



1-5
JUNE 2026

PIB

WEEKLY BRIEF

STRATEGIC & POLICY
SIGNALS FOR UPSC ASPIRANTS



RUDRAM-II MISSILE

Indigenous Precision
Strike Capability



INDIA-MYANMAR STATEMENT

Act East &
Border Security



UPI IN CAMBODIA

India's DPI
Goes Global



PM SURYA GHAR

75 Lakh Solar
Households



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INDIA-MYANMAR JOINT STATEMENT — NEIGHBOURHOOD FIRST & ACT EAST

Ministry: Prime Minister’s Office / Ministry of External Affairs

Easy Explanation:

Myanmar President U Min Aung Hlaing visited India from 30 May to 3 June 2026. During the visit, India and



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Myanmar discussed security, connectivity, border management, development cooperation, and people-to-people ties. For India, Myanmar is not just another neighbour. It is the land bridge between India and Southeast Asia. It matters for Act East Policy, North-East development, border security, and counter-insurgency. The most important line from the joint statement is Myanmar's assurance that its territory will not be allowed to be used against India's security interests.

Key Terms:

Term	Definition
Act East Policy	India's policy to deepen ties with Southeast Asia through trade, connectivity, security, and diplomacy
Neighbourhood First	India's foreign policy approach giving priority to immediate neighbours
Kaladan Multi-Modal Transit Transport Project	Connectivity project linking Kolkata with Sittwe Port in Myanmar and then to Mizoram
India–Myanmar–Thailand Trilateral Highway	Road connectivity project connecting India's North-East with Myanmar and Thailand
Border Management	Coordination to prevent insurgency, smuggling, illegal movement, and misuse of border areas
Sovereignty and Territorial Integrity	Respect for a country's independence, borders, and internal political authority
Development Partnership	India's support through infrastructure, capacity-building, grants, lines of credit, and community projects

Important Points for UPSC:

- Myanmar is India's only ASEAN neighbour with a land border. This makes it central to India's Act East Policy.
- India shares a long land border with Myanmar through Arunachal Pradesh, Nagaland, Manipur, and Mizoram.
- Myanmar is important for the security of India's North-East because some insurgent groups have historically used border areas for shelter and movement.
- The joint statement's security line is important: Myanmar assured that its territory will not be used against India's security interests.
- Connectivity with Myanmar helps reduce the geographical isolation of India's North-East.
- The Kaladan project and the India–Myanmar–Thailand Trilateral Highway are key connectivity projects linked to Myanmar.
- Myanmar also matters for India's access to Southeast Asian markets.





- India has to balance security cooperation with humanitarian concerns because Myanmar has faced internal political instability and ethnic conflict.
- China's influence in Myanmar makes the country geopolitically important for India.

INDIA–OMAN CEPA — INDIA'S TRADE GATEWAY TO WEST ASIA

Ministry: Ministry of Commerce & Industry

Easy Explanation:

India and Oman have entered into a Comprehensive Economic Partnership Agreement. A CEPA is broader than a normal trade agreement because it covers goods, services, investment, mobility of professionals, and regulatory cooperation. Oman is important for India because it is located near key shipping routes and acts as a gateway to the Gulf region. Under the agreement, India gets duty-free access for a very large share of its exports to Oman. This can help Indian exporters in sectors like textiles, gems and jewellery, engineering goods, chemicals, food products, and services.

Key Terms:

Term	Definition
CEPA	Comprehensive Economic Partnership Agreement; broader than a simple free trade agreement
Tariff Line	A product category on which customs duty is applied
Duty-Free Market Access	Entry of goods into another country without customs duty
Trade in Services	Export of services like IT, healthcare, education, finance, and professional services
Professional Mobility	Easier movement of skilled workers and professionals between countries
Rules of Origin	Rules used to decide whether a product genuinely belongs to a country and qualifies for tariff benefits
Gulf Cooperation Council	Regional grouping of Gulf countries including Oman, UAE, Saudi Arabia, Qatar, Kuwait, and Bahrain

Important Points for UPSC:

- India–Oman CEPA is important because Oman is a strategic partner in West Asia.
- Oman is India's second-largest trading partner in the Gulf region.
- The agreement gives India duty-free market access across most of Oman's tariff lines.
- It covers trade in goods, services, investment, professional mobility, and regulatory cooperation.



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- Oman's location is strategically important because it connects India with the Gulf, West Asia, Africa, and global shipping routes.
- Oman can act as a gateway for Indian exports to the larger GCC market.
- The agreement can help Indian sectors such as textiles, engineering goods, gems and jewellery, chemicals, food products, pharmaceuticals, and services.
- CEPA is also important for India's energy security because Oman is part of the larger Gulf energy geography.
- India has been expanding its trade agreements in recent years, including agreements with UAE, Australia, EFTA, UK, and Oman.

INDIA'S SEAFOOD EXPORTS — RECORD HIGH IN FY 2025–26

Ministry: Ministry of Commerce & Industry

Easy Explanation:

India's seafood exports touched a record high in FY 2025–26. India exported 19,72,018 metric tonnes of seafood worth ₹73,890.46 crore, or about USD 8.46 billion. Frozen shrimp remained the major export item. The United States and China continued to be the top markets. This is important because seafood exports are linked to India's blue economy, coastal livelihoods, aquaculture, marine product quality standards, and export competitiveness.

Key Terms:

Term	Definition
Seafood Exports	Export of fish, shrimp, prawns, squid, cuttlefish, and other marine products
Frozen Shrimp	India's most important seafood export item by value
MPEDA	Marine Products Export Development Authority; promotes marine product exports from India
Blue Economy	Sustainable use of ocean resources for economic growth and livelihood
Aquaculture	Farming of aquatic organisms such as fish, shrimp, and prawns
SPS Standards	Sanitary and Phytosanitary standards related to food safety and animal/plant health
Value Addition	Processing raw products into higher-value export products

Important Points for UPSC:

- India exported 19,72,018 metric tonnes of seafood in FY 2025–26.
- The value of seafood exports reached ₹73,890.46 crore, or USD 8.46 billion.
- This was an all-time high in both volume and value.



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- Frozen shrimp remained the main driver of India's seafood exports.
- The United States and China remained the top markets for Indian seafood.
- Seafood exports are important for coastal states, fishermen, aquaculture farmers, processing units, and export earnings.
- India's seafood sector is closely linked with the Blue Economy.
- Quality control is important because seafood exports face strict food safety checks in foreign markets.
- SPS standards, traceability, disease control, cold chain, and processing infrastructure are important challenges.
- India needs to move from raw or low-value seafood exports to more value-added products.

INDIA-AUSTRALIA DEFENCE MINISTERS' DIALOGUE — INDO-PACIFIC SECURITY

Ministry: Ministry of Defence

Easy Explanation:

India and Australia held the second Defence Ministers' Dialogue in New Delhi. The meeting focused on strengthening defence cooperation, military interoperability, defence industry collaboration, co-development, co-production, and regional security. This is important because India and Australia are both Quad members and share concerns about a free, open, peaceful, and stable Indo-Pacific. Defence cooperation with Australia helps India strengthen maritime security, especially in the Indian Ocean and wider Indo-Pacific region.

Key Terms:

Term	Definition
Defence Ministers' Dialogue	High-level meeting between defence ministers to review military and strategic cooperation
Indo-Pacific	Strategic region connecting the Indian Ocean and Pacific Ocean
Quad	Grouping of India, Australia, Japan, and the United States
Military Interoperability	Ability of armed forces of two countries to operate together smoothly
Co-development	Joint development of defence technology or platforms
Co-production	Joint manufacturing of defence equipment
Maritime Security	Protection of sea lanes, ports, ships, trade routes, and oceanic interests



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Defence Industry Cooperation	Collaboration between defence companies, research bodies, and governments
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Important Points for UPSC:

- India and Australia are natural maritime partners because both have strong interests in the Indian Ocean region.
- Australia is a Quad partner, so defence cooperation also fits into the larger Indo-Pacific security framework.
- The dialogue reviewed progress in bilateral defence cooperation and identified new areas of collaboration.
- Major areas discussed included defence and security cooperation, military interoperability, and defence industry collaboration.
- Co-development and co-production are important because India wants to reduce dependence on defence imports.
- Maritime security is a major shared concern because much of India's trade and energy movement depends on secure sea lanes.
- India and Australia already conduct defence exercises and naval cooperation, which improve trust and operational coordination.
- The Indo-Pacific has become strategically important because of China's growing military and economic presence.
- India must balance cooperation with Quad partners while maintaining its strategic autonomy.
- The dialogue shows India's growing preference for practical defence partnerships rather than only diplomatic statements.

DIGITAL INDIA BHASHINI–DPIIT MoU — MULTILINGUAL INVESTMENT ACCESS

Ministry: Ministry of Electronics & Information Technology

Easy Explanation:

Digital India BHASHINI Division and DPIIT signed an MoU to make India's investment ecosystem more accessible in different Indian languages. Many investors, entrepreneurs, and small businesses struggle because government platforms and investment-related information are often difficult to access in local languages. Through this collaboration, BHASHINI tools will be integrated with DPIIT platforms to provide translation, voice-based access, multilingual glossaries, and language models for investment-related services.

Key Terms:

Term	Definition
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BHASHINI	India's AI-based language translation platform under Digital India
DPIIT	Department for Promotion of Industry and Internal Trade
Multilingual Access	Making digital services available in many Indian languages
Translation API	Software tool that allows one platform to translate text using another system
Voice-enabled Technology	Technology that allows users to speak and receive digital responses
Language Model	AI model trained to understand and generate language
Investment Ecosystem	System of investors, startups, entrepreneurs, regulators, policies, and platforms
Digital Public Infrastructure	Large-scale public digital systems such as Aadhaar, UPI, DigiLocker, ONDC, and BHASHINI

Important Points for UPSC:

- BHASHINI aims to reduce India's language barrier in digital governance.
- The MoU will help DPIIT platforms become more accessible to users in Indian languages.
- This is especially useful for small entrepreneurs, local investors, and first-generation business owners.
- The collaboration includes translation API integration, multilingual glossary creation, voice-enabled tools, and domain-specific language models.
- Domain-specific language models are important because business, investment, and policy terms require accurate translation.
- Language inclusion is important for ease of doing business because people should not be excluded from economic opportunities due to English barriers.
- The initiative can improve access to investment-related government information for non-English users.
- It supports India's larger Digital Public Infrastructure approach.
- It can help bridge the gap between urban English-speaking users and regional-language users.
- The initiative shows how AI can be used for inclusive governance rather than only private-sector automation.

SWACHH GAON, SURAKSHIT JALVAYU CAMPAIGN — CLEAN VILLAGES & CLIMATE RESILIENCE

Ministry: Ministry of Jal Shakti

Easy Explanation:

The Department of Drinking Water and Sanitation launched the "Swachh Gaon, Surakshit Jalvayu" campaign for World Environment Day 2026 in collaboration with the Ministry of Environment, Forest and Climate Change. The



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campaign connects rural sanitation with climate resilience. The idea is simple: a clean village is not just about toilets or waste collection. It is also about managing solid and liquid waste, reducing pollution, protecting water sources, and making villages more prepared for climate risks.

Key Terms:

Term	Definition
Swachh Gaon, Surakshit Jalvayu	Campaign linking clean villages with climate-safe living
DDWS	Department of Drinking Water and Sanitation under Ministry of Jal Shakti
Mission LiFE	Lifestyle for Environment; India's campaign for environment-friendly behaviour
SWM Rules	Solid Waste Management Rules guiding waste handling, segregation, treatment, and disposal
IEC Campaign	Information, Education and Communication campaign to spread public awareness
ODF Plus	Stage after Open Defecation Free status, focusing on solid and liquid waste management
Climate Resilience	Ability of communities to prepare for and recover from climate-related risks
Greywater Management	Safe reuse or disposal of wastewater from kitchens, bathrooms, and washing

Important Points for UPSC:

- The campaign was launched around World Environment Day 2026.
- It links rural sanitation with climate action.
- Cleanliness is being connected with waste management, water protection, and climate-safe behaviour.
- The campaign was launched by the Department of Drinking Water and Sanitation in collaboration with the Environment Ministry.
- It also includes a national IEC campaign on Solid Waste Management Rules 2026.
- Rural waste management is important because unmanaged waste can pollute soil, groundwater, ponds, and local ecosystems.
- ODF Plus is the next stage after toilet construction; it focuses on solid and liquid waste management.
- Climate change can worsen water stress, floods, disease outbreaks, and sanitation problems in villages.
- Mission LiFE is relevant because behaviour change is central to waste reduction and environmental protection.
- The campaign shows a shift from toilet construction towards broader village-level environmental management.



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ANRF–MAHA WATER MISSION — STARTUPS FOR WATER SECURITY

Ministry: Ministry of Science & Technology

Easy Explanation:

The Anusandhan National Research Foundation (ANRF) and the Ministry of Jal Shakti launched the ₹200-crore MAHA Water Mission. The aim is to support startups, MSMEs, universities, researchers, and innovators working on water-sector solutions. India faces serious water problems like groundwater depletion, pollution, uneven rainfall, floods, droughts, and poor water-use efficiency. This mission tries to bring science, technology, startups, industry, and government together to create practical water solutions that can move from lab research to field use.

Key Terms:

Term	Definition
ANRF	Anusandhan National Research Foundation; institution created to strengthen and widen research funding in India
MAHA	Missions for Advancement in High-Impact Areas
MAHA Water Mission	Mission to support research, startups, and technology solutions for India's water sector
Ministry of Jal Shakti	Ministry handling water resources, river development, drinking water, and sanitation
Startup-led Innovation	Using startups and entrepreneurs to solve public problems through new technologies
Technology Validation	Testing whether a technology works in real field conditions
Water Security	Reliable availability of safe and sufficient water for people, agriculture, industry, and ecosystems
Whole-of-Government Approach	Coordination across ministries, departments, institutions, and stakeholders

Important Points for UPSC:

- The mission has a financial outlay of ₹200 crore.
- It is linked to ANRF and the Ministry of Jal Shakti.
- MAHA stands for Missions for Advancement in High-Impact Areas.
- MAHA missions focus on mission-driven innovation in strategic sectors.



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- Water has been included as one of the high-impact areas because water security is a major developmental challenge for India.
- The mission will support startups, MSMEs, universities, researchers, industry, and innovators.
- The idea is to move beyond basic research and support technology development, validation, and deployment.
- India's water challenges include groundwater overuse, river pollution, urban water stress, floods, droughts, and climate-linked water insecurity.
- The mission reflects a shift from only government-built solutions to ecosystem-based innovation.
- It is also important because ANRF is trying to democratise research funding beyond a few elite institutions.

RUDRAM-II AIR-TO-SURFACE MISSILE — INDIGENOUS PRECISION STRIKE CAPABILITY

Ministry: Ministry of Defence

Easy Explanation:

DRDO and the Indian Air Force successfully conducted flight-tests of the RudraM-II Air-to-Surface Missile from an airborne platform. The missile was tested under extreme release conditions and guided to a predefined target with pin-point accuracy. RudraM-II is an indigenously developed air-launched missile system. It is important because it improves India's ability to strike enemy targets from aircraft and strengthens self-reliance in advanced weapon systems.

Key Terms:

Term	Definition
RudraM-II	Indigenous air-to-surface missile developed by DRDO
Air-to-Surface Missile	Missile launched from an aircraft to hit a target on land or surface
DRDO	Defence Research and Development Organisation; India's defence R&D body
IAF	Indian Air Force
Airborne Platform	Aircraft or flying platform from which a weapon is launched
Extreme Release Conditions	Difficult launch conditions used to test missile reliability
Integrated Test Range	DRDO testing range at Chandipur used for missile trials
Precision Strike	Ability to hit a selected target accurately

Important Points for UPSC:

- RudraM-II is an indigenously developed air-to-surface missile.
- It was flight-tested by DRDO and the Indian Air Force.



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- The missile was launched from an airborne platform.
- The tests were conducted under extreme release conditions.
- The missile was guided to a predefined target with pin-point accuracy.
- The tests confirmed the performance of its subsystems and critical trajectory.
- The flight data was captured by range instruments deployed at Integrated Test Range, Chandipur.
- Research Centre Imarat, Hyderabad is the nodal DRDO laboratory for RudraM-II.
- Other DRDO labs involved include Defence Research and Development Laboratory, High Energy Materials Research Laboratory, Armament Research & Development Establishment, and Integrated Test Range.
- RudraM-II strengthens India's Aatmanirbharta in advanced weapon systems.

VYOMA INNOVATION CHALLENGE — MULTILINGUAL EDGE AI FOR INDIAN LANGUAGES

Ministry: Ministry of Electronics & Information Technology

Easy Explanation:

Digital India BHASHINI Division, Current AI, and Kalpa Impact launched the VYOMA Innovation Challenge. The challenge promotes open-source, multilingual, voice-first AI solutions that can work even in offline or low-connectivity areas. It builds on Sunno Sutra, a handheld AI reference device unveiled at the IndiaAI Impact Summit 2026. The idea is to make AI useful for people who do not speak English, live in low-internet areas, or need voice-based services in Indian languages.

Key Terms:

Term	Definition
VYOMA Innovation Challenge	Challenge to build multilingual, voice-first, open-source AI solutions
BHASHINI	India's national AI-driven language translation and language technology initiative
Edge AI	AI that runs on a device locally instead of depending fully on cloud servers
Voice-first AI	AI system designed mainly for spoken interaction
Open-source AI	AI tools or models whose code or design can be openly used and improved
Sunno Sutra	Multilingual, voice-first, handheld AI reference device
Low-connectivity Environment	Area where internet access is weak, unstable, or absent



National Hub for Language Technology	BHASHINI's language technology platform supporting speech and text-based services
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Important Points for UPSC:

- VYOMA Innovation Challenge was launched by Digital India BHASHINI Division in collaboration with Current AI and Kalpa Impact.
- It promotes open-source, multilingual, voice-first AI solutions.
- The challenge focuses on AI tools that can work in offline and low-connectivity environments.
- It builds on Sunno Sutra, a handheld AI reference device developed by BHASHINI and Current AI.
- Sunno Sutra combines multilingual language technologies with on-device AI capability.
- The challenge invites startups, researchers, students, academic institutions, MSMEs, industry partners, and independent innovators.
- Participants can build new use cases, improve hardware, optimise models, and create deployable applications.
- Potential sectors include education, agriculture, healthcare, governance, and public service delivery.
- Twenty shortlisted teams will receive developer kits and access to the Sunno Sutra platform.
- Winning teams are eligible for prizes up to ₹80 lakh and possible deployment opportunities with central and state government departments.
- BHASHINI supports 36 Indian text languages, 23 Indian voice languages, and 35 international languages.
- BHASHINI powers over 800 government websites and processes more than 15 million inferences daily.

