURCE: THE HINDU

May 31st marks the birth anniversary of the 18th century Maratha queen Ahilya Bai Holkar who was a great administrator and visionary.

ABOUT AHILYABAI HOLKAR

- Born in 1725, she was the Rani of Indore (Holkar dynasty) within Maratha Confederacy.
- She established **Maheshwar (in Madhya Pradesh)** as the seat of the Holkar Dynasty, south of Indore on Narmada River.
- After the demise of her husband (Khande Rao), she was trained in military affairs by her father-in-law **Malhar Rao Holkar**. She came to power after the death of Malhar Rao Holkar.



CONTRIBUTIONS IN CULTURE

- Funded reconstruction of Kashi Vishwanath Temple in Varanasi (1780)**, which had been destroyed in the past and subsequently converted into mosque by Aurangzeb in 1669.
- She built the current structure of **Vishnupad Temple, Gaya, Bihar in 1787**.
- Resurrected the jyotirlingas** across the country. Renovations in Somnath, Varanasi, Trimbak, Gaya, Pushkar, Vrindavan, Nathdwara, Haridwar, Badrinath, Kedarnath etc.
- Maheshwari Sari** are also part of the queen's legacy. She not only promoted the traditional weave but paved the way for skilling women and their empowerment.

HOLKARS OF MARATHA CONFEDERACY

- Holkars were Subedar** (one of the designations of a governor of a Subah/province) under Peshwa Bajirao I (Pune seat).

- When the Maratha Empire began to weaken due to internal clashes, Holkars declared themselves the rulers of Indore in Central India, existing as an autonomous member of the Maratha Empire until 1818. Later, they were under the protectorate of the British Empire.
- Holkar dynasty was founded with Malhar Rao Holkar, who joined the service of the Peshwas of the Maratha Empire in 1721, and rose to the rank of Subedar. In 1720s, he led Maratha armies in Malwa region, and in 1733 was granted 9 parganas in the vicinity of Indore by the Peshwa.
- By the time of his death, he was acknowledged as one of the five virtually independent rulers of the Maratha Confederacy. He was succeeded by Ahilyabai Holkar (his daughter-in-law).

RAGHUJI BHONSLE I

#MEDIEVAL INDIA

PRIMARY SOURCE: The Indian EXPRESS

The state government of Maharashtra has reclaimed the famous "**Raghuji Sword**" of the 18th century Maratha general **Raghuji Bhonsle I** for Rs 47.15 lakh at an auction in London, United Kingdom.

About Raghuji Bhonsle I (1739-1755):

- Distinguished Maratha general under Chhatrapati Shahu Maharaj.
- Founder** of the Nagpur-based Bhosale dynasty, which became a significant power center within the Maratha Confederacy.
- Led pivotal military campaigns** in Bengal in 1745 and 1755, greatly expanding the Maratha Empire's territory into Bengal and Odisha.
- His influence also extended** to regions in Central India such as Chanda, Chhattisgarh and Sambalpur.



- **His successful campaigns** in South India resulted in the defeat of the Nawabs of Kurnool and Cuddapah, and further solidified Maratha dominance in the region.
- **Honoured** with the title 'Senasaheb Subha' by Chhatrapati Shahu Maharaj, impressed by his bravery and military acumen.

RAGHUJI SWORD

- **The sword bears an inscription** in Devanagari script on its spine, suggesting that it was made for Raghuji Bhonsle I.
- **It exemplifies the 'European' style** of Maratha weaponry- characterised by a straight, single-edged European blade paired with a locally crafted Mulheri hilt, beautifully adorned with intricate gold inlay.
- **The European-made blade reflects** the active global arms trade in 18th-century India, emphasising the intersection of Indian and European craftsmanship.



CONTROVERSY SURROUNDING DIGHA JAGANNATH TEMPLE

#TEMPLE ARCHITECTURE #HERITAGE

PRIMARY SOURCE The Indian EXPRESS

Servitors of the Jagannath Temple in Puri, Odisha have warned members of their community against participating in any rituals held at Digha temple, West Bengal- replica of Jagannath Puri dham.