JAL JEEVAN MISSION 2.0 — REFORM-LINKED MoUs FOR RURAL WATER SUPPLY

Ministry: Ministry of Jal Shakti

Easy Explanation:

Arunachal Pradesh, Jharkhand, Tamil Nadu, Puducherry, and Nagaland signed reform-linked MoUs under Jal Jeevan Mission 2.0. These MoUs are not just about giving funds for pipelines. They are about improving the way rural drinking water systems are managed. The focus is on service delivery standards, sustainability, community-led management, digital monitoring, and long-term maintenance of water supply systems. The idea is to shift from only “building tap connections” to ensuring that water actually reaches households regularly and safely.

Key Terms:

Term	Definition
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Jal Jeevan Mission 2.0	Extended phase of Jal Jeevan Mission focusing on sustainable and accountable rural drinking water delivery
Reform-linked MoU	Agreement where states commit to governance and service reforms while implementing the mission
Har Ghar Jal	Aim of providing functional household tap connections to rural households
Service Delivery Standards	Benchmarks for quantity, quality, regularity, and reliability of water supply
Community-led Management	Involving local communities in operation, maintenance, and monitoring of water supply
Sujalam Bharat	Digital framework for mapping and tracking rural drinking water supply systems
Sujal Gaon ID	Unique digital ID assigned to villages/service areas under the water supply tracking framework
Sustainability Measures	Steps to ensure long-term availability and maintenance of drinking water systems

Important Points for UPSC:

- Arunachal Pradesh, Jharkhand, Tamil Nadu, Puducherry, and Nagaland signed reform-linked MoUs under Jal Jeevan Mission 2.0.
- The MoUs were signed with the National Jal Jeevan Mission, Department of Drinking Water and Sanitation.
- The focus is on sustainable, transparent, and community-led rural drinking water service delivery.
- Jal Jeevan Mission 2.0 moves the programme from infrastructure creation to service delivery.
- The reform framework includes service standards, sustainability measures, community participation, and accountability.
- This is important because a tap connection alone does not guarantee regular and safe water supply.
- Rural drinking water systems often fail due to poor maintenance, weak local ownership, source depletion, and lack of monitoring.
- Sujalam Bharat provides a digital framework for mapping and real-time tracking of drinking water supply systems.
- Community-led management can improve local accountability and reduce dependence on top-down administration.
- The reform-linked approach shows a shift from spending-based schemes to performance-based governance.





CCPA ACTS AGAINST DARK PATTERNS — DIGITAL CONSUMER PROTECTION

Ministry: Ministry of Consumer Affairs, Food & Public Distribution

Easy Explanation:

The Central Consumer Protection Authority acted against dark patterns on digital platforms. Dark patterns are tricks used by websites or apps to manipulate consumers into making choices they may not have made freely. Examples include adding items secretly to the cart, hiding cancellation options, creating fake urgency, using confusing buttons, or forcing users to accept unnecessary terms. CCPA fined PhysicsWallah ₹5 lakh and McAfee ₹1 lakh for such practices. This is important because consumer protection now has to deal with digital manipulation, not just defective goods or misleading advertisements.

Key Terms:

Term	Definition
CCPA	Central Consumer Protection Authority; protects consumer rights and acts against unfair trade practices
Dark Patterns	Manipulative design practices used by digital platforms to influence consumer choices unfairly
Basket Sneaking	Adding extra products, services, or charges to a cart without clear consent
Confirm Shaming	Making users feel guilty for refusing an option
Forced Action	Forcing users to take an extra action before completing what they wanted to do
Interface Interference	Designing the screen in a way that misleads or confuses the user
Trick Questions	Questions framed in a confusing way to make users choose something unintentionally
Informed Consent	Consent given clearly, freely, and after understanding the consequences

Important Points for UPSC:

- CCPA acted against dark patterns on digital platforms.
- PhysicsWallah was fined ₹5 lakh and McAfee was fined ₹1 lakh.
- Dark patterns are treated as unfair trade practices because they manipulate consumer choice.
- The Guidelines for Prevention and Regulation of Dark Patterns, 2023 identify 13 dark patterns.
- Important dark patterns include basket sneaking, confirm shaming, forced action, interface interference, and trick questions.



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- CCPA had earlier issued an advisory asking e-commerce companies and digital platforms to conduct self-audits and remove dark patterns.
- Consumer consent must be explicit, informed, and free from manipulative design.
- Digital platforms can influence user behaviour through design, language, button placement, and hidden charges.
- This marks a shift from traditional consumer protection to digital consumer protection.
- The issue is important because India's digital economy is expanding rapidly and more consumers are using online education, e-commerce, fintech, travel, and subscription platforms.

CROSS-BORDER UPI PAYMENTS IN CAMBODIA — INDIA'S DIGITAL PUBLIC INFRASTRUCTURE GOES GLOBAL

Ministry: Ministry of Finance

Easy Explanation:

NPCI International and ACLEDA Bank launched cross-border UPI payments in Cambodia through KHQR, Cambodia's national QR code system. In the first phase, Indian travellers in Cambodia will be able to make payments using UPI-enabled apps by scanning KHQR codes. This is important because UPI is no longer only a domestic payment system. It is becoming part of India's digital diplomacy and international fintech presence. The launch also creates the base for a future two-way payment corridor between India and Cambodia.

Key Terms:

Term	Definition
UPI	Unified Payments Interface; India's instant digital payment system
NPCI	National Payments Corporation of India; umbrella organisation for retail payments in India
NPCI International	International arm of NPCI that promotes Indian payment systems abroad
ACLEDA Bank	Cambodian bank partnering for UPI payments through KHQR
KHQR	Cambodia's national QR code payment system
Cross-border Payments	Payments made across countries using linked payment systems
Two-way Payment Corridor	Arrangement allowing users from both countries to make digital payments in each other's markets
Digital Public Infrastructure	Digital systems built for public-scale use, such as UPI, Aadhaar, DigiLocker, and BHASHINI

Important Points for UPSC:



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- NPCI International and ACLEDA Bank launched cross-border UPI payments in Cambodia through KHQR.
- KHQR is Cambodia's national QR code system.
- The first phase allows Indian travellers in Cambodia to make UPI payments by scanning KHQR codes.
- The launch paves the way for a future two-way payment corridor between India and Cambodia.
- UPI's internationalisation helps Indian tourists, students, business travellers, and small merchants.
- Cross-border UPI reduces dependence on cash, forex cards, and expensive payment intermediaries.
- It strengthens India's Digital Public Infrastructure model at the global level.
- UPI expansion abroad is also a form of fintech diplomacy.
- Cambodia is important for India's Act East engagement and ASEAN outreach.
- The move can support tourism, trade, people-to-people movement, and easier small-value payments between India and Cambodia.

DISTRICT DOMESTIC PRODUCT GUIDELINES — DISTRICT-LEVEL ECONOMIC DATA

Ministry: Ministry of Statistics & Programme Implementation

Easy Explanation:

The National Statistics Office released uniform guidelines for compiling District Domestic Product estimates with the new base year 2022–23. District Domestic Product is like GDP, but at the district level. It helps us understand how much economic activity is happening in each district. Until now, different States used different methods, so comparison was difficult. A uniform guideline will help States and Union Territories prepare district-level economic data in a more consistent and comparable way.

Key Terms:

Term	Definition
District Domestic Product	Total value of goods and services produced within a district
GDDP	Gross District Domestic Product; gross economic output of a district
NDDP	Net District Domestic Product; GDDP after deducting depreciation
Per Capita Income	Average income per person in a district
Base Year	Reference year used for comparing economic data over time
Bottom-up Approach	Estimating district income using district-level data wherever available
Top-down Approach	Allocating State-level estimates to districts using suitable indicators





NSO	National Statistics Office under MoSPI
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Important Points for UPSC:

- The guidelines use the revised base year 2022–23.
- The aim is to create a uniform framework for District Domestic Product estimates across States and Union Territories.
- The guideline covers GDDP, NDDP, and Per Capita Income at the district level.
- A bottom-up approach is preferred wherever district-level data is available.
- Where district-wise data is not available, a top-down approach with suitable allocation indicators can be used.
- At present, 26 States and Union Territories compile District Domestic Product estimates.
- Comparable district-level data can help in decentralized planning.
- It can help identify regional inequality within a State.
- Reliable district-level data can improve evidence-based policymaking.
- Better DDP estimates can help States improve their statistical systems and planning capacity.

INDIA–UK CRITICAL MINERALS GLOBAL SUPPLY CHAIN OBSERVATORY**Ministry: Ministry of Mines****Easy Explanation:**

India and the United Kingdom launched the India–UK Critical Minerals Global Supply Chain Observatory in New Delhi. Critical minerals are minerals that are essential for modern technologies but have supply risks. They are needed for electric vehicles, batteries, solar panels, wind energy, semiconductors, defence systems, and advanced manufacturing. The Observatory will monitor global critical mineral supply chains, identify risks, generate market intelligence, and help policymakers and industry make informed decisions.

Key Terms:

Term	Definition
Critical Minerals	Minerals essential for strategic sectors but vulnerable to supply disruption
Supply Chain Resilience	Ability to continue supply even during shocks or disruptions
National Critical Mineral Mission	India's mission to secure critical mineral supply chains
Global Supply Chain Observatory	Platform to monitor, analyse, and generate intelligence on global supply chains



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TEXMiN	Technology Innovation in Exploration & Mining Foundation at IIT (ISM) Dhanbad
IIT (ISM) Dhanbad	Indian Institute of Technology (Indian School of Mines), Dhanbad
University of Cambridge	UK university partnering in the Observatory
Market Intelligence	Data and analysis used to understand prices, risks, sources, and supply trends

Important Points for UPSC:

- The Observatory was launched by India's Union Minister of Coal and Mines and the UK Foreign Secretary.
- It is a joint initiative involving TEXMiN, IIT (ISM) Dhanbad, and the University of Cambridge.
- The initiative was announced during India–UK Prime Ministers' bilateral engagement in October 2025.
- It was formalised through a Research Collaboration Agreement in March 2026.
- The Observatory will monitor global critical mineral supply chains.
- It will help identify supply risks and disruptions.
- It will generate market intelligence for policymakers, industry, and researchers.
- Critical minerals are important for clean energy transition, electric mobility, advanced manufacturing, emerging technologies, and strategic sectors.
- The initiative supports India's National Critical Mineral Mission.
- It also reflects India's effort to work with trusted partners for resilient and diversified mineral supply chains.

PM SURYA GHAR — 75 LAKH ROOFTOP SOLAR HOUSEHOLDS TARGETED BY DECEMBER 2026

Ministry: Ministry of New and Renewable Energy

Easy Explanation:

The government said that PM Surya Ghar: Muft Bijli Yojana has crossed 40 lakh beneficiary households within two years. The target is to reach 75 lakh households by December 2026 and eventually scale up to 1 crore rooftop solar households. The scheme supports domestic rooftop solar installation so that households can generate their own electricity, reduce power bills, and contribute to clean energy. A new Utility-Linked Aggregation model has also been introduced to speed up adoption, especially among underserved households.

Key Terms:

Term	Definition
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PM Surya Ghar: Muft Bijli Yojana	Government scheme to promote rooftop solar among households
Rooftop Solar	Solar panels installed on rooftops to generate electricity
Utility-Linked Aggregation Model	Model where electricity utilities help aggregate and implement rooftop solar installations
DISCOM	Distribution company responsible for supplying electricity to consumers
Residential Solar	Solar power systems installed for household use
Battery Energy Storage System	System that stores solar power for later use
Model Solar Village	Village-level model to demonstrate widespread solar adoption
Non-fossil Capacity	Electricity generation capacity from non-fossil sources like solar, wind, hydro, and nuclear

Important Points for UPSC:

- PM Surya Ghar: Muft Bijli Yojana was launched on 13 February 2024.
- The scheme has an outlay of ₹75,021 crore.
- It has crossed 40 lakh beneficiary households within two years.
- The target is to reach 75 lakh households by December 2026.
- More than 65 lakh applications are already in the pipeline.
- More than 33 lakh rooftop systems had been installed as of May 2026, adding over 12 GW capacity.
- The scheme aims to eventually scale to 1 crore rooftop solar households.
- The Utility-Linked Aggregation model has been introduced to accelerate adoption among underserved households.
- Around 30 lakh rooftop solar installations have been planned under this model across States.
- More than ₹22,750 crore in subsidies has been disbursed.
- Over 17 lakh households have achieved zero electricity bills.
- Rooftop solar can reduce household electricity bills, reduce pressure on DISCOMs, and support India's clean energy transition.





FLEX-FUEL PASSENGER VEHICLE — ETHANOL, FARMERS & ENERGY SECURITY

Ministry: Ministry of Petroleum & Natural Gas

Easy Explanation:

The Petroleum Minister launched the first flex-fuel passenger vehicle. A flex-fuel vehicle can run on petrol blended with higher levels of ethanol. This is important for India because ethanol blending can reduce crude oil imports, save foreign exchange, lower emissions, and create additional income for farmers. PIB also mentioned that E85 rollout has started across 48 retail outlets of public sector oil marketing companies. E85 means fuel containing up to 85% ethanol and 15% petrol.

Key Terms:

Term	Definition
Flex-Fuel Vehicle	Vehicle that can run on petrol blended with high levels of ethanol
E85	Fuel blend containing up to 85% ethanol and 15% petrol
Ethanol Blending	Mixing ethanol with petrol to reduce fossil fuel use
Oil Marketing Companies	Companies that market and sell petroleum products, such as IndianOil, BPCL, and HPCL
Biofuel	Fuel produced from biological sources like sugarcane, maize, agricultural waste, or biomass
Energy Security	Reliable and affordable access to energy without excessive dependence on imports
Foreign Exchange Savings	Saving foreign currency by reducing imports
Farm-to-Fuel Economy	Using agricultural produce or residue to produce fuel, creating income for farmers

Important Points for UPSC:

- India launched its first flex-fuel passenger vehicle.
- E85 rollout has started across 48 retail outlets of public sector oil marketing companies.
- E85 allows a much higher ethanol share than normal petrol-ethanol blends.
- Flex-fuel vehicles can help reduce India's dependence on imported crude oil.
- Ethanol blending can save foreign exchange because India imports a large share of its crude oil.
- The policy also links energy security with farmer income.



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- If agricultural produce and residues are used for ethanol, farmers can get an additional market.
- Ethanol blending can reduce vehicular emissions compared to pure fossil fuel use.
- India has already been pushing ethanol blending through the Ethanol Blended Petrol programme.
- A major challenge is to ensure enough ethanol supply without harming food security or increasing crop-water stress.
- Feedstock choice matters: sugarcane-based ethanol can raise water-use concerns, while second-generation ethanol from agricultural residue is more sustainable.
- Flex-fuel adoption will also require vehicle compatibility, fuel availability, consumer acceptance, and pricing support.

JAI PRAKASH NARAYAN BIRD SANCTUARY — INDIA'S 100TH RAMSAR SITE

Ministry: Prime Minister's Office / Ministry of Environment, Forest and Climate Change

Easy Explanation:

Jai Prakash Narayan Bird Sanctuary, also known as Surha Tal, in Ballia district of Uttar Pradesh has been designated as India's 100th Ramsar site. A Ramsar site is a wetland of international importance under the Ramsar Convention. Wetlands are important because they support birds, recharge groundwater, control floods, store carbon, and protect biodiversity. This site is especially important for avifaunal biodiversity, including migratory and resident birds.

Key Terms:

Term	Definition
Ramsar Site	Wetland recognised as internationally important under the Ramsar Convention
Ramsar Convention	International treaty for conservation and wise use of wetlands
Wetland	Area where water covers the soil permanently or seasonally
Surha Tal	Local name associated with Jai Prakash Narayan Bird Sanctuary
Avifaunal Biodiversity	Diversity of bird species in an area
Migratory Birds	Birds that move seasonally between regions for breeding, feeding, or climate reasons
Wise Use	Sustainable use of wetlands while maintaining their ecological character
Ecosystem Services	Benefits provided by ecosystems, such as flood control, water purification, and carbon storage

Important Points for UPSC:

- Jai Prakash Narayan Bird Sanctuary is located in Ballia district of Uttar Pradesh.



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- It is also known as Surha Tal.
- It has been designated as India's 100th Ramsar site.
- The site is rich in avifaunal biodiversity.
- It attracts both migratory and resident birds.
- Ramsar sites are wetlands of international importance.
- The Ramsar Convention promotes conservation and wise use of wetlands.
- Wetlands act as natural sponges by absorbing excess water and helping in flood control.
- Wetlands help recharge groundwater and maintain local water cycles.
- They also support fisheries, agriculture, tourism, and local livelihoods.
- Wetlands are important carbon sinks and help in climate regulation.
- Major threats to wetlands include encroachment, pollution, invasive species, excessive tourism, and changes in water flow.

G-SEC MARKET & FPI REFORMS — DEEPENING INDIA'S FINANCIAL MARKETS

Ministry: Ministry of Finance

Easy Explanation:

The government announced measures to deepen the Government Securities market and facilitate greater Foreign Portfolio Investment in the equity segment. Government Securities, or G-Secs, are debt instruments issued by the government to borrow money. A deeper G-Sec market helps the government borrow more efficiently, improves liquidity, and supports better price discovery. Facilitating FPI in equity can bring foreign capital into Indian companies and markets, but it also requires careful regulation because such flows can be volatile.

Key Terms:

Term	Definition
G-Sec	Government Security; debt instrument issued by the government
Bond Market	Market where debt instruments are issued and traded
Yield	Return earned by an investor on a bond
Liquidity	Ease with which an asset can be bought or sold without major price change
Price Discovery	Process by which market prices are determined through demand and supply



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FPI	Foreign Portfolio Investment; foreign investment in shares, bonds, and financial assets
Equity Segment	Stock market segment dealing with ownership shares of companies
Capital Market Reform	Policy change aimed at improving efficiency, depth, transparency, and participation in financial markets

Important Points for UPSC:

- Government Securities are used by the government to borrow money from the market.
- A deep G-Sec market helps in efficient public borrowing.
- Better liquidity in G-Secs can reduce borrowing costs and improve market confidence.
- G-Sec yields act as benchmarks for pricing other loans and bonds in the economy.
- A stronger bond market can reduce excessive dependence on bank lending.
- Greater FPI participation in equity markets can bring more capital into Indian companies.
- FPI inflows can improve market depth, but they can also reverse quickly during global uncertainty.
- Capital market reforms need a balance between attracting foreign investment and maintaining financial stability.
- India's financial market development is important for infrastructure financing, corporate borrowing, and long-term investment.
- The reform is part of the broader effort to make Indian financial markets deeper, more liquid, and globally attractive.