DIGHA TEMPLE, WEST BENGAL

- Recently consecrated in April 2025.
- **Location:** Purba Medinipur district, West Bengal, about 350 km from Puri, Odisha.
- **Dedicated to:** Lord Jagannath, Lord Balabhadra, Goddess Subhadra and Goddess Mahalaxmi.
- **The 213 foot high temple** is a replica of the world famous Puri Temple.
- **Built in sandstone** in the Kalingan architectural style.

- **Non-Hindus and foreigners would be allowed** to enter the Digha shrine – a break from the centuries-old practice of allowing only Hindus in Puri.



CONTROVERSY ASSOCIATED WITH DIGHA TEMPLE

- **Use of the word 'Dham'** (seat) and a picture of Nilachakra (metal wheel atop the Puri Temple) for the temple have been questioned. There are only four dham in Hinduism- Badrinath, Dwarka, Puri and Rameswaram.
- **Stone Idols:** Idols at Digha temple are made of stone. Lord Jagannath is Daru (wood) Brahma, and he is never made of stone. The idols in Puri are made of neem wood.
- **Replica of Puri Temple:** Performing the same rituals in Digha would dilute the significance of Puri Temple. It could emerge as a competitor to Puri for Bengali tourists and devotees.

ABOUT JAGANNATH TEMPLE

- Ancient Hindu temple dedicated to Jagannath, a form of Lord Vishnu. The present temple was rebuilt by Anantavarman Chodaganga, the king of Eastern Ganga dynasty in 10th century CE.
- **Location:** Puri, Odisha (eastern coast of India).
- **Deities worshipped:** Jagannath, Subhadra and Balabhadra
- **Idol of Lord Jagannath** is made of wood (neem wood, known as Daru), and is ceremoniously replaced every 12 or 19 years by an exact replica.
- **Built in** Kalinga Architecture. It has distinct sectional structures: Deula, Vimana or Garbhagriha (sanctum sanctorum).
- **Ratha Yatra** or chariot festival is held annually in Puri. The three deities are ceremoniously pulled in massive wooden chariots from the Jagannath Temple to Gundicha Temple.

VEERASHAIVA-LINGAYATS TO SEEK SEPARATE RELIGION CODE IN UPCOMING CENSUS

#CULTURE

PRIMARY SOURCE THE HINDU

Veerashaiva-Lingayats are demanding a separate religion code in the upcoming National Census likely to commence in 2026. They are the dominant land-owning community in north and central Karnataka. They are a part of backward classes Category in the state.

BASAVA & LINGAYATS

- **Basava, a 12th century philosopher** and social reformer, was the founder of the Shaivite sect called Lingayats. He was the Prime Minister during the reign of Kalachuri dynasty King Bijjala (I) of the Kalachuri dynasty in the 12th century Karnataka.
- **Veerashaivas are a sub-sect of Lingayats** and ardent followers of Lord Shiva. They preceded Basavanna, the founder of Lingayatism. Veerashaivism has its roots in the Vedas and Agamas, and they only worship Lord Shiva.
- **Basava advocated equality** of all human beings, irrespective of caste and that all forms of manual labour are equally important.
- **He rejected temple worship** and rituals led by Brahmins and replaced it with personalised direct worship of Shiva through practices such as individually worn icons and symbols like a small linga (known as Ishtalinga).
- **His poetry** was known as Vachanaas and primarily focused on socio-cultural reforms. He rejected gender or social discrimination, superstitions, and rituals.

KEY CONCEPTS IN LINGAYATISM

- **Anubhav Mantapa:** Considered to be the first parliament in the history of mankind. Proceedings of Anubhav Mantapa are recorded in the form of Vachana Literature.
- **Kaayaka (Manual labour):** Working for survival with a divine mindset which is mandatory to every individual. Without Kaayaka nobody has the right to live.

- **Daasoocha (Charity):** Part of the earnings from Kaayaka must be spent on the welfare of the poor called Dasoocha. It is a voluntary contribution from one's own earned wealth.
- **Sharanas:** Sharanas are common followers of Lingayat beliefs.

SHIRUI LILY FESTIVAL

#FESTIVALS

PRIMARY SOURCE The Indian EXPRESS

The Shirui Lily Festival commenced in Shirui Village, Ukhrul district, Manipur after a two-years pause due to the long-drawn ethnic conflict in the state.

ABOUT SHIRUI LILY FESTIVAL

- Annual cultural state festival of Manipur organised by Manipur Tourism Department.
- Initially, it was celebrated by the locals of Shirui village to pay tribute to the **state flower Shirui Lily**. Since 2017, it has been declared as a state festival by Manipur.
- Designed as an **eco-tourism festival** to raise awareness about the Shirui Lily and to promote tourism to the hills of Ukhrul. It includes cultural performances, music concerts, beauty pageant, trash collection marathon etc.



SHIRUI LILY

- **Rare endemic species** found only on the upper reaches of Shirui Hill range, Manipur.
- **IUCN status:** Endangered.
- **Threats:** Changing climatic conditions, human encroachment, habitat invasion by wild dwarf bamboo species.

INTERNATIONAL BOOKER PRIZE 2025

#AWARDS AND HONOURS

PRIMARY
SOURCE THE HINDU

Writer, activist, and lawyer **Banu Mushtaq** won the International Booker Prize 2025 for her short story collection **Hridaya Deepa (Heart Lamp)**.



ABOUT HRIDAYA DEEPA (HEART LAMP)

- Collection of twelve short stories written in **Kannada** by **Banu Mushtaq**. It is translated from Kannada to English by **Deepa Bhashti**.
- It narrates the everyday lives of Muslim women moved by their lived experiences of pain and suffering in a patriarchal society.
- First Kannada work of literature to be awarded International Booker Prize.

International Booker Prize:

- Formerly Man Booker International Prize, is an international literary award hosted in the United Kingdom.
- It is **awarded annually** to a single work of fiction or collection of short stories translated into English (originally written in a language other than English) and published in the UK or Ireland.
- The £50,000 prize is shared equally between author and translator. It promotes international literature in the English language.

PRACTICE QUESTIONS

MCQS

Q1. With reference to the Jagannath temple situated in Puri, consider the following statements:

1. The temple follows the Dravidian architectural style.
2. The idol of Lord Jagannath is made of stone and metal.
3. The temple is one of the Char Dham pilgrimage sites for Hindus.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 and 3 only
(c) 3 only (d) 1, 2 and 3

Q2. Consider the following statements with reference to Raghuji Bhonsle I:

1. He was the founder of the Nagpur-based Bhosale dynasty.

2. He was a distinguished Maratha general under Chhatrapati Shivaji Maharaj.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q3. Consider the following statements with reference to Holkar dynasty:

1. Holkar dynasty was an autonomous state within the Maratha confederacy.
2. The Holkar dynasty was founded by queen Ahilyabai Holkar.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q4. Consider the following statements with reference to Queen Ahilya Bai Holkar:

1. She transferred the capital of the Holkar dynasty from Maheshwar to Indore.
2. The present Vishnupad Temple, Bihar was built by Ahilya Bai.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q5. Consider the following statements with reference to International Booker Prize 2025

1. The award is bestowed to a literary work originally written in English Language.
2. It is an annual award that promotes international literature in the English language.

Which of the statements given above is/are correct?

- | | |
|------------------|---------------------|
| (a) 1 only | (b) 2 only |
| (c) Both 1 and 2 | (d) Neither 1 nor 2 |

Answers: 1-c, 2-a, 3-a, 4-b, 5-b



VANIK-IAS
Exclusive Coaching for UPSC/OPSC/WBCS