INDIGENOUS SECOND-GENERATION DIESEL-EQUIVALENT BIOFUEL TECHNOLOGY

Ministry: Ministry of Science & Technology

Easy Explanation:

The Technology Development Board under the Department of Science & Technology has supported Greenjoules Private Limited, Pune, for commercialising indigenous second-generation diesel-equivalent biofuel technology. This project aims to produce advanced biofuels from agricultural waste and agro-processing residues. The main idea is to convert waste into fuel. This can reduce dependence on imported fossil fuels, support India's net-zero goals, and create a circular economy where farm waste becomes an energy resource.

Key Terms:

Term	Definition
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| Click to Connect Now.



Second-Generation Biofuel	Biofuel made from non-food biomass such as agricultural residue, waste, or lignocellulosic material
Diesel-equivalent Biofuel	Biofuel that can act as a substitute or blend for diesel-like applications
Technology Development Board	Statutory body under DST that supports commercialisation of indigenous technologies
Greenjoules Private Limited	Pune-based company supported for this biofuel project
Agricultural Waste	Crop residue and other farm waste that can be converted into useful products
Agro-processing Residue	Waste generated during processing of agricultural products
Circular Economy	Economic model where waste is reused as a resource
Waste-to-Wealth	Converting waste materials into economically useful products

Important Points for UPSC:

- The project is supported by the Technology Development Board under the Department of Science & Technology.
- The company supported is Greenjoules Private Limited, Pune.
- The project is titled “Manufacturing of 2nd Generation Diesel Equivalent Biofuel.”
- It aims to establish a commercial-scale facility for producing advanced biofuels.
- The feedstock will come from agricultural waste and agro-processing residues.
- Second-generation biofuels are better than first-generation biofuels because they do not directly depend on food crops.
- This can help reduce stubble burning and agricultural waste disposal problems.
- Diesel-equivalent biofuels can help reduce fossil fuel dependence in transport and industrial sectors.
- The project supports India’s energy security and net-zero aspirations.
- It also fits into the waste-to-wealth mission and circular economy approach.

AMAZON FUTURE ENGINEER PROGRAM IN EMRSs — DIGITAL SKILLING FOR TRIBAL STUDENTS

Ministry: Ministry of Tribal Affairs

Easy Explanation:

The National Education Society for Tribal Students signed an MoU with Learning Links Foundation to implement the Amazon Future Engineer Program in Eklavya Model Residential Schools. The programme aims to introduce tribal students to computer science, coding, artificial intelligence, and digital problem-solving. This matters



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because many tribal students face digital access gaps. The programme tries to bring future-ready skills to EMRS students so that they are not left behind in the technology-driven economy.

Key Terms:

Term	Definition
NESTS	National Education Society for Tribal Students; manages Eklavya Model Residential Schools
EMRS	Eklavya Model Residential School for tribal students
Amazon Future Engineer Program	Programme focused on computer science and digital skilling
Learning Links Foundation	Organisation partnering with NESTS for implementation
Digital Divide	Gap between people who have access to digital tools and those who do not
Computational Thinking	Problem-solving method using logic, patterns, and step-by-step reasoning
Coding	Writing instructions for computers using programming languages
AI Literacy	Basic understanding of artificial intelligence and its uses

Important Points for UPSC:

- NESTS signed an MoU with Learning Links Foundation.
- The MoU is for implementing the Amazon Future Engineer Program in EMRSs.
- EMRSs are meant to provide quality residential education to tribal students.
- The programme will help tribal students learn computer science and digital skills.
- It can expose students to coding, computational thinking, artificial intelligence, and technology-based problem-solving.
- The initiative is important because tribal students often face unequal access to digital resources.
- Digital skilling can improve educational and career opportunities for students from Scheduled Tribe communities.
- This is an example of partnership between government institutions and non-government/private ecosystem actors.
- It supports inclusive education by taking advanced skills to underserved communities.
- The programme can help reduce the digital divide in tribal education.



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INDIA'S BIODIVERSITY — COMMITMENTS AND ACHIEVEMENTS

Ministry: PIB Backgrounder / Ministry of Environment, Forest and Climate Change

Easy Explanation:

The PIB backgrounder highlighted India's biodiversity commitments and achievements. India is one of the world's mega-biodiverse countries and has a wide variety of forests, wetlands, wildlife, coastal ecosystems, grasslands, and traditional ecological knowledge. Biodiversity is important because it supports food security, water security, climate resilience, livelihoods, and disaster protection. India's biodiversity policy is based on legal frameworks, international commitments, protected areas, community participation, and local action.

Key Terms:

Term	Definition
Biodiversity	Variety of life forms, including plants, animals, microorganisms, and ecosystems
Mega-biodiverse Country	Country with exceptionally high biological diversity
Biological Diversity Act	Indian law for conservation, sustainable use, and benefit-sharing of biological resources
National Biodiversity Authority	Statutory body under the Biological Diversity Act
Biodiversity Management Committee	Local body that helps document and conserve local biodiversity
People's Biodiversity Register	Local register documenting biological resources and traditional knowledge
Protected Area	Area legally protected for wildlife and ecosystem conservation
Ramsar Site	Wetland of international importance under the Ramsar Convention

Important Points for UPSC:

- India is one of the world's mega-biodiverse countries.
- Biodiversity conservation is linked with food security, water security, climate adaptation, and livelihood protection.
- India's biodiversity governance is based on the Biological Diversity Act.
- The National Biodiversity Authority plays an important role in biodiversity regulation and benefit-sharing.
- Biodiversity Management Committees help bring local communities into biodiversity governance.
- People's Biodiversity Registers document local biological resources and traditional knowledge.
- India follows a community-linked model of conservation, especially through local institutions and traditional knowledge.



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- Protected areas, national parks, wildlife sanctuaries, conservation reserves, community reserves, and Ramsar sites are important tools of conservation.
- Wetlands are important biodiversity hotspots and also provide flood control, groundwater recharge, and carbon storage.
- Biodiversity loss can happen due to habitat destruction, pollution, invasive alien species, climate change, and overexploitation.
- Biodiversity conservation should not be seen only as wildlife protection; it is also linked to agriculture, medicine, local livelihoods, climate resilience, and disaster risk reduction.
- The backgrounder is useful because it consolidates legal frameworks, local action, and India's international biodiversity commitments in one place.

10 PRELIMS QUESTIONS

Q1. With reference to the India–Myanmar relationship, consider the following statements:

1. Myanmar is India's only ASEAN country with which India shares a land border.
2. The Kaladan Multi-Modal Transit Transport Project connects India's eastern coast with Myanmar and India's North-East.
3. The India–Myanmar–Thailand Trilateral Highway is primarily a maritime connectivity project.

Which of the statements given above is/are correct?

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

Q2. With reference to Comprehensive Economic Partnership Agreements (CEPAs), consider the following statements:

1. A CEPA generally covers only trade in goods and does not cover services or investment.
2. India–Oman CEPA can strengthen India's trade linkage with the Gulf region.
3. Rules of Origin are used to determine whether a product qualifies for preferential tariff treatment under a trade agreement.

Which of the statements given above is/are correct?

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



| Click to Connect Now.



(c) 1 and 3 only

(d) 1, 2 and 3

Q3. Consider the following pairs:

Initiative / Term — Associated Ministry / Institution

1. BHASHINI — Ministry of Electronics and Information Technology
2. MAHA Water Mission — Ministry of Science & Technology and Ministry of Jal Shakti
3. National Sports Tribunal — Ministry of Home Affairs
4. National e-Vidhan Application — Ministry of Parliamentary Affairs

How many of the above pairs are correctly matched?

(a) Only one

(b) Only two

(c) Only three

(d) All four

Q4. With reference to dark patterns on digital platforms, consider the following statements:

1. Dark patterns are design practices that manipulate or mislead users into making choices they may not have made freely.
2. Basket sneaking refers to adding extra products, services, or charges to a user's cart without clear consent.
3. Dark patterns are regulated only under the Information Technology Act and not under consumer protection mechanisms.

Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Q5. With reference to RudraM-II, consider the following statements:

1. It is an indigenously developed air-to-surface missile.
2. It was flight-tested by DRDO and the Indian Air Force.
3. It is primarily a submarine-launched ballistic missile.

Which of the statements given above is/are correct?



| Click to Connect Now.



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

Q6. With reference to cross-border UPI payments in Cambodia, consider the following statements:

1. NPCI International has partnered with ACLEDA Bank for enabling UPI payments through KHQR.
2. KHQR is Cambodia's national QR code payment system.
3. In the first phase, Cambodian citizens in India will be able to make payments using KHQR at Indian UPI merchants.

Which of the statements given above is/are correct?

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

Q7. Consider the following statements regarding India–UK Critical Minerals Global Supply Chain Observatory:

1. It is linked with monitoring and analysing global critical mineral supply chains.
2. It involves TEXMiN, IIT (ISM) Dhanbad and the University of Cambridge.
3. Critical minerals are relevant only for the coal and steel sectors and have no major role in clean energy technologies.

Which of the statements given above is/are correct?

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

Q8. Jai Prakash Narayan Bird Sanctuary was recently in news. With reference to it, consider the following statements:

1. It is located in Uttar Pradesh.
2. It is also known as Surha Tal.
3. It has been designated as India's 100th Ramsar site.
4. Ramsar sites are declared under the Convention on Biological Diversity.

Which of the statements given above are correct?



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

Q9. With reference to PM Surya Ghar: Muft Bijli Yojana, consider the following statements:

1. It promotes rooftop solar installations for households.
2. The scheme was launched in 2024.
3. It is implemented only for commercial and industrial consumers.
4. Rooftop solar can help reduce household electricity bills and support clean energy transition.

Which of the statements given above are correct?

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

Q10. With reference to second-generation biofuels, consider the following statements:

1. They can be produced from agricultural waste and agro-processing residues.
2. They are generally considered better than first-generation biofuels because they do not directly depend on food crops.
3. They can contribute to waste-to-wealth and circular economy approaches.
4. They are produced only from imported crude oil.

Which of the statements given above are correct?

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

ANSWER KEY

1. (a)
2. (b)
3. (c)
4. (a)
5. (a)





6. (a)
7. (a)
8. (a)
9. (a)
10. (b)

EXPLANATIONS

Q1. Myanmar is India's only ASEAN neighbour with a land border. Kaladan connects Kolkata/Sittwe/Mizoram. The Trilateral Highway is a road project, not a maritime project.

Q2. CEPA is broader than a basic goods-only agreement and may include services, investment and mobility. Rules of Origin prevent misuse of tariff benefits.

Q3. BHASHINI is under MeitY. MAHA Water Mission is linked with ANRF/Science & Technology and Jal Shakti. National Sports Tribunal is linked with Youth Affairs and Sports, not Home Affairs. NeVA is linked with Parliamentary Affairs.

Q4. Dark patterns manipulate consumer choices. Basket sneaking means adding items or charges without clear consent. These are also handled under consumer protection mechanisms through CCPA.

Q5. RudraM-II is an indigenous air-to-surface missile tested by DRDO and IAF. It is not a submarine-launched ballistic missile.

Q6. NPCI International and ACLEDA Bank launched UPI payments in Cambodia through KHQR. In the first phase, Indian travellers in Cambodia can use UPI by scanning KHQR codes.

Q7. The Observatory monitors critical mineral supply chains and involves TEXMin, IIT (ISM) Dhanbad and University of Cambridge. Critical minerals are important for EVs, batteries, solar, semiconductors, defence and clean energy.

Q8. Jai Prakash Narayan Bird Sanctuary, also known as Surha Tal, is in Ballia, Uttar Pradesh. It became India's 100th Ramsar site. Ramsar sites come under the Ramsar Convention, not CBD.

Q9. PM Surya Ghar promotes household rooftop solar. It was launched in 2024. It is not limited to commercial and industrial consumers.

Q10. Second-generation biofuels can use agricultural waste and residues. They reduce direct food-versus-fuel conflict and support circular economy. They are not produced from imported crude oil.





2 MAINS QUESTIONS

Q1. “India’s Digital Public Infrastructure is now moving from domestic governance to international diplomacy.” Discuss with reference to UPI internationalisation and BHASHINI.

(150 words)

Expected Points:

- India’s DPI model includes UPI, Aadhaar, DigiLocker, ONDC, BHASHINI, etc.
- UPI’s expansion to Cambodia through KHQR shows that India’s payment systems are becoming international tools.
- Cross-border UPI helps travellers, small merchants, students, and businesses by reducing dependence on cash, forex cards, and costly intermediaries.
- It also strengthens India’s fintech presence in the Global South and ASEAN.
- BHASHINI shows the domestic inclusion side of DPI by reducing the language barrier in governance and investment access.
- BHASHINI–DPIIT MoU can help entrepreneurs and investors access investment-related services in Indian languages.
- Together, UPI and BHASHINI show that DPI is not just technology; it is a governance model.
- Challenge: data security, interoperability, trust, cyber risks, and digital exclusion must be addressed.
- Conclusion: India’s DPI can become a soft-power tool if it remains inclusive, secure, low-cost, and people-centric.

Q2. India’s energy transition requires not only renewable energy expansion but also diversification of fuels and critical mineral security. Examine.

(250 words)

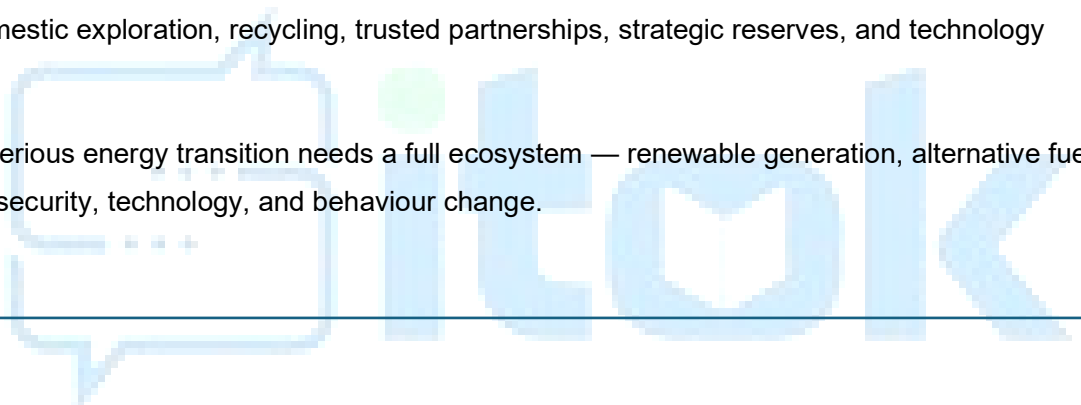
Expected Points:

- India’s energy transition cannot depend only on solar and wind capacity expansion.
- Rooftop solar under PM Surya Ghar helps households generate electricity, reduce power bills, and support clean energy transition.
- The target of 75 lakh rooftop solar households by December 2026 shows decentralised renewable energy push.
- Flex-fuel vehicles and E85 rollout show another pathway: reducing petrol dependence through ethanol blending.





- Ethanol blending can reduce crude oil imports, save foreign exchange, lower emissions, and create income opportunities for farmers.
- However, ethanol policy must balance energy goals with food security and water use, especially if sugarcane-based feedstock is overused.
- Second-generation biofuels are important because they use agricultural waste and agro-processing residues instead of food crops.
- This supports waste-to-wealth, circular economy, stubble management, and fossil fuel substitution.
- Critical minerals are essential for batteries, electric vehicles, solar panels, wind energy, semiconductors, and advanced manufacturing.
- India–UK Critical Minerals Global Supply Chain Observatory shows that India is trying to monitor supply risks and build resilient mineral supply chains.
- Critical mineral security is important because clean energy technologies can create new dependencies if minerals are concentrated in a few countries.
- India needs domestic exploration, recycling, trusted partnerships, strategic reserves, and technology cooperation.
- Conclusion: A serious energy transition needs a full ecosystem — renewable generation, alternative fuels, storage, mineral security, technology, and behaviour change.

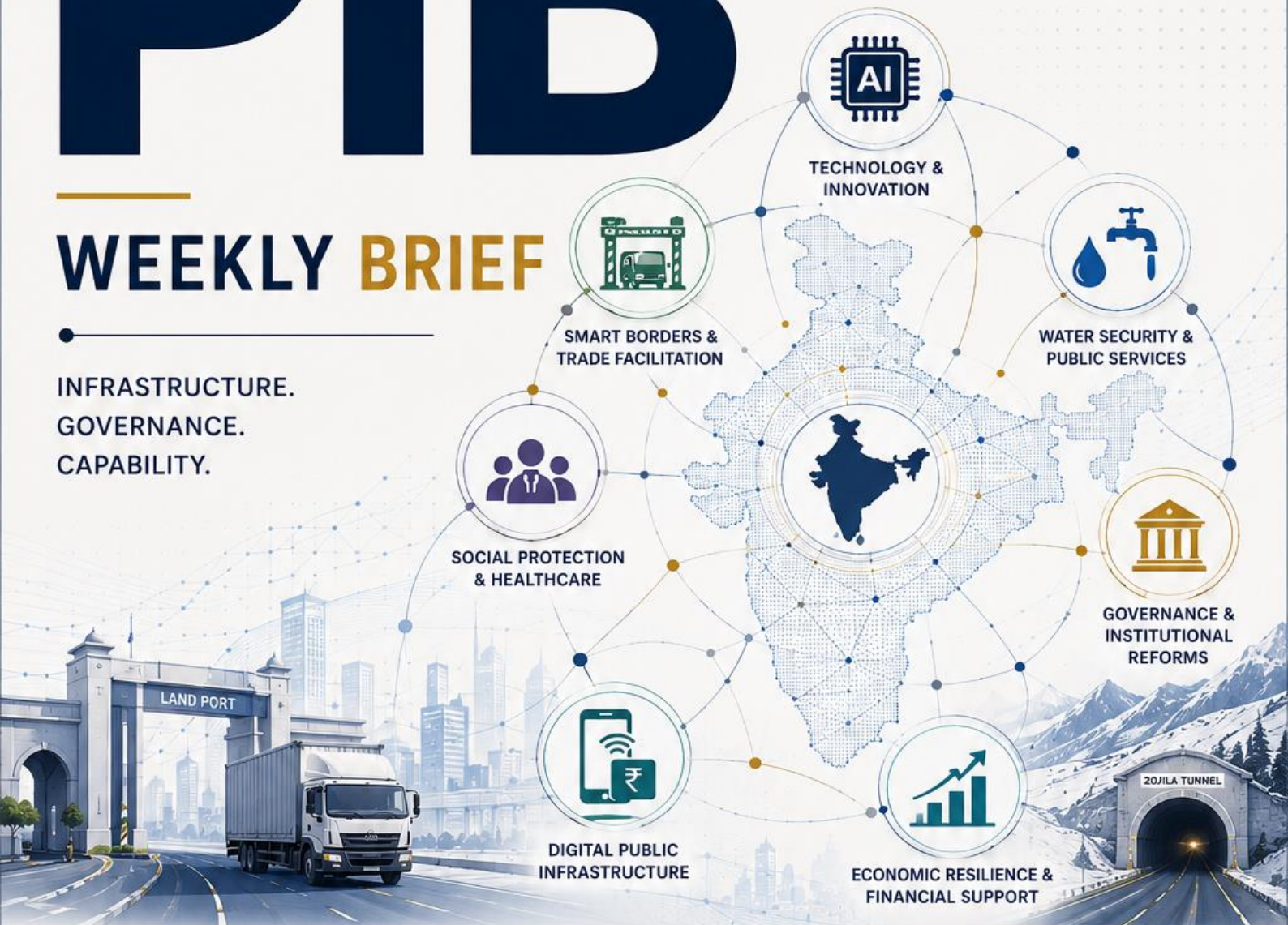


6-12
JUNE 2026

PIB

WEEKLY BRIEF

INFRASTRUCTURE.
GOVERNANCE.
CAPABILITY.



VINIMAY

SMART BORDERS
Seamless Land Port
Management



VARYA

INDIA'S AI VIDEO MODEL
A Leap in Indigenous
AI Innovation



DIGILOCKER

35 CRORE USERS
India's Digital Trust
Infrastructure



ZOJILA TUNNEL

HISTORIC BREAKTHROUGH
All-Weather Connectivity
to Ladakh



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VINIMAY — LAND PORT MANAGEMENT SYSTEM

Ministry: Ministry of Home Affairs

Easy Explanation

Imagine you are a truck driver carrying goods from India into Nepal. Currently, at the border, you have to go to 5 different counters — customs, immigration, security, tax, and inspection — each with their own paper forms, stamps, and queues. It can take hours, sometimes a full day, just to cross. Now imagine all of that is replaced by one digital screen where everything happens at once, your truck's number plate is read automatically by a camera, and 90% of the paperwork simply disappears. That is exactly what VINIMAY does. India launched this Land Port Management System (LPMS) on June 9 to modernise all its land border crossings. India has 15,000+ km of land borders with 7 countries — Bangladesh, Nepal, Bhutan, China, Myanmar, Pakistan, Afghanistan — and currently 15 land ports handle all the trade and people movement. VINIMAY brings customs, immigration, and border security onto one single digital platform so that goods move faster, smuggling is harder to hide, and India's borders become 'smart' — secure but efficient.

Key Terms:

Term	Definition
VINIMAY	Land Port Management System (LPMS) — real-time digital platform for land border operations
LPAI	Land Ports Authority of India — nodal agency under MHA managing land ports
Smart Border	MHA's four-pronged strategy: security, trade facilitation, migration management, connectivity
ANPR	Automatic Number Plate Recognition — enables automated gate operations at land ports
Single Electronic Window	Unified digital clearance replacing multiple agency approvals; reduces processing time
ICP	Integrated Check Post — modern land port facility with all agencies under one roof

Important Points for UPSC:

- India shares 15,106 km land border with 7 countries: Bangladesh, China, Pakistan, Nepal, Myanmar, Bhutan, Afghanistan
- Currently 15 land ports operational; 11 more expected in next 2-3 years — total 26 land ports
- VINIMAY eliminates ~90% paperwork; ANPR-based gates significantly reduce vehicle processing time
- The Smart Border concept has four pillars: border security, trade facilitation, migration management, people-to-people connectivity



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- Land Ports Authority of India (LPAI) set up under the Land Ports Authority of India Act, 2010
- Major ICPs: Attari (Pakistan), Petrapole (Bangladesh), Agartala (Bangladesh), Raxaul (Nepal), Moreh (Myanmar)
- VINIMAY enables forensic data trails — critical for curbing smuggling, illegal immigration, and contraband
- Complements ICIMOD and Neighbourhood First policy — facilitates trade with SAARC nations

WEST ASIA INTER-MINISTERIAL BRIEFING — SUPPLY CHAIN RESILIENCE

Ministry: Ministry of Petroleum & Natural Gas / Ministry of Defence

Easy Explanation

Think about where the petrol in your car comes from. Around 80% of India's crude oil — the raw material for petrol, diesel, cooking gas — is imported from the Middle East (West Asia): Saudi Arabia, UAE, Iraq, Kuwait. Now imagine that region is on fire. Yemen is at war, Iran and Israel are in conflict, and armed groups are attacking ships in the Red Sea and the Gulf. Suddenly those oil tankers cannot move safely. Prices shoot up, India's foreign exchange drains out, petrol becomes expensive, and everything from vegetables to medicines gets costlier because transport costs rise. This is not a hypothetical — it is happening right now. So India's Defence Ministry called a meeting with the Petroleum, External Affairs, Finance, and Home Ministries together to ask: 'How many days of oil do we have stored? Can we get oil from Russia or Norway instead? Are our ports safe? What happens to medicines if supply routes break?' This kind of meeting — where multiple ministries sit together to plan for a crisis before it happens — is called an inter-ministerial group review. It is India treating supply chain security the way it treats military security.

Key Terms:

Term	Definition
IGoM	Inter-Governmental Group on Memorandum — multi-ministry coordination mechanism for crisis response
SPR	Strategic Petroleum Reserve — India's emergency crude oil stockpile; currently 5.33 MT = 67 days
Strait of Hormuz	Critical chokepoint through which ~30% of global oil trade transits; single-point vulnerability
IFC-IOR	Information Fusion Centre – Indian Ocean Region; India's maritime domain awareness hub at Gurugram
Houthi Attacks	Yemen-based Houthi rebels targeting Red Sea commercial shipping since late 2023
Supply Diversification	Reducing dependence on a single supplier; India imports from Saudi, UAE, Iraq, Russia, Norway



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API	Active Pharmaceutical Ingredients — 70% sourced from China; West Asia transit disruption risk
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Important Points for UPSC:

- India's SPR stored at 5 locations: Vizag, Mangalore, Padur, Udupi, Indulkhand — currently 67 days capacity vs target of 90-100 days
- Every \$1/barrel price increase = ~₹4,000 crore additional annual fiscal burden for India
- Suez Canal carries ~12% of global trade; Houthis attacks have significantly disrupted Red Sea shipping since 2023
- India's integrated approach: Energy (oil/gas) + Health (medicines/APIs) + Food (grain reserves) + Defence — treated as unified supply chain security
- IGoM includes Defence, Petroleum, External Affairs, Finance, and Home Ministries — rare multi-ministry coordination
- Russian oil access: Important diversification since Ukraine war 2022, but payment restrictions (Western sanctions) remain a constraint
- India's dependence on both Saudi Arabia (Sunni) and Iran (Shia) requires careful diplomatic balancing
- SPR expansion plan: ₹3,000 crore investment; 2-3 year timeline to reach 90-day target

AYUSHMAN BHARAT PM-JAY — WEST BENGAL JOINS AS 36TH STATE/UT

Ministry: Ministry of Health and Family Welfare

Easy Explanation

Imagine you are a poor family and someone in your house suddenly needs a serious surgery — say a heart operation or a cancer treatment. At a private hospital it could cost ₹3-5 lakh. You don't have that kind of money. Ayushman Bharat PM-JAY is the government's answer to this problem: it gives poor families a health insurance card worth ₹5 lakh per year, which they can use at government and empanelled private hospitals for free. The government pays the hospital on behalf of the family. Launched in 2018, this scheme now covers about 50 crore people — roughly the bottom 40% of India's population. The catch? West Bengal, India's 4th most populous state with over 10 crore people, had refused to join since 2018. They had their own state health scheme called Swasthya Sathi. But on June 8, 2026, West Bengal finally joined, making it the 36th State/UT to come on board. Why does this matter? Because now a West Bengal family can use their Ayushman card in a hospital in Chennai or Delhi too — the coverage travels with them across India.

Key Terms:

Term	Definition
PM-JAY	Pradhan Mantri Jan Arogya Yojana — world's largest government-funded health insurance scheme
Ayushman Bharat	Umbrella programme with two components: PM-JAY (insurance) + HWCs (Health and Wellness Centres)



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₹5 Lakh Cover	Annual health coverage per family for secondary and tertiary hospitalisation
PMJAY-SECC	Beneficiaries identified using Socio-Economic Caste Census 2011 data — ~50 crore people
Swasthya Sathi	West Bengal's own health scheme; state operated this instead of PM-JAY since 2018
Empanelled Hospital	Government or private hospital registered under PM-JAY to provide cashless treatment

Important Points for UPSC:

- PM-JAY launched in 2018 under Ayushman Bharat; targets bottom 40% of India's population — approximately 50 crore beneficiaries
- West Bengal is the 36th State/UT — now only a handful of non-participating states/UTs remain
- West Bengal had its own Swasthya Sathi scheme with ₹5 lakh cover; integration with PM-JAY expands portability — beneficiaries can now access treatment across India
- Portability is a key PM-JAY feature: beneficiaries can access treatment in any empanelled hospital across India
- PM-JAY is implemented by National Health Authority (NHA) — an autonomous body under MoHFW
- Distinction: Ayushman Bharat has TWO components — (1) PM-JAY (insurance), (2) Ayushman Arogya Mandirs/HWCs (previously Health and Wellness Centres — primary care)
- AB-PMJAY has so far enabled 7+ crore hospitalizations; ~₹1 lakh crore+ in claims authorized since 2018

PMSMA — A DECADE OF MATERNAL CARE

Ministry: Ministry of Health and Family Welfare

Easy Explanation

In India, thousands of women used to die every year during pregnancy or childbirth — not because medicine didn't exist, but because nobody checked on them during pregnancy. They never went for a doctor's check-up, nobody monitored their blood pressure or haemoglobin, and by the time something went wrong during delivery, it was too late. PMSMA (Pradhan Mantri Surakshit Matritva Abhiyan) launched in 2016 with a beautifully simple idea: on the 9th of every month, every government health centre in India will provide free check-ups for pregnant women — blood tests, weight check, blood pressure, ultrasound — no excuses, no charges, no appointment needed. Doctors and gynaecologists volunteer to come in on that one day. Over 10 years, more than 6 crore pregnant women have been examined. The scheme completed its 10th anniversary this week. The result? India's Maternal Mortality Rate — the number of women dying per 1 lakh births — has fallen dramatically, from 254 in 2004 to 97 in 2023. PMSMA is a big reason why.

Key Terms:



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Term	Definition
PMSMA	Pradhan Mantri Surakshit Matritva Abhiyan — free ANC on 9th of every month at govt facilities
ANC	Antenatal Care — medical care during pregnancy; includes check-ups, tests, nutrition support
MMR	Maternal Mortality Rate — deaths per 1,00,000 live births; India's MMR dropped from 254 (2004) to 97 (2023)
High-Risk Pregnancy	Pregnancies with complications (anaemia, hypertension, gestational diabetes) identified via PMSMA
SBA	Skilled Birth Attendant — trained professional present at delivery; PMSMA improves referral to SBA
SUMAN	Surakshit Matritva Aashwasan — zero tolerance for preventable maternal/newborn deaths

Important Points for UPSC:

- PMSMA launched on June 9, 2016; provides ANC on the 9th of every month — a fixed, predictable service date for pregnant women
- India's MMR has declined from 254 (2004-06) to 97 (2018-20) — one of the fastest declines globally; SDG target is 70 by 2030
- Over 6 crore antenatal check-ups conducted under PMSMA in 10 years; specialist doctors (gynaecologists, physicians) participate voluntarily
- Scheme covers: minimum one ANC in the 2nd trimester + one in the 3rd trimester; blood tests, BP, weight, haemoglobin check
- PMSMA complements Janani Suraksha Yojana (JSY) which incentivises institutional delivery, and Janani Shishu Suraksha Karyakram (JSSK) for free drugs/transport
- India achieved 93%+ institutional delivery rate (2021 NFHS-5) — significant improvement from 39% (NFHS-3, 2005-06)
- MMR target: SDG Goal 3.1 requires reducing global MMR to less than 70 per 1,00,000 live births by 2030

DEFENCE INVESTITURE CEREMONY 2026 — GALLANTRY AWARDS

Ministry: President's Secretariat / Ministry of Defence

Easy Explanation

Every country has a system to honour its soldiers and civilians who show extraordinary bravery. India has two separate medal systems — one for bravery shown during a war (wartime), and one for bravery shown during peacetime operations like counter-terrorism, anti-naxal operations, or rescue missions. The highest wartime medal is the Param Vir Chakra — India's equivalent of the Victoria Cross or Medal of Honor. Below it are Maha Vir Chakra and Vir Chakra. The highest peacetime bravery medal is the Ashoka Chakra, followed by Kirti Chakra and



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Shaurya Chakra. On June 8, the President of India presented these medals at a formal ceremony — called the Defence Investiture Ceremony — attended by PM Modi. This time, 7 Kirti Chakras (2 given posthumously, meaning the soldier had already died), 15 Vir Chakras, and 29 Shaurya Chakras were awarded. Posthumous awards are particularly poignant — the family of the deceased soldier comes to receive the medal. For UPSC, remembering the two series and their hierarchy — and not mixing up wartime and peacetime medals — is the key.

Key Terms:

Term	Definition
Param Vir Chakra	India's highest wartime gallantry award; awarded for most conspicuous bravery in the face of enemy
Maha Vir Chakra	Second highest wartime gallantry award; awarded for acts of conspicuous gallantry in war
Vir Chakra	Third highest wartime gallantry award; awarded for acts of bravery in battle
Ashoka Chakra	Highest peacetime gallantry award; equivalent to PVC but for non-combat bravery/sacrifice
Kirti Chakra	Second highest peacetime gallantry award; awarded for conspicuous gallantry
Shaurya Chakra	Third highest peacetime gallantry award; awarded for gallantry other than in face of the enemy
Posthumous Award	Award given in honour of a deceased recipient; accepted by next of kin

Important Points for UPSC:

- Gallantry awards in India have TWO series: Wartime (PVC, MVC, VC) and Peacetime (AC, KC, SC) — don't confuse them
- Hierarchy — Wartime: Param Vir Chakra > Maha Vir Chakra > Vir Chakra; Peacetime: Ashoka Chakra > Kirti Chakra > Shaurya Chakra
- Param Vir Chakra (PVC): only 21 recipients in India's history; 14 of them posthumous
- Defence Investiture Ceremony is held twice yearly (Phase I and Phase II); President is Supreme Commander of Armed Forces
- Gallantry awards carry a monthly monetary allowance (pension) for recipients; posthumous recipients' families receive it
- President also confers President's Police Medal for Gallantry, Fire Services Medal, and Correctional Services Medal at separate ceremonies
- Kirti Chakra and Shaurya Chakra can be awarded to civilians and police personnel as well — not just military





INDIAN NAVY EOD OPERATION — MT OLYMPIC LIFE

Ministry: Ministry of Defence

Easy Explanation

Picture a massive oil tanker — the size of four football fields — sailing from Dubai towards Kochi, carrying crude oil. Somewhere near Oman, there is a sudden explosion on the side of the ship. The crew investigates and finds something terrifying: a missile has punched through the hull of the ship, travelled through several steel compartments inside, and come to rest sitting inside a fuel tank — but it has NOT exploded. It is a live missile warhead, sitting inside a tank full of fuel. One wrong move and the entire ship — carrying lakhs of litres of oil — could explode. This is exactly what happened to MT Olympic Life on May 26, 2026. The ship continued sailing to Kochi and informed the Indian Navy. India's Southern Naval Command immediately sent a specialist bomb disposal (EOD — Explosive Ordnance Disposal) team. Over 7 days, using precise diagnostic tools, the team carefully identified exactly how the warhead worked, disabled its detonator, and physically removed it from inside the fuel tank. It then sent the warhead to a laboratory to figure out who fired it — most likely Houthi rebels from Yemen who have been attacking ships in the region. This operation showed India's growing role as the 'policeman' of the Indian Ocean.

Key Terms:

Term	Definition
EOD	Explosive Ordnance Disposal — specialist military unit trained to safely identify and neutralize unexploded munitions
IFC-IOR	Information Fusion Centre – Indian Ocean Region; India's maritime domain awareness hub; triggered the Navy response
VLCC	Very Large Crude Carrier — massive oil tanker capable of carrying 2M+ barrels; MT Olympic Life category
Southern Naval Command	Kochi-based command; primary Navy command for Indian Ocean operations
Gulf of Oman	Sea area where the hull explosion occurred; strategic maritime route for energy trade
Warhead Forensics	Scientific analysis of recovered munition to determine origin, type, and launch platform
UNCLOS	UN Convention on the Law of the Sea — legal framework for maritime operations and jurisdiction

Important Points for UPSC:

- MT Olympic Life is a Marshall Islands-flagged VLCC; explosion occurred ~60 nautical miles east of Muscat on May 26, 2026 — West Asia maritime security context



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- IFC-IOR (at Gurugram) triggered the coordinated response — it is India's real-time maritime domain awareness centre covering the entire Indian Ocean Region
- The warhead penetrated the hull, traversed multiple structural compartments, and lodged inside a bunker fuel tank without detonating — extreme risk scenario
- Operation took 7+ days; EOD team used advanced diagnostics to isolate detonation mechanism before removal
- Recovered warhead sent for forensic examination — important for identifying the source of the attack (likely Houthi missile)
- Demonstrates India's growing maritime security role: 'Net Security Provider' in the Indian Ocean Region — a stated foreign policy objective
- India has deployed warships in the Arabian Sea since late 2023 for anti-piracy/Houthi attack response — Operation Sankalp-style continuity
- VLCC attacks are a serious threat to India's energy security: India imports ~80% crude from Gulf; most transits through this zone

VARYA — INDIA'S INDIGENOUS AI VIDEO MODEL

Ministry: Ministry of Electronics & IT (MeitY) / IndiaAI Mission

Easy Explanation

You may have seen AI tools like Sora or Veo that can generate a video just from a text description — type 'a farmer dancing in a wheat field at sunset' and it creates the video automatically. But these tools are extremely expensive — generating one second of video can cost ₹8-10 (roughly \$0.10). For a small Indian business owner who wants to make a 30-second advertisement, that's ₹300 just for the video — unaffordable at scale. Now India has built its own version called Varya, launched on June 12 by a startup called Avataar. Varya generates the same quality video for just ₹0.48 per second — 20 times cheaper. How? Using a technique called 'distillation' — think of it like making a concentrated summary of a very long textbook. The original AI model took 50 processing steps to make a video; Varya figured out how to do the same thing in just 4 steps. More importantly, Varya understands Indian culture — it can generate images of Diwali celebrations, regional food, local clothing, and Indian faces correctly, unlike foreign models that often get Indian contexts wrong. This was built using cheap computer power that the government provided through the IndiaAI Mission — India's ₹10,000 crore push to build its own AI technology.

Key Terms:

Term	Definition
IndiaAI Mission	₹10,371 crore government initiative to build India's AI ecosystem; compute, data, startups, skilling
Foundation Model	Large AI model trained on vast data; forms the base for multiple applications (like GPT, Gemini)



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Distillation	AI technique: compresses a large model's capabilities into a smaller, faster, cheaper version
Varya	India's first indigenous distilled video AI model; 14-billion parameter; by Avataar under IndiaAI Mission
GPU Compute	Graphics Processing Units — hardware required for AI model training; IndiaAI Mission provides subsidised access
MeitY	Ministry of Electronics and Information Technology — nodal ministry for IndiaAI Mission
Frugal Innovation	High-quality output at drastically lower cost — India's AI development philosophy

Important Points for UPSC:

- IndiaAI Mission (approved 2024): ₹10,371 crore; seven pillars including AI compute, datasets, application development, skilling, safety, startups, international partnerships
- Varya is a 14-billion parameter model; reduces video generation from 50 steps → 4 steps via distillation technique
- Cost: ₹0.48/second vs global rivals charging \$0.10+/second — makes video AI accessible at India's population scale
- Avataar was one of 12 startups selected by IndiaAI Mission to build indigenous foundation AI capabilities using subsidised GPU compute
- In exchange for subsidised compute, startups must publicly release their models — open-source requirement

Varya is optimised for India's cultural context: regional festivals, clothing, food, public spaces — not a Western-centric model

- India's AI strategy: Rather than competing with US/China on frontier models, India focuses on application layers, affordability, and cultural relevance
- Connects to: National Data Governance Framework, Digital India, Semiconductor Mission — all part of India's tech sovereignty push

BRICS AGRICULTURE MINISTERS' MEETING — INDORE

Ministry: Ministry of Agriculture & Farmers Welfare

Easy Explanation

BRICS is a group of five major developing countries — Brazil, Russia, India, China, South Africa. Together they produce about 40% of the world's food. India is currently the chairperson of BRICS (2024-25), which means it gets to host meetings and set the agenda. This week, Agriculture Ministers from all five countries met in Indore — India's first time hosting such a meeting. The discussion had two important layers. First, the immediate problem: the Russia-Ukraine war has disrupted global wheat and sunflower oil supplies — both Russia and Ukraine are massive food exporters — so food prices have risen globally and poorer countries are struggling. BRICS needs to coordinate food security responses. Second, the bigger opportunity: India wants to push millets — ancient grains



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like jowar, bajra, ragi — as the answer to global food and climate challenges. Millets need very little water, grow in poor soil, are highly nutritious, and are climate-resilient. India successfully made 2023 the International Year of Millets at the UN, and now wants BRICS countries to adopt millet farming. India also proposed a BRICS seed bank — a shared collection of crop seeds that countries can use if their own crops fail due to disease or climate disaster.

Key Terms:

Term	Definition
BRICS	Brazil, Russia, India, China, South Africa — major emerging economies bloc; India chairs 2024-25
Food Security	Availability, accessibility, utilisation, and stability of food supply — BRICS collective concern
Millet Promotion	India's focus: BRICS adopting millets (IYM 2023 legacy) as climate-resilient, nutritious crops
Post-Harvest Loss	Food lost between harvest and consumption; India's estimated loss ~15-20% — technology can reduce this
Agri-Tech Cooperation	Sharing drone technology, precision farming, AI in agriculture among BRICS members
BRICS Agricultural Research Network	India's proposal: joint R&D for crop varieties, pest management, climate adaptation

Important Points for UPSC:

- BRICS Agriculture Ministers have met annually since 2010; the 16th meeting in Indore is under India's chairship — India sets the agenda and priorities
- India's push: Millets as food security crop — IYM 2023 (International Year of Millets) legacy being extended through BRICS multilateral advocacy
- BRICS nations collectively account for ~40% of global agricultural output and ~30% of global arable land
- Russia-Ukraine conflict impact: Both are major grain exporters; BRICS food security discussions have geopolitical dimension
- India proposed BRICS Seed Bank cooperation — important for crop diversity and food security insurance
- Climate-resilient agriculture: BRICS nations face diverse climate challenges — India (monsoon variability), Brazil (Amazon), Russia (permafrost), China (water stress)
- Agricultural cooperation distinct from BRICS Tourism/Finance — shows BRICS becoming a substantive multi-sector platform, not just economic

INDIA-NEPAL CROSS-BORDER REMITTANCE MECHANISM

Ministry: Ministry of Finance / Reserve Bank of India



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Easy Explanation

Imagine a young man from a village in Nepal who works at a construction site in Delhi. Every month he wants to send ₹5,000 back to his family in Kathmandu. Until now, he had two bad options. Option 1: Walk to a Western Union or money transfer shop, pay a 5-7% fee (₹300-350 gone immediately), and wait 2-3 days for the money to reach home. Option 2: Give cash to a trusted friend travelling to Nepal — called hawala — which is informal, sometimes illegal, and has no safety net if the money goes missing. Now India and Nepal have launched a direct digital remittance system that links India's UPI (the same system you use for Google Pay or PhonePe) with Nepal's payment system. The Nepali worker can now send money home in seconds, from his phone, at a fraction of the old cost. Why is this a big deal? Nepal's economy is unusually dependent on money sent home by its workers abroad — it makes up about 22-25% of Nepal's entire GDP. India is the biggest source of those remittances. By making this flow cheaper, faster, and formal, both countries benefit: Nepal gets more money home, India strengthens financial ties with a key neighbour, and both governments can track flows properly instead of losing them to informal channels.

Key Terms:

Term	Definition
Remittance	Money sent by a worker in one country to their home country; critical for Nepal's economy (~25% of GDP)
UPI	Unified Payments Interface — India's real-time payment system; already linked with several countries
Cross-Border Payments	Financial transactions between two countries; regulated by central banks of both nations
Hawala	Informal money transfer system operating outside formal banking channels; risk of money laundering
NPCI International	National Payments Corporation of India's global arm — facilitates UPI adoption in foreign countries
Remittance Cost	G20 target: reduce cross-border remittance cost to below 3% by 2030 (currently ~5-7% globally)

Important Points for UPSC:

- Nepal's remittance dependency: Remittances constitute ~22-25% of Nepal's GDP — one of the highest globally; India is the largest source
- India-Nepal open border (Treaty of Peace and Friendship 1950) allows free movement; financial connectivity lagged behind physical connectivity
- UPI international expansion: Already linked with UAE, Singapore, Bhutan, France, Sri Lanka, Mauritius — Nepal is a significant addition
- G20 Financial Inclusion Agenda (under India's G20 Presidency 2023): Reducing remittance costs was a key deliverable



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- Hawala reduction: Formal channels reduce money laundering risk, improve tax compliance, and provide sender/receiver data for economic planning
- FATF (Financial Action Task Force) compliance: Nepal has had FATF concerns; formal remittance channels help strengthen Nepal's AML framework
- Connects to Neighbourhood First Policy: Financial integration with Nepal complements infrastructure (Raxaul-Kathmandu rail), energy (power trade), and people-to-people ties

NITI AAYOG — 11TH GOVERNING COUNCIL MEETING

Ministry: NITI Aayog / Prime Minister's Office

Easy Explanation

For 65 years, India had a Planning Commission — a body in Delhi that would decide what every state should do, how much money each state gets, and what targets each state must meet. States had very little say. It was top-down, centralised planning. In 2015, PM Modi scrapped it and created NITI Aayog — not as a commander, but as a think-tank, a policy advice body, where the Centre and states are meant to sit together and figure out India's future. The Governing Council is NITI Aayog's biggest meeting — the PM chairs it and all Chief Ministers attend. It is held roughly once a year, and it is essentially India's most senior cooperative policy meeting. This week's 11th Governing Council meeting had two historically notable things: (1) For the first time EVER, all 28 Chief Ministers attended — in previous years, opposition-ruled states like West Bengal or Delhi often boycotted it. (2) The theme was 'Inclusive Human Development for Viksit Bharat@2047' — meaning, as India sprints to become a developed nation by its 100th independence anniversary, are we leaving people behind? The four pillars — skills, employment, health, and equity — are essentially India asking: growth for whom?

Key Terms:

Term	Definition
NITI Aayog	National Institution for Transforming India; replaced Planning Commission on January 1, 2015
Governing Council	Apex body of NITI Aayog; comprises PM (Chair), all CMs, LGs of UTs, and Union Ministers
Cooperative Federalism	Centre and states working together as equal partners; NITI Aayog's foundational principle
Viksit Bharat@2047	India's vision to become a developed nation by 2047 — centenary of independence
Planning Commission	Replaced by NITI Aayog; was a top-down planning body unlike NITI's advisory/think-tank role
Demographic Dividend	India's young population (70 crore below 25 years) as an economic asset — requires skilling



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Important Points for UPSC:

- NITI Aayog formed on January 1, 2015 via Cabinet resolution; Planning Commission was established in 1950 — replaced after 65 years
- Key distinction: Planning Commission allocated resources (top-down); NITI Aayog is a think-tank/advisory body — resource allocation is with Finance Ministry
- Governing Council composition: PM (Chairperson), Vice Chairman, Full-time Members, Ex-officio Members (Cabinet Ministers), Special Invitees, CEO
- 11th meeting was historic: first time ALL 28 state Chief Ministers participated — reflects cooperative federalism in action
- Four pillars of 2026 meeting directly map to SDGs and India's Human Development Index challenges
- India's HDI rank: 134 out of 193 (2023-24); Viksit Bharat target requires significant improvement in health, education, and income indicators
- NITI Aayog also has a 15-Year Vision, 7-Year Strategy, and 3-Year Action Agenda — distinguishing it from the old 5-Year Plans

JAL JEEVAN MISSION 2.0 — REFORM-LINKED MoUs

Ministry: Ministry of Jal Shakti

Easy Explanation

In 2019, India launched Jal Jeevan Mission with an ambitious goal: give every rural home a tap water connection by 2024. The government spent lakhs of crores laying pipes, installing taps, and connecting villages. By 2024, it declared that 75%+ of rural homes now have tap connections — a remarkable achievement on paper. But here was the problem: many of those taps were not actually working. Pipes were laid but water wasn't flowing. Taps were installed but not connected to a water source. Villages had the tap fitting on the wall but nothing came out when you turned it. This gap — between a 'connection' (tap installed) and a 'functional connection' (water actually coming out) — became the central issue. JJM 2.0 is India's course correction. Instead of just counting taps, it now counts whether water is actually reaching families — at least 55 litres per person per day. And here is the innovation: states can only get full central funding if they sign an MoU (agreement) promising specific reforms — like charging people a small user fee for water (so they value it and maintain it), setting up village-level water committees, and creating maintenance plans for the pipes. This week, Sikkim, Manipur, and Bihar signed these MoUs. It is India moving from building infrastructure to making infrastructure actually work.

Key Terms:

Term	Definition
JJM 1.0	Jal Jeevan Mission original (2019): target — every rural household gets tap water connection by 2024
JJM 2.0	Jal Jeevan Mission Phase 2: Focus on sustainability, water quality, functionality, and community ownership



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Har Ghar Jal	JJM's tagline — every household gets functional tap water connection (FHTC)
FHTC	Functional Household Tap Connection — not just installed, but actually delivering 55 lpcd (litres per capita per day)
Reform-Linked MoU	State signs agreement committing to specific governance reforms in water sector to access central funds
O&M Framework	Operations & Maintenance — long-term plan for keeping water infrastructure functional post-installation

Important Points for UPSC:

- JJM 1.0 (2019): India went from 17% rural tap coverage to 75%+ tap connections — one of the world's fastest water delivery programmes
- JJM 2.0 problem it solves: Many installed taps were not functional (non-functional HTCs); shift to measuring actual water delivery, not just connections
- 55 lpcd standard: WHO recommends minimum 50 litres per capita per day for basic needs; JJM targets 55 lpcd
- Reform-Linked MoU is a significant governance innovation: States must show commitment to water tariff rationalization and community participation to get full funding
- Jal Sanchay Jan Bhagidari: Community-level water conservation programme complementing JJM 2.0 — Odisha's model highlighted (PIB June 11)
- Water is a State subject (Entry 17, State List); Centre funds via Centrally Sponsored Scheme structure; reform-linked conditionality is a fiscal federalism tool

TEXTILE PLI SCHEME — ROUND III

Ministry: Ministry of Textiles

Easy Explanation

India has been making cotton clothes for thousands of years — we are great at it. But the world has mostly moved to synthetic fabrics — polyester shirts, nylon sportswear, stretch jeans. Countries like Bangladesh and Vietnam dominate this segment and take the bulk of global clothing export orders. India barely participates. Why? Because Indian textile factories never invested in the machinery to make synthetic fabrics at scale. To change this, the government launched the Textile PLI Scheme — essentially a financial reward for companies that set up factories and actually produce these synthetic (Man-Made Fibre) clothes and technical textiles (specialised fabrics used in hospitals, construction, defence). For every extra rupee of production beyond a baseline, the government pays back 15%. This week, 96 more companies were approved under Round 3 of this scheme, committing ₹12,822 crore of new investment. Think of it this way: the government is saying 'you take the risk of setting up the factory, and if you succeed in producing, we will share the reward.' The broader goal is to capture a larger slice of the \$800 billion global textile market — currently India has only about 5% of it despite having the workforce and raw material to grab much more.



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**Key Terms:**

Term	Definition
PLI Scheme	Production-Linked Incentive — government pays % of incremental production value to boost manufacturing
MMF	Man-Made Fibre — synthetic fibres (polyester, nylon, viscose); India strong in cotton but weak in MMF
Technical Textiles	Functional textiles for industrial/medical/defence use — e.g., geotextiles, medical textiles, protective wear
RISA	Traditional woven textile of Northeast India; PLI includes tribal textiles and handicrafts
Textile PLI Target	₹19,000 crore additional investment; generate 7.5 lakh additional employment in 5 years
PM MITRA	PM Mega Integrated Textile Region and Apparel Parks — plug-and-play textile parks in 7 states

Important Points for UPSC:

- India's textile sector is the 2nd largest employer after agriculture — employs ~4.5 crore people directly
- India's textile exports: ~\$35 billion annually; China leads at ~\$300 billion; India's share ~5% of global textile exports
- PLI Textile was approved in 2021 (₹10,683 crore); Round III with 96 companies signals scaling up and strong investor interest
- MMF gap: India's strength is cotton (natural fibre); global demand is increasingly MMF/synthetic — PLI aims to bridge this gap
- Technical Textiles: A high-growth segment; India's technical textile market ~\$22 billion; government target \$40 billion by 2030
- PM MITRA Parks (7 locations including Gujarat, Tamil Nadu, Telangana, UP, MP, Karnataka, Maharashtra) will complement PLI incentives
- Geopolitical opportunity: US-China trade tensions + Bangladesh political instability → orders diverted to India; PLI prepares capacity to capture this

ECLGS 5.0 — EMERGENCY CREDIT LINE GUARANTEE SCHEME MILESTONE**Ministry:** Ministry of Finance / NCGTC**Easy Explanation**

When COVID-19 hit in 2020, millions of small businesses — your neighbourhood restaurant, the tailor shop, the small hotel, the local tour operator — lost all their income overnight. Banks refused to give them loans because they had no collateral (no property to mortgage) and their businesses looked too risky. These businesses were not bankrupt — they just needed cash to survive 6 months and restart. The government's answer was ECLGS:



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Emergency Credit Line Guarantee Scheme. Here is how it works: the government tells banks, 'We will guarantee the loan. If the small business cannot repay, WE will pay you back.' With that guarantee, banks suddenly became willing to lend. No collateral needed from the business owner. ECLGS 5.0 is the latest version, targeting businesses that are still struggling in specific stressed sectors. This week it crossed a milestone: 1 lakh (100,000) businesses have now received loans under ECLGS 5.0, totalling over ₹48,000 crore. That is ₹48,000 crore of private bank money flowing to struggling small businesses because the government stood behind each loan as a guarantor. The beauty of this scheme is fiscal efficiency — the government does not spend this money directly; it only pays if businesses default. Most businesses don't default, so the actual government expenditure is a fraction of ₹48,000 crore.

Key Terms:

Term	Definition
ECLGS	Emergency Credit Line Guarantee Scheme — 100% government-backed guarantee on additional credit to MSMEs
NCGTC	National Credit Guarantee Trustee Company — government entity that manages credit guarantee schemes
Credit Guarantee	Government promises to repay lender if borrower defaults — reduces lending risk; incentivises banks to lend to MSMEs
Collateral-Free Loan	Loan given without requiring property/assets as security — key for MSMEs with limited assets
NPA	Non-Performing Asset — loan where borrower has stopped repaying; ECLGS reduces NPAs by supporting borrowers
CGSMFI 2.0	Credit Guarantee Scheme for Microfinance Institutions — also extended/upgraded this week alongside ECLGS

Important Points for UPSC:

- ECLGS launched May 2020 during COVID-19; total outstandings across all versions have exceeded ₹3.5 lakh crore — one of India's largest credit support programmes
- ECLGS works by removing the 'collateral barrier': NCGTC guarantees the loan, so banks lend even to MSMEs without assets — addresses market failure in MSME credit
- ECLGS 5.0 specifically targets stressed sectors identified post-COVID — hospitality, aviation, health, and related businesses
- 1 lakh guarantee milestone = 1 lakh businesses have accessed emergency credit under ECLGS 5.0; ₹48,000 crore mobilised
- MSME sector: 6.3 crore MSMEs; contributes 30% of GDP, 45% of exports, employs 11 crore people — credit access is critical
- CGSMFI 2.0 (also extended this week): Covers microfinance borrowers — typically women, rural, below poverty line; loan limits increased





- Credit guarantees are a fiscal tool: Government doesn't directly spend money until defaults occur; leverages private sector credit at low fiscal cost

DIGILOCKER — MASSIVE EXPANSION

Ministry: Ministry of Electronics & IT (MeitY)

Easy Explanation

Think about how many physical documents you carry or need in daily life — Aadhaar card, PAN card, driving licence, vehicle RC, school marksheets, college degree certificate, insurance papers. They get lost, damaged, faded, or you just never have the right one when you need it. DigiLocker solves this: it is a government-issued digital locker on your phone where all your official documents are stored securely and linked to your Aadhaar. The moment CBSE releases your Class 12 result, the marksheet automatically appears in your DigiLocker. Your driving licence from the transport department is already there. Your Aadhaar and PAN are always accessible. And when a bank, airport, or university asks for documents, you just share them digitally from your DigiLocker — legally valid, tamper-proof, and cannot be faked. No more carrying a folder of photocopies. Started in 2015 with a few documents, DigiLocker now has 35 crore users, stores 800 crore documents, and has 2,500 organisations issuing documents into it. This week's announcement highlighted its continued massive expansion. For UPSC, DigiLocker is India's flagship example of Digital Public Infrastructure (DPI) — government-built technology that benefits every citizen equally, not a private product owned by a corporation.

Key Terms:

Term	Definition
DigiLocker	Government-issued digital document wallet; part of Digital India programme; eliminates physical document carrying
Issuer	Government body or institution that issues documents into DigiLocker (e.g., CBSE, NHA, MoRTH, banks)
Requester	Organisation that accepts DigiLocker documents (e.g., airports, banks, universities)
eSign	Electronic signature service integrated with DigiLocker; legally valid under IT Act 2000
National Digital Identity	DigiLocker forms the backbone of India's digital identity framework alongside Aadhaar
Data Empowerment	Data Protection Act framework: citizen owns their data; DigiLocker is 'consent-based' sharing model

Important Points for UPSC:

- DigiLocker launched 2015 under Digital India; uses Aadhaar authentication; Section 7B of IT Act gives DigiLocker documents legal validity equal to originals



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- 35+ crore users = ~25% of India's population; 800+ crore documents stored — massive DPI (Digital Public Infrastructure) success story
- Key documents on DigiLocker: Aadhaar, PAN, driving licence (mDL), vehicle RC, CBSE marksheets, degree certificates, Ayushman Bharat card, insurance policies
- DigiLocker is a cornerstone of India's DPI stack alongside Aadhaar (identity), UPI (payments), and ABDM (health data)
- It reduces document fraud: Documents issued directly by government issuers — cannot be tampered with unlike physical copies
- International recognition: India's DPI model (including DigiLocker) presented at G20 2023; World Bank and UNDP studying it for replication in developing countries
- DPDP Act 2023 relevance: DigiLocker's consent-based data sharing model aligns with new data protection principles — citizen controls data sharing

ZOJILA TUNNEL — HISTORIC BREAKTHROUGH

Ministry: Ministry of Road Transport & Highways

Easy Explanation

Ladakh — the stunning high-altitude region bordering China and Pakistan — is cut off from the rest of India for roughly 6 months every year. The only road connection, through Zojila Pass in the Himalayas, gets buried under 20-30 feet of snow from October to April. During these months, everything that Ladakh needs — food, medicine, fuel, military supplies — has to either be pre-stocked before winter or airlifted at enormous cost. This is not just inconvenient; after the 2020 Galwan Valley clash with China, it became a serious national security problem. India cannot effectively defend its borders if its own troops and supplies are cut off for half the year. The solution is a 14.15 km tunnel being drilled through the mountains beneath the Zojila Pass — when complete, it will be the longest road tunnel in India and in Asia. This week, the two ends of the tunnel being drilled from opposite directions finally met in the middle — called a 'breakthrough' — the most dramatic milestone in tunnel construction. The work is not done (lining, electrification, ventilation still remain), but the hard part — drilling through the mountain — is complete. When this tunnel opens, Ladakh will have all-weather connectivity for the first time in its history.

Key Terms:

Term	Definition
Zojila Pass	Mountain pass at 11,575 ft on NH-1; connects Kashmir Valley to Ladakh; closed 6 months in winter due to snow
Zojila Tunnel	14.15 km all-weather road tunnel; India's longest; on NH-1 (Srinagar-Kargil-Leh highway)
Breakthrough	Point in tunnel construction when the two ends meet after boring from both sides — a major milestone



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NHIDCL	National Highways and Infrastructure Development Corporation — implementing agency for Zojila Tunnel
Z-Morh Tunnel	Connecting Srinagar-Sonamarg; already completed; Zojila is the next segment for year-round Ladakh access
Strategic Connectivity	Military and civilian access to Ladakh (border with China and Pakistan); critical after Galwan 2020

Important Points for UPSC:

- Zojila Tunnel: 14.15 km length; estimated cost ₹8,213 crore; NHIDCL implementing under MoRTH
- Strategic significance: After Galwan Valley clash (June 2020), all-weather connectivity to Ladakh became a national security imperative
- Current situation: Zojila Pass closes ~October-April each year; military and civilian supplies to Ladakh depend on airlift or advance stockpiling for 6 months
- The tunnel will reduce travel time between Srinagar and Kargil from 3.5 hours to ~15 minutes through the Zojila Pass section
- Zojila Tunnel is part of a connectivity cluster: Z-Morh Tunnel (Sonamarg) + Zojila Tunnel + Shinkun La Tunnel (Manali-Leh) — together creating all-weather Leh access
- Construction challenges: High altitude, extreme cold, hard rock, seismic zone — some of the most difficult tunnel engineering conditions in the world
- Economic benefit: Ladakh tourism, apple/apricot exports, Kargil connectivity — currently all seasonal; tunnel makes it year-round





PRACTICE QUESTIONS

10 PRELIMS QUESTIONS (Solve without looking at answers below)

Q1. With reference to VINIMAY, the Land Port Management System, consider the following statements:

1. It was launched under the Ministry of Commerce & Industry to facilitate trade at seaports.
2. It uses Automatic Number Plate Recognition (ANPR)-based gate operations.
3. It eliminates approximately 90% of paperwork at land ports.
4. India shares a land border exceeding 15,000 km with seven neighbouring countries.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Q2. Consider the following pairs:

Gallantry Award	Category
1. Kirti Chakra	— Wartime gallantry
2. Vir Chakra	— Wartime gallantry
3. Ashoka Chakra	— Peacetime gallantry
4. Shaurya Chakra	— Peacetime gallantry

How many of the above pairs are correctly matched?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Q3. Which of the following statements about Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY) is/are correct?

1. It provides health coverage of ₹5 lakh per family per year for secondary and tertiary hospitalisation.
2. West Bengal was the last state to join PM-JAY, completing 100% state coverage.
3. Beneficiaries under PM-JAY can access treatment only in government hospitals.

Select the correct answer using the code given below:

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





Q4. The Information Fusion Centre – Indian Ocean Region (IFC-IOR), which was in news recently, is:

- (a) A joint India-US naval surveillance facility located in the Andaman Islands
- (b) India's maritime domain awareness centre that shares real-time information with partner navies
- (c) An IMO-mandated body coordinating anti-piracy operations in the Indian Ocean
- (d) A civilian coast guard facility under the Ministry of Ports, Shipping and Waterways

Q5. Consider the following statements about the IndiaAI Mission:

1. It was approved with a budget of ₹10,371 crore to develop India's AI ecosystem.
2. Startups selected under the mission receive subsidised GPU compute in exchange for publicly releasing their models.
3. Varya, the first indigenous video AI model, was developed by a government research institution under IndiaAI Mission.

Which of the above statements is/are correct?

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

Q6. The NITI Aayog Governing Council differs from the erstwhile Planning Commission in which of the following ways?

1. The Planning Commission allocated financial resources to states; NITI Aayog does not.
2. The Governing Council includes Chief Ministers of all states, while Planning Commission did not have such mandatory state representation.
3. NITI Aayog functions as an advisory think-tank, whereas Planning Commission had executive authority.

Select the correct answer using the code given below:

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

Q7. With reference to Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), which of the following is/are correct?

1. The scheme provides free antenatal check-ups on the 9th of every month.
2. India's Maternal Mortality Rate (MMR) has a Sustainable Development Goal target of below 70 per 1,00,000 live births by 2030.
3. PMSMA is the primary scheme for incentivising institutional deliveries in rural India.

Select the correct answer:

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



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(d) 1, 2 and 3

Q8. Consider the following statements about the Zojila Tunnel:

1. It is being constructed on NH-1, the Srinagar-Kargil-Leh highway.
2. At 14.15 km, it will be India's longest and Asia's longest bi-directional road tunnel.
3. The implementing agency is the National Highways Authority of India (NHAI).
4. Zojila Pass currently remains closed for approximately six months every year due to heavy snowfall.

How many of the above statements are correct?

- (a) Only two
- (b) Only three
- (c) All four
- (d) Only one

Q9. With reference to India's Strategic Petroleum Reserve (SPR), which of the following statements is/are correct?

1. India's current SPR capacity provides approximately 67 days of crude oil supply.
2. The SPR is stored at five locations — Vizag, Mangalore, Padur, Udupi, and Indulkhand.
3. The Strait of Hormuz, through which approximately 30% of global oil transits, is India's single biggest energy supply vulnerability.

Select the correct answer:

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

Q10. Which of the following correctly describes the 'distillation' technique used in developing Varya, India's AI video model?

- (a) A process of training an AI model using only Indian-language datasets to eliminate foreign cultural bias
- (b) A technique of compressing a large model's capabilities into a smaller, faster, cheaper version while maintaining output quality
- (c) A method of encrypting AI model weights to prevent reverse engineering by foreign entities
- (d) A process of combining multiple AI models into a single unified architecture

2 MAINS QUESTIONS (Solve without looking at answers below)

MAINS QUESTION 1: 150 WORDS



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'India's digital public infrastructure — illustrated by DigiLocker, UPI, and the IndiaAI Mission — represents a shift from welfare delivery to capability building. Critically examine this assertion with reference to recent developments.'

MAINS QUESTION 2: 250 WORDS

'From VINIMAY and the Zojila Tunnel to ECLGS and Jal Jeevan Mission 2.0, the week's policy announcements reflect a consistent theme: converting physical and institutional access into economic and security outcomes. Analyse.'

PRELIMS ANSWERS & EXPLANATIONS

Q1. Answer: (c) Only three

Explanation: Statement 1 is WRONG — VINIMAY is under the Ministry of Home Affairs and is for land ports, not seaports. Statements 2 (ANPR gates), 3 (90% paperwork elimination), and 4 (15,106 km land border with 7 countries) are all correct. Hence 3 statements are correct.

Q2. Answer: (c) Only three

Explanation: Pairs 2, 3, and 4 are correctly matched. Pair 1 is WRONG — Kirti Chakra is a PEACETIME gallantry award (not wartime). The wartime-peacetime distinction is a classic UPSC trap. Vir Chakra (wartime), Ashoka Chakra (peacetime), Shaurya Chakra (peacetime) are all correctly matched.

Q3. Answer: (a) 1 only

Explanation: Statement 1 is correct — ₹5 lakh per family per year for secondary and tertiary care. Statement 2 is WRONG — West Bengal joined as the 36th State/UT; it was not the last to join (some UTs are still outside). Statement 3 is WRONG — PM-JAY covers both government and empanelled private hospitals.

Q4. Answer: (b)

Explanation: IFC-IOR is India's maritime domain awareness centre located in Gurugram (not Andaman Islands). It is operated by the Indian Navy and shares real-time maritime information with partner navies. It is not an IMO body and not a civilian coast guard facility.

Q5. Answer: (a) 1 and 2 only

Explanation: Statements 1 and 2 are correct. Statement 3 is WRONG — Varya was developed by Avataar, a private AI startup (not a government research institution). The IndiaAI Mission selected 12 startups; Avataar was one of them. The government provided compute, not the model itself.

Q6. Answer: (c) 1, 2 and 3





Explanation: All three statements are correct. Planning Commission allocated funds (Finance Ministry does now); Governing Council has mandatory CM representation; NITI Aayog is advisory without executive authority. All three correctly distinguish the two bodies.

Q7. Answer: (b) 1 and 2 only

Explanation: Statements 1 and 2 are correct. Statement 3 is WRONG — PMSMA is for antenatal care, not for incentivising institutional deliveries. That role is played by Janani Suraksha Yojana (JSY). Confusing JSY and PMSMA is a common UPSC trap.

Q8. Answer: (b) Only three

Explanation: Statements 1, 2, and 4 are correct. Statement 3 is WRONG — Zojila Tunnel is implemented by NHIDCL (National Highways and Infrastructure Development Corporation), NOT NHAI. NHIDCL handles projects in border/strategic areas including J&K, Northeast. Hence 3 statements are correct.

Q9. Answer: (d) 1, 2 and 3

Explanation: All three statements are correct. India's SPR is 5.33 MT = ~67 days supply; stored at exactly the five locations listed; and the Strait of Hormuz (30% global oil transit) is indeed India's primary single-point energy vulnerability given 80% of imports come from the Gulf.

Q10. Answer: (b)

Explanation: Distillation in AI specifically refers to model compression — taking a large 'teacher' model's capabilities and compressing them into a smaller, faster, cheaper 'student' model. Varya used Alibaba's Wan 2.2 as the base and distilled it, cutting generation from 50 steps to 4 steps. Options (a), (c), (d) describe entirely different concepts.

MAINS MODEL ANSWERS

MAINS Q1 — Model Answer (150 words):

India's Digital Public Infrastructure (DPI) has evolved beyond welfare delivery toward systemic capability building. DigiLocker (35+ crore users) no longer just stores documents — it enables consent-based data sharing, reducing fraud and bureaucratic friction. UPI, processing 14+ billion monthly transactions, has democratised financial access for unbanked populations. The IndiaAI Mission moves further: by providing compute subsidies to startups like Avataar (Varya), it creates indigenous AI capabilities at population scale rather than simply delivering government services.

However, critical gaps remain. DigiLocker penetration is urban-skewed; UPI's rural depth is still limited; IndiaAI Mission's 12-startup selection is narrow for a 1.4-billion population. The shift from welfare to capability is real but incomplete — it is concentrated among digitally literate citizens.

The true test is inclusion: Can these platforms reach the last mile — farmers, daily wage workers, tribal communities — and convert digital access into economic mobility? That remains the unfinished agenda.

MAINS Q2 — Model Answer (250 words):



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The week's policy announcements share a common thread: they treat infrastructure — physical, institutional, or digital — not as ends in themselves but as mechanisms to generate tangible outcomes in security, welfare, and economic growth.

Physical Access → Security Outcomes: The Zojila Tunnel breakthrough exemplifies this. The 6-month winter closure of Zojila Pass is not merely an inconvenience — it is a strategic vulnerability. Post-Galwan 2020, all-weather connectivity to Ladakh became a national security imperative. The tunnel converts a seasonal liability into a permanent strategic asset, enabling year-round military logistics and civilian economic activity.

Institutional Access → Economic Outcomes: VINIMAY transforms land ports from security checkpoints to trade facilitation nodes. By eliminating 90% of paperwork and enabling real-time clearance, it reduces the 'border tax' — time and cost burden on traders. Similarly, ECLGS 5.0's 1 lakh guarantee milestone converts institutional trust (government guarantee) into private sector credit for 1 lakh small businesses.

Infrastructure Investment → Welfare Outcomes: JJM 2.0's Reform-Linked MoUs ensure that tap connections actually deliver water (FHTC vs installed connections). This prevents infrastructure becoming a statistical artefact divorced from lived reality.

Constraints: These conversions are not automatic. Zojila's security dividend depends on parallel border infrastructure; VINIMAY's trade facilitation requires customs reforms beyond the portal; ECLGS's credit guarantee works only if banks actually lend and borrowers repay. Governance quality, not just policy design, determines whether access translates to outcomes.

Conclusion: India's policy architecture increasingly recognises that access is a necessary but insufficient condition for development. The week's announcements mark a shift toward outcome-linked infrastructure — a mature governance paradigm, though its full potential awaits consistent implementation.

PIB

WEEKLY BRIEF STRATEGIC INDIA



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INS DUNAGIRI, INS SANSHODHAK & INS AGRAY — TRI-COMMISSIONING IN KOLKATA

Ministry: Ministry of Defence / Indian Navy

PIB Date: 21st June 2026



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Easy Explanation

Picture three ships lined up at Kolkata's Syama Prasad Mookerjee Port on a Sunday morning, each draped in Indian Navy white, their crews standing at attention. PM Narendra Modi walks the dock and formally commissions all three into active naval service in one ceremony — a rare 'tri-commissioning' that India has done only twice before. All three ships were designed by the Indian Navy's own Warship Design Bureau and built at Garden Reach Shipbuilders and Engineers (GRSE) in Kolkata — over 75% of every component inside them is made in India. INS Dunagiri is a stealth combat frigate — a large warship built to fight on the sea surface, in the air above it, and against submarines below. It carries supersonic missiles, air defence systems, torpedoes, and a helicopter, and can operate anywhere in India's Exclusive Economic Zone for weeks at a time. INS Sanshodhak is a survey vessel — not a fighting ship, but an ocean scientist. Equipped with autonomous underwater robots (AUVs), sonar, and multi-beam echo sounders, it maps the seafloor, collects oceanographic data, and creates the nautical charts that every other ship depends on for safe navigation. INS Agray is an anti-submarine warfare shallow water craft — a smaller, nimble vessel designed specifically to hunt submarines in India's shallow coastal and harbour waters using sonar, torpedoes, and rockets. Together they add three entirely different capabilities to the Indian Navy, entirely made in India.

Key Terms:

Term	Definition
Project 17A	Programme of 7 advanced stealth frigates; successor to Shivalik-class; INS Dunagiri is the 5th; built at MDL Mumbai and GRSE Kolkata
GRSE	Garden Reach Shipbuilders and Engineers, Kolkata — Defence PSU; built all three vessels commissioned this week
Warship Design Bureau (WDB)	Indian Navy's in-house ship design organisation; designed all three vessels — true indigenisation beyond just manufacturing
INS Dunagiri	Project 17A stealth guided-missile frigate; CODOG propulsion; surface/air/sub-surface warfare; carries helicopters
INS Sanshodhak	4th Survey Vessel (Large); hydrographic surveys, nautical charting, oceanographic research; equipped with AUVs and ROVs
INS Agray	5th Arnala-class Anti-Submarine Warfare Shallow Water Craft (ASW SWC); waterjet propulsion; sonar, torpedoes, anti-sub rockets

Important Points for UPSC:

- Three ships commissioned simultaneously at Syama Prasad Mookerjee Port (formerly Kolkata Port Trust), West Bengal — venue chosen to honour GRSE's contribution
- Project 17A: 7 frigates total (4 at MDL Mumbai, 3 at GRSE Kolkata); INS Nilgiri (1st) commissioned January 2025; INS Dunagiri is 5th — programme on track
- 75%+ indigenous content across all three vessels — over 200 MSMEs supplied components; demonstrates depth of India's defence supply chain
- INS Sanshodhak replaces the old INS Sandhayak; survey vessels critical for updating India's nautical charts — last full Indian Ocean survey was over a decade ago





- INS Agray (Arnala-class): Waterjet propulsion allows operations in very shallow water (2-3m depth) — designed for harbour protection and littoral combat
- PM Modi's speech: Referenced the journey from INS Vikrant (first indigenous aircraft carrier, 2022) to this tri-commissioning — India's naval Atmanirbharta is now systemic, not episodic
- India Navy's 2047 vision: 200+ vessel fleet including 3 carrier battle groups, 24 submarines — current commissioning pipeline feeding this target
- Kolkata commissioning is also politically symbolic: West Bengal has historically felt excluded from defence manufacturing; GRSE's central role addresses this

INDIA'S SPACE ODYSSEY — PIB BACKGROUNDER

Ministry: Department of Space / ISRO / IN-SPACe

PIB Date: 21st June 2026

Easy Explanation

India launched its first satellite, Aryabhata, in 1975 — built entirely by Indian scientists, though launched by a Soviet rocket because India didn't have its own yet. In 50 years since, India has gone from borrowing a launch vehicle to building one of the world's most reliable and cost-effective space programmes. The PIB released a comprehensive backgrounder this week on India's Space Odyssey — essentially a report card and roadmap combined. Here is the story in plain terms. The early decades (1975-2000) were about survival and learning — building satellites, mastering launch technology with PSLV, proving India could do this independently. The 2000s brought confidence — PSLV became the world's most reliable workhorse rocket, launching foreign satellites commercially. The 2010s brought ambition — Chandrayaan-1 discovered water on the Moon (2008), Mangalyaan reached Mars on India's first attempt at a fraction of the cost of NASA's missions (2014). The 2020s mark transformation — Chandrayaan-3 became the first spacecraft to land near the Moon's south pole (2023), Gaganyaan (India's human spaceflight programme) is underway, and critically, India opened space to private companies through IN-SPACe, creating 400+ space startups. The backgrounder signals that India's space ambition is no longer about proving capability — it is about commercialisation, international partnerships, and building a space economy targeting \$44 billion by 2033.

Key Terms:

Term	Definition
ISRO	Indian Space Research Organisation — government agency; conducts missions, develops rockets and satellites
IN-SPACe	Indian National Space Promotion and Authorisation Centre — regulator for private space companies; single-window clearance
PSLV	Polar Satellite Launch Vehicle — India's workhorse rocket; 60+ successful launches; commercial satellite launcher for foreign clients
GSLV Mk III / LVM3	Geosynchronous Satellite Launch Vehicle Mark III — heavy lift rocket; used for Chandrayaan-3, OneWeb commercial launches



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Gaganyaan	India's human spaceflight programme; target: send 3 astronauts to orbit by 2026-27; currently in test phase
New Space India Limited (NSIL)	Government commercial arm of ISRO; contracts private companies for satellite manufacturing and launches
Space Economy Target	India targets \$44 billion space economy by 2033 (from ~\$8 billion currently); private sector to drive growth

Important Points for UPSC:

- Key milestones: Aryabhata (1975) → PSLV (1994, 60+ successes) → Chandrayaan-1 water discovery (2008) → Mars Orbiter Mission/Mangalyaan (2014, first attempt success) → Chandrayaan-3 south pole landing (Aug 23, 2023) → Aditya-L1 solar mission (2023)
- Chandrayaan-3: First mission ever to land near lunar south pole; Pragyan rover confirmed presence of sulphur and other elements; September 2023 PM Modi named landing site 'Shiv Shakti Point'
- Gaganyaan: 4 astronauts selected (Group Captain Prashanth Balakrishnan Nair, Ajit Krishnan, Angad Pratap, Shubhanshu Shukla); uncrewed test missions underway; crewed mission target 2026-27
- Private space sector: IN-SPACe authorised 400+ space startups since 2020; Skyroot Aerospace launched Vikram-S (India's first private rocket, 2022); Agnikul Cosmos, Bellatrix also building rockets
- Commercial launch success: LVM3 (upgraded GSLV Mk III) successfully launched 36 OneWeb satellites in 2022-23 — India competing directly with SpaceX for commercial launch contracts
- Space Docking Experiment (SpaDeX): India's mission to demonstrate space docking technology — critical for future space station and Moon missions; India becomes 4th country after USA, Russia, China
- India's space budget: ~₹13,042 crore (FY2025-26) — modest by global standards (NASA's is 70x larger) but India extracts exceptional value through frugal engineering
- India-USA Artemis Accords signatory (2023): Commits to peaceful, transparent exploration of Moon; Indian astronaut Shubhanshu Shukla to fly on NASA ISS mission under AXIOM-4 in 2025

INDIA'S EMERGING TECHNOLOGY ECOSYSTEM — PIB BACKGROUNDER

Ministry: Ministry of Electronics & IT / MoST / DPIIT

PIB Date: 22nd June 2026

Easy Explanation

A decade ago, when you thought of India's technology sector, you thought of IT services — Indian engineers writing software for American companies, call centres answering queries, back-office processing. That image is outdated. The PIB released a comprehensive backgrounder on India's Emerging Technology Ecosystem this week, painting a picture of a country that is now building frontier technologies, not just providing services. The numbers are striking: 2.3 lakh DPIIT-recognised startups (2nd largest startup ecosystem in the world after USA and China), 25 lakh jobs in the startup economy, 119 unicorns (startups valued over \$1 billion), a bioeconomy that grew from \$10 billion to \$190 billion in 12 years, IndiaAI Mission with ₹10,371 crore to build indigenous AI, India Semiconductor Mission with ₹76,000 crore to build chip manufacturing, and space tech startups growing from near-zero to 400+. What changed? Three things: government policy (PLI schemes, regulatory liberalisation, dedicated missions for each technology),



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capital (venture capital, sovereign wealth fund investments, government-backed funds like SIDBI, NABVENTURES), and talent (IITs producing world-class engineers, 50 lakh STEM graduates per year). The backgrounder also acknowledges the gap: India is still largely a consumer of frontier technology (importing chips, AI models, rockets), not yet a creator at the frontier. The missions (ISM, IndiaAI, Space) are designed to bridge this gap over 10-20 years.

Key Terms:

Term	Definition
DPIIT	Department for Promotion of Industry and Internal Trade — recognises startups; 2.3 lakh startups recognised as of 2026
Unicorn	Startup valued at \$1 billion or more; India has 119 unicorns — 3rd largest globally after USA and China
Deep Tech	Technology based on fundamental scientific advances — AI, quantum, biotech, space, semiconductors; India's emerging focus
PLI Scheme	Production-Linked Incentive — covers 14 sectors; ₹1.97 lakh crore committed; attracts manufacturing investment in emerging tech
Quantum Mission	National Quantum Mission (NQM): ₹6,003 crore; targets quantum computers, communication, sensing, metrology by 2031
Semiconductor Mission	ISM: ₹76,000 crore; Micron (₹22,516 crore fab in Gujarat), Tata Electronics fab in Assam — India's chip manufacturing beginning

Important Points for UPSC:

- India's startup ecosystem: 2.3 lakh DPIIT-recognised startups; 25 lakh jobs; 119 unicorns; ₹10+ lakh crore total valuation — 2nd largest global startup ecosystem
- National Quantum Mission (2023-2031): ₹6,003 crore; four thematic hubs (Q-computing, Q-communication, Q-sensing, Q-materials); India aims to build 50-qubit quantum computer by 2026-27
- India Semiconductor Mission: Micron Technology fab in Sanand, Gujarat (₹22,516 crore) — producing memory chips by 2026; Tata Electronics fab in Dholera; CG Power display fab
- IndiaAI Mission: ₹10,371 crore; 10,000 GPU compute cluster for researchers and startups; Varya (video AI) is first output — more indigenous models expected
- AI skilling: 1 crore people to be skilled in AI by 2028 under AI for India programme; FutureSkills PRIME platform active
- Green tech: ₹19,744 crore National Green Hydrogen Mission; 500 GW renewable target by 2030; India 4th largest renewable energy capacity globally
- India's R&D gap: India spends only 0.65% of GDP on R&D vs 2%+ for USA, China, South Korea — bridging this is essential for moving from 'consumer to creator' of deep tech
- Emerging tech districts: Bengaluru (AI/Biotech), Hyderabad (Pharma/Biotech), Pune (EV/Defence), Chennai (Semiconductors/Autos), Delhi-NCR (Fintech) — geographic clustering emerging





CRITICAL MINERALS MISSION — 56 BLOCKS AUCTIONED, 7TH TRANCHE COMPLETE

Ministry: Ministry of Mines

PIB Date: 23rd June 2026

Easy Explanation

Electric vehicles need lithium for their batteries. Solar panels need silicon and silver. Wind turbines need rare earth elements. Semiconductors need gallium and germanium. Defence systems need cobalt and titanium. These are called critical minerals — not because they are rare in the earth's crust, but because they are critical for the technologies that will power the next 50 years, and because supply is dangerously concentrated in a few countries. China controls 60-80% of processing of most critical minerals globally. If China decides to restrict exports (it already has with gallium and germanium), countries that depend on it are stuck. India has recognised this and launched the National Critical Mineral Mission. This week, the Ministry of Mines completed the 7th tranche of critical mineral block auctions, taking the total to 56 blocks successfully auctioned out of 88 offered — a 63% success rate. Minerals in these blocks include graphite (for EV batteries), rare earth elements (for magnets in EVs and wind turbines), vanadium (for energy storage), titanium (for aerospace and defence), and rock phosphate (for fertilisers). For the first time this week, blocks were auctioned in Gujarat, Uttarakhand, and Telangana — states that had not participated before. Simultaneously, 11 Exploration Licence blocks were auctioned, including first-ever EL blocks in Arunachal Pradesh, Uttar Pradesh, and Odisha. The EL mechanism allows companies to explore for minerals first — rather than bidding blind for a mine.

Key Terms:

Term	Definition
Critical Minerals	Minerals essential for clean energy, EVs, defence, semiconductors; supply risk due to geographic concentration; India heavily import-dependent
National Critical Mineral Mission (NCMM)	India's strategic framework to secure domestic supply of critical minerals through exploration, mining, and overseas acquisition
Exploration Licence (EL)	New licence category allowing exploration before commercial mining; helps assess actual reserves before investment commitment
7th Tranche	Latest round of critical mineral block auctions; 10 blocks auctioned; cumulative total now 56 blocks from 88 offered (63% success rate)
MMDR Act 1957	Mines and Minerals (Development and Regulation) Act — legal framework governing mineral auctions; amended multiple times to include critical minerals
Mineral Auction Rules 2015	Rules under MMDR Act governing bidding process; amended to accommodate new EL category and critical mineral provisions

Important Points for UPSC:



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- India's critical mineral import dependence: Lithium (100% imported), Cobalt (100% imported), Nickel (majority imported), REEs (majority imported from China) — strategic vulnerability
- 7th Tranche details: 10 blocks auctioned; minerals include graphite, REEs, vanadium, titanium, glauconite, rock phosphate; first auctions in Gujarat, Uttarakhand, and Telangana by Centre
- Cumulative: 56 of 88 blocks auctioned (63% success rate); 11 of EL blocks auctioned — reflects growing industry confidence after multiple policy reforms
- NCMM pillars: (1) Domestic exploration and mining, (2) Overseas acquisition through KABIL (Khanij Bidesh India Limited), (3) Recycling and recovery of critical minerals, (4) Technology development
- KABIL: Joint venture of NALCO, HCL, and MECL to acquire critical mineral assets overseas; signed MoUs with Australia, Argentina — securing lithium and cobalt sources abroad
- Rare Earth Elements: India has world's 5th largest REE reserves (est. 6.9 million tonnes) but minimal processing capacity — developing processing is next critical step
- EL blocks in Arunachal Pradesh: Significant because Northeast India is geologically prospective for many minerals but severely underexplored; EL allows low-risk exploration first
- Global context: US Inflation Reduction Act, EU Critical Raw Materials Act — all major economies racing to secure critical mineral supply chains; India is late but catching up fast

RAKHIGARHI SKELETAL REMAINS — TRANSFERRED TO ANTHROPOLOGICAL SURVEY OF INDIA

Ministry: Ministry of Culture / ASI / AnSI

PIB Date: 22nd June 2026

Easy Explanation

Rakhigarhi in Haryana's Hisar district is not just an archaeological site — it is potentially the largest city of one of humanity's oldest urban civilisations, the Indus-Saraswati (Harappan) Civilisation, which flourished 4,500 years ago. At 550 hectares, it is bigger than Mohenjo-daro in Pakistan or Harappa itself. Archaeologists have found evidence of planned streets, sophisticated drainage systems, craft production, long-distance trade, and burial grounds. This week, three complete human skeletons and additional skeletal fragments excavated during the 2025-26 season from Mound No. 7 (a cemetery area) were formally transferred from the Archaeological Survey of India (ASI) to the Anthropological Survey of India (AnSI) under a new MoU between the two institutions. Why does this matter? Because these bones carry secrets. Modern science can extract ancient DNA from human teeth and bones that are thousands of years old and reconstruct: who these people were genetically, where their ancestors came from, whether they migrated, what diseases they had, what they ate, and how they were related to modern South Asian populations. This directly connects to one of the most contested academic debates in Indian history — the Aryan Migration Theory — and questions about the origins of South Asian civilisation. The research at Rakhigarhi could provide definitive scientific evidence on questions that have been argued about for 150 years.

Key Terms:

Term	Definition
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Rakhigarhi	Largest known Harappan site; 550 hectares; Hisar district, Haryana; continuous habitation from Early to Mature Harappan period
ASI	Archaeological Survey of India — conducts excavations; under Ministry of Culture; transferred the skeletal remains
AnSI	Anthropological Survey of India — studies human populations; receives remains for analysis; repository in Kolkata
Indus-Saraswati Civilisation	Also called Harappan or Indus Valley Civilisation; 3300-1300 BCE; extended across present-day India, Pakistan, Afghanistan
Ancient DNA (aDNA)	DNA extracted from ancient human remains; can reconstruct ancestry, migration patterns, genetic diseases of ancient populations
Palaeogenomics	Study of ancient genomes; combines archaeology with genetics; can resolve debates about population origins and migrations

Important Points for UPSC:

- Rakhigarhi: 550 hectares; Hisar, Haryana; largest Harappan site globally — larger than Mohenjo-daro (300 ha) and Harappa (150 ha)
- ASI (Archaeological Survey of India) and AnSI (Anthropological Survey of India) are both under Ministry of Culture — different mandates: ASI excavates, AnSI studies human remains
- AnSI repository in Kolkata (NOT New Delhi) — important factual detail for MCQ; skeletal remains transferred there for laboratory analysis
- Research methods to be applied: Ancient DNA extraction, osteological analysis (bone measurements), isotope analysis (diet and migration), radiocarbon dating, CT scanning
- Significance of Mound No. 7: Previously identified as cemetery; 8 burials found in 2025-26 season; 3 complete skeletons + fragments transferred
- Academic controversy: 2019 Rakhigarhi DNA study (David Reich et al.) suggested Harappan people had no detectable ancestry from Central Asian Steppe — contradicting Aryan Migration Theory; new samples may confirm, refute, or nuance this
- India's first Nagoya Protocol report submitted this year — separate context but relevant: India documenting biological resources and knowledge, including genetic heritage
- Connects to: UPSC Ancient History (Harappan Civilisation), Science & Technology (ancient DNA, palaeogenomics), and contemporary debates on Indian civilisational continuity

BRICS ENERGY MINISTERS' MEETING — 11TH EDITION, GURUGRAM

Ministry: Ministry of Power / Ministry of Petroleum & Natural Gas

PIB Date: 25th–26th June 2026

Easy Explanation

Energy is the foundation of everything — economic growth, industrial production, transportation, and even national security. The 11th BRICS Energy Ministers' Meeting was held in Gurugram on June 25-26 under India's BRICS



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chairship. BRICS nations together consume about 40% of the world's energy and hold some of the largest reserves of fossil fuels (Russia) and renewable potential (India, Brazil, China). The timing of this meeting matters enormously. The world is in energy transition — moving from coal and oil to renewables — but the transition is uneven, expensive, and complicated by geopolitics. Russia's invasion of Ukraine triggered a global energy crisis (2022-23), reshuffled supply chains, and caused many European countries to temporarily burn more coal. Meanwhile, West Asia tensions threaten oil supplies. BRICS members have different interests: Russia wants to keep selling fossil fuels; India and China want cheap energy for development; Brazil has enormous hydropower and biofuel capacity; South Africa has energy poverty problems. India's agenda at this meeting focused on energy access (getting electricity to all), energy security (diverse supply, not dependent on one source), and energy transition (renewables, green hydrogen). India also pushed for BRICS to adopt a common position on energy for the COP climate negotiations — giving BRICS a collective voice at global climate talks.

Key Terms:

Term	Definition
BRICS Energy Ministers' Meeting	Annual ministerial-level meeting of energy ministers of BRICS nations; 11th edition under India's 2024-25 chairship
Energy Trilemma	Three competing energy goals: security (reliable supply), equity (affordable access), sustainability (low-carbon) — BRICS discussions address all three
Just Energy Transition	Shifting to clean energy without leaving workers in fossil fuel industries behind; BRICS concern given coal-dependent economies
BRICS+ Energy Cooperation	With 5 new BRICS members (UAE, Saudi Arabia, Iran, Egypt, Ethiopia) — expanded bloc controls even more of global energy supply
Energy Security	Ensuring reliable, affordable energy supply; India's approach: diversify sources (Saudi, Russia, UAE), build SPR, invest in renewables
Critical Minerals for Energy	Green energy needs lithium, cobalt, nickel, copper, REEs — BRICS nations collectively have large reserves; cooperation to secure supply

Important Points for UPSC:

- BRICS nations: 40%+ of global energy consumption; Russia (world's 2nd largest oil exporter), Saudi Arabia (new member, world's largest oil exporter), UAE (new member) — BRICS+ is now a major energy bloc
- India's energy agenda: 500 GW renewable capacity by 2030, net zero by 2070, E20 ethanol blending achieved, 5 MMT green hydrogen by 2030 — all presented as BRICS leadership themes
- Russia-India energy dimension: India buying discounted Russian oil since 2022 (Russia's share of India's imports rose from 2% to ~35%); BRICS platform allows India to manage this relationship diplomatically
- BRICS energy cooperation proposals: Joint R&D on hydrogen, solar, and storage technologies; coordinated critical minerals supply chains; common energy access standards
- New BRICS members and energy: UAE and Saudi Arabia bring massive oil/gas reserves and solar expertise; Ethiopia brings hydropower; Egypt is an energy transit hub — BRICS+ is now an energy powerhouse





- India's power sector: 24/7 electricity for all households achieved (2024 milestone); installed capacity 950 GW target by 2030; renewables at 45%+ of installed capacity already
- Coal transition sensitivity: India cannot afford rapid coal phase-out — 200 GW of coal still needed for base load as solar is intermittent; BRICS meeting acknowledged 'just transition' timeline flexibility for developing countries

BRICS MSME FORUM & SME WORKING GROUP — AGRA

Ministry: Ministry of MSME

PIB Date: 21st June 2026

Easy Explanation

MSMEs — Micro, Small and Medium Enterprises — are the backbone of every developing economy. In India, they employ 11 crore people, contribute 30% of GDP, and account for 45% of exports. Across all BRICS nations, the numbers are similar — small businesses are the primary source of jobs and economic activity, yet they chronically struggle for two things: finance (banks don't like to lend to small businesses without collateral) and markets (small businesses can't easily access international customers). The 1st BRICS MSME Forum and 3rd BRICS SME Working Group Meeting in Agra this week brought together MSME ministers and officials from all BRICS nations to address exactly these problems at scale. India, as BRICS chair, proposed three things. First, a BRICS MSME Digital Marketplace — a platform where small businesses from all BRICS nations can list their products and find buyers in other BRICS countries. Second, a BRICS Credit Guarantee Framework — similar to India's ECLGS but multilateral, where BRICS nations collectively guarantee MSME loans, reducing banks' risk. Third, technology sharing — India's successful digital public infrastructure for MSMEs (Udyam portal, GeM, TReDS invoice discounting) demonstrated as a model for other BRICS nations to adopt. Agra was symbolically chosen — it is in the heart of India's MSME heartland (UP alone has 90+ lakh MSMEs).

Key Terms:

Term	Definition
MSME	Micro ($\leq$ ₹1 crore turnover), Small (₹1-10 crore), Medium (₹10-50 crore) enterprises; India has 6.3 crore MSMEs employing 11 crore
GeM	Government e-Marketplace — online platform for government procurement from MSMEs; ₹4 lakh crore+ cumulative orders
TReDS	Trade Receivables Discounting System — allows MSMEs to convert unpaid invoices to instant cash; addresses MSME cash flow problem
Udyam Portal	Government portal for MSME registration; 4.5 crore+ registrations; provides access to schemes, credit, market linkages
BRICS MSME Digital Marketplace	India's proposal: single platform for BRICS MSMEs to trade across national borders — unlocks 40%+ of global GDP for small businesses
Credit Guarantee Framework	Proposed multilateral guarantee mechanism; reduces bank risk in lending to MSMEs — modelled on India's CGTMSE and ECLGS



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Important Points for UPSC:

- India's MSME statistics: 6.3 crore MSMEs; 11 crore jobs; 30% of GDP; 45% of exports; 99% of all enterprises — critical for inclusive growth
- 1st BRICS MSME Forum: India hosted for the first time; reflects India's priority of giving MSMEs a multilateral platform, not just bilateral
- GeM (Government e-Marketplace): ₹4+ lakh crore in cumulative orders since 2016; 60 lakh+ sellers; 10,000+ product categories — India's model for MSME market access
- TReDS (Trade Receivables Discounting System): MSMEs get instant cash by selling their pending invoices to banks at a small discount; MSME no longer waits 60-90 days for large company payments
- Udyam registration: Companies with Udyam registration get priority in government procurement, collateral-free loans, lower interest rates, and protection under MSME Development Act
- India's proposal for BRICS MSME Digital Marketplace: If all BRICS MSMEs can sell to each other's markets, it unlocks \$30+ trillion in combined GDP for small business trade
- BRICS+ context: New members Ethiopia, Egypt, Indonesia all have large informal MSME sectors — BRICS cooperation on formalisation and credit access relevant to their development needs

FERTILISER SHIPS CROSS STRAIT OF HORMUZ — SUPPLY CHAIN RESILIENCE

Ministry: Ministry of Chemicals & Fertilizers

PIB Date: 22nd June 2026

Easy Explanation

India is the world's 2nd largest consumer of fertilisers after China. Its 140 million farmers need urea, DAP (diammonium phosphate), and MOP (muriate of potash) every kharif and rabi season. Without fertilisers, crop yields collapse and food prices spike. The problem: India imports significant quantities of fertilisers — particularly potash and phosphatic fertilisers — and many of these originate from or transit through the Gulf region. With West Asia tensions escalating and Houthi rebels attacking ships in the Red Sea and Arabian Sea, India's fertiliser supply chains were under threat. This week's PIB release confirmed that four fertiliser ships successfully crossed the Strait of Hormuz and are en route to Indian ports, bolstering stocks ahead of the kharif sowing season. The government is also pre-positioning fertiliser stocks at district level — ensuring that even if future shipments are disrupted, India has buffer stocks for 30-45 days at farm level. This may seem like a routine logistics update, but its significance is strategic: India is treating fertiliser supply the same way it treats oil supply — as a national security priority that needs advance planning and buffer stocks.

Key Terms:

Term	Definition
Strait of Hormuz	Narrow waterway between Iran and Oman; 30% of global oil AND significant fertiliser trade transits through it; strategic chokepoint



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Kharif Season	Summer cropping season (June-November); sowing happens June-July; major kharif crops: paddy, cotton, soybean, maize, groundnut
Urea	Most-used nitrogen fertiliser; India imports ~20% of needs; majority domestic production from gas-based plants; heavily subsidised
DAP	Diammonium Phosphate — major phosphatic fertiliser; India imports ~80% from Morocco, Jordan, China, Saudi Arabia
MOP	Muriate of Potash — potassic fertiliser; India imports 100% from Canada, Russia, Belarus, Jordan — zero domestic production
Nutrient-Based Subsidy (NBS)	Subsidy on P and K fertilisers based on nutrient content; urea has separate flat subsidy; government absorbs price difference from international rates

Important Points for UPSC:

- India's fertiliser import dependence: Urea ~20%, DAP ~80%, MOP ~100% — the last two are completely or heavily import-dependent, creating supply vulnerability
- Strait of Hormuz relevance: Not just oil — fertiliser ships from the Gulf (Saudi Arabia, UAE, Jordan, Oman) also pass through Hormuz; disruption hits both energy AND agriculture
- Kharif fertiliser requirement: India needs ~33 million tonnes of fertilisers for kharif season; any shortage in June-July causes irreversible crop damage for the entire season
- Government pre-positioning: District-level buffer stocks being built ahead of kharif to insulate farmers from supply shocks — same strategic reserve logic as SPR for oil
- Fertiliser subsidy: India spends ₹1.5-2 lakh crore annually on fertiliser subsidies; urea MRP capped at ₹266.50/bag regardless of international price — farmer insulated but fiscal cost is massive
- China risk: China restricted DAP exports in 2021 causing price spike; India now diversifying to Morocco, Jordan, Egypt — but transportation longer and more expensive
- Domestic production push: Nano Urea (IFFCO), nano DAP — nano-fertilisers use 50% less material for same nutrient delivery; if scaled, reduces import dependence significantly
- Connects to: West Asia Supply Chain Resilience Review (Week 02), Strait of Hormuz geopolitics, India's food security strategy — all part of the same supply chain vulnerability picture

INDIA — WORLD'S TOP SHIP RECYCLING NATION IN 2025

Ministry: Ministry of Ports, Shipping and Waterways

PIB Date: 22nd June 2026

Easy Explanation

Every ship — a container vessel, an oil tanker, a cruise liner — has a working life of about 25-30 years. When it is too old to operate safely or economically, it needs to be 'recycled' — broken down into steel and components that can be reused. This is a massive global industry. Someone needs to cut open the hull, separate the steel, safely dispose of hazardous materials like asbestos and heavy metals, and recycle everything that can be reused. India's Alang ship



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recycling yard in Gujarat, on the Gulf of Khambhat, has been doing this for decades. It is the world's largest ship breaking yard — a 10-km stretch of beach where retired ships are driven onto shore at high tide and then dismantled by workers. This week, the UN's trade body UNCTAD confirmed that India became the world's number one ship recycling nation in 2025, with a 35.4% global market share — up from 30.1% in 2024, and nearly 60% more tonnage than the previous year. This achieved India's Maritime India Vision 2030 target of global leadership in ship recycling — five years ahead of schedule. Why does this matter beyond a ranking? Steel recovered from ship recycling feeds India's secondary steel production. Metals recovered (copper, aluminium, brass) re-enter industrial supply chains. And jobs — Alang employs 50,000-70,000 workers, mostly from UP, Rajasthan, and Bihar.

Key Terms:

Term	Definition
Alang Ship Recycling Yard	World's largest ship breaking facility; 50+ km of Gujarat coastline on Gulf of Khambhat; 50,000-70,000 workers
UNCTAD	United Nations Conference on Trade and Development — releases annual ship recycling data; confirmed India's #1 ranking for 2025
Maritime India Vision (MIV) 2030	Government's maritime sector development blueprint; ship recycling global leadership was one target; achieved 5 years early
Hong Kong Convention (HKC)	International treaty for safe and environmentally sound ship recycling; India ratified via Recycling of Ships Act 2019 — key to getting EU approval
Light Displacement Tonnes (LDT)	Weight of ship when empty; standard measure for ship recycling capacity; India's capacity target: 9 million LDT
EU Ship Recycling Regulation (EUSRR)	EU requires ships flying EU flags to be recycled at approved yards; India working to get Alang yards on EU approved list — huge commercial opportunity

Important Points for UPSC:

- India's 2025 market share: 35.4% (up from 30.1% in 2024); volume: 2.99 million gross tonnes (up 60% from 1.86 million GT in 2024) — UNCTAD data
- MIV 2030 target achieved 5 years early: India was targeting global leadership in ship recycling by 2030; achieved in 2025 — rare instance of India ahead of its own timeline
- Alang-Sosiya Yard, Gujarat: Located on Gulf of Khambhat; natural tidal variation (10m tidal range) ideal for beaching ships; 150+ active recycling plots
- Recycling of Ships Act 2019: India's domestic legislation aligning with Hong Kong Convention standards; mandatory Ship Recycling Plan, Inventory of Hazardous Materials required
- EU approval push: If India gets Alang yards on EU Ship Recycling Regulation (EUSRR) approved list, EU-flagged ships (25%+ of global fleet) can be sent to India — massive volume increase potential
- Environmental concern: Ship recycling involves asbestos, PCBs, heavy metals, fuel residues — must be handled with international standards; India's compliance improving but not perfect yet





- Capacity expansion: Gujarat master plan to expand Alang to 9 million LDT (nearly double current capacity); new infrastructure, modern equipment, green recycling standards
- BIMCO projection: 16,000+ ships to be recycled globally over next decade; India at 35.4% market share could recycle 500-600 vessels annually — employment and steel recovery at scale

DISHA 2.0 — DESIGNING INNOVATIVE SOLUTIONS FOR HOLISTIC ACCESS TO JUSTICE

Ministry: Ministry of Law and Justice

PIB Date: 22nd June 2026

Easy Explanation

Justice in India has a paradox. The Constitution guarantees equal justice to every citizen. But in practice, a poor farmer in a remote village cannot afford a lawyer, doesn't know what her rights are, and even if she goes to court, may wait 10-15 years for a verdict. India has 5 crore pending cases in courts. Legal aid technically exists — the government provides free lawyers to those who can't afford them — but awareness of this right is extremely low, and quality of free legal aid is often poor. DISHA 2.0 — Designing Innovative Solutions for Holistic Access to Justice — is the government's redesigned programme to fix this. It goes beyond simply providing free lawyers. It covers the entire access-to-justice ecosystem: legal literacy (teaching people what their rights are through village-level programmes), Lok Adalats (alternative dispute resolution forums where cases are settled without formal trials), tele-law (lawyers accessed via video call from Common Service Centres in villages), Nyaya Bandhu (pro bono lawyer programme), and legal aid clinics in prisons (where undertrials — people awaiting trial — often spend years in jail for offences that carry shorter sentences). DISHA 2.0 was approved this week by the Law Minister with enhanced funding and digital integration. It connects directly to SDG 16 — Peace, Justice, and Strong Institutions.

Key Terms:

Term	Definition
DISHA 2.0	Designing Innovative Solutions for Holistic Access to Justice — MoLJ's revamped legal access scheme; covers literacy, aid, Lok Adalats, tele-law
Lok Adalat	Alternative dispute resolution forum; settles cases out of court; no appeal against Lok Adalat award; Legal Services Authorities Act 1987
Tele-Law	Lawyers accessed via video call at Common Service Centres (CSCs) in villages; over 30 lakh consultations since 2017
Nyaya Bandhu	Pro bono lawyer programme; trained lawyers volunteer to provide free services to poor litigants; government facilitates matching
NALSA	National Legal Services Authority — apex body for legal aid; constituted under Legal Services Authorities Act 1987; chaired by Chief Justice of India



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**Undertrial Prisoners**

People awaiting trial in prison; 75%+ of India's 5.5 lakh prison population are undertrials — often imprisoned longer than their eventual sentence

Important Points for UPSC:

- India's justice access gap: 5 crore pending cases in courts; average case takes 10-15 years to resolve at district level; legal system inaccessible to poor
- Undertrial crisis: 75%+ of India's 5.54 lakh prison population are undertrials (not convicted); many languish in jail for years for bailable offences — Section 436A CrPC allows bail after serving half the maximum sentence, but awareness is low
- NALSA (National Legal Services Authority): Constitutional mandate under Article 39A — free legal aid is a fundamental right; NALSA coordinates state legal services authorities
- Tele-Law: CSC-based video legal consultations; 30+ lakh consultations since 2017; expanded to 50,000+ CSCs under DISHA 2.0; primary channel for rural legal access
- Lok Adalat impact: Over 20 crore cases settled through Lok Adalats since inception; reduces court burden; binding settlement, no appeal — fast and final
- Prison legal aid clinics: Lawyers visit prisons to identify undertrials who qualify for bail or have served sufficient time; DISHA 2.0 formalises and funds this
- SDG 16 connection: Sustainable Development Goal 16 — 'Peace, Justice and Strong Institutions'; India's DISHA 2.0 is the domestic implementation vehicle
- Digital courts: E-courts Phase III underway; DISHA 2.0 integrates with e-courts for case tracking, virtual hearings, digital evidence — makes justice geographically accessible

ABS FRAMEWORK — ₹145 CRORE TO BIODIVERSITY BENEFICIARIES

Ministry: Ministry of Environment, Forest and Climate Change / National Biodiversity Authority

PIB Date: 20th June 2026

Easy Explanation

Imagine a tribal community in Odisha that has known for generations that a particular forest plant's bark cures fever. They have used this knowledge for centuries. One day, a pharmaceutical company discovers the same property, synthesises the active compound, patents a drug, and makes crores. The community gets nothing. This is called biopiracy — the commercial exploitation of biological resources and traditional knowledge without sharing benefits with the communities who discovered and conserved them. The Access and Benefit Sharing (ABS) framework under India's Biological Diversity Act 2002 is designed to prevent this. Any company that uses Indian biological resources — a medicinal plant, a crop variety seed, a micro-organism from Indian soil — must first get approval from the National Biodiversity Authority (NBA), pay a benefit-sharing fee, and that fee is distributed to the communities, farmers, and forest departments that conserved those resources. This week's PIB release revealed: since 2008, the NBA has collected ₹266 crore through ABS, disbursed ₹145 crore to over 10,500 Biodiversity Management Committees across 23 states. The largest contributors were companies using Red Sanders (₹120 crore), seeds (₹85 crore), and pharma/AYUSH products (₹37 crore). This is not just a conservation mechanism — it is a social justice mechanism, putting money in the hands of communities that have been custodians of India's biological wealth for millennia.



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**Key Terms:**

Term	Definition
ABS	Access and Benefit Sharing — framework ensuring communities get fair share of benefits when their biological resources or traditional knowledge is commercially used
Biological Diversity Act 2002	India's law implementing CBD; establishes NBA, SBBs, and BMCs; mandates ABS; amended in 2023 for easier AYUSH access
NBA	National Biodiversity Authority — statutory body in Chennai; approves access to biological resources; collects and distributes ABS funds
BMC	Biodiversity Management Committee — village/ward level; maintains People's Biodiversity Register; receives ABS funds; 2.76 lakh BMCs operational
Nagoya Protocol 2010	Supplementary agreement to CBD (COP-10, Nagoya, Japan); international framework for ABS; India ratified it — NBA implements domestically
Kunming-Montreal GBF	Global Biodiversity Framework (COP-15, 2022); Target 13: 'fair and equitable sharing of benefits'; India's ABS framework directly implements this target

Important Points for UPSC:

- ABS framework statistics: ₹266 crore mobilised since 2008; ₹145 crore disbursed (including ₹78 crore in FY2025-26 alone — highest ever single-year disbursement)
- Beneficiaries reached: 10,500+ BMCs across 23 states + 4 UTs; 230+ farmers; 6 State Forest Departments; institutions — grassroots reach is impressive
- Sector-wise ABS collections: Red Sanders 45% (₹120 crore); Seeds sector 32% (₹85 crore); Pharma/AYUSH 14% (₹37 crore) — shows who benefits commercially from India's biodiversity
- Red Sanders (*Pterocarpus santalinus*): Endemic to Andhra Pradesh; heavily traded internationally; high ABS value reflects its commercial demand in Japan, China for furniture and medicine
- NBA three-tier structure: NBA (national) → State Biodiversity Boards (state) → Biodiversity Management Committees (village) — 85-90% of NBA collections flow down to state and local levels
- Biological Diversity Amendment Act 2023: Eased ABS requirements for AYUSH sector (traditional medicine) to reduce compliance burden while maintaining core benefit-sharing obligations
- India's People's Biodiversity Registers: 2.72 lakh registers documenting local biodiversity — world's largest grassroots biodiversity documentation effort; forms evidence base for ABS claims
- Biopiracy prevention: ABS framework makes it legally mandatory to seek permission before accessing Indian biological resources; multiple cases of foreign companies denied or penalised for violation





INCOIS EL NIÑO BULLETINS — PROTECTING INDIA'S MARITIME SECTORS

Ministry: Ministry of Earth Sciences / INCOIS

PIB Date: 23rd June 2026

Easy Explanation

El Niño is a natural climate phenomenon where the surface temperature of the central and eastern Pacific Ocean becomes unusually warm. This sounds distant from India, but El Niño's effects reach India directly: it weakens the Indian monsoon, causing droughts in many parts of India, floods in others. For India's 15 crore fishermen, farmers dependent on monsoon rains, and maritime operators, El Niño is not an abstract climate event — it is an economic threat. The Indian National Centre for Ocean Information Services (INCOIS), under the Ministry of Earth Sciences, launched specialised El Niño Bulletins this week, specifically designed for India's maritime sectors — fishing, shipping, coastal tourism, offshore oil platforms, and ports. These are not generic weather alerts. They are sector-specific forecasts: which fishing zones will have lower fish catches because El Niño has disrupted ocean temperature layers (thermoclines) that fish depend on? Which coastal areas will face rough sea conditions? Which ports need to prepare for unusual tide and wave patterns? Think of it as a hyper-personalised weather service for people who live and work on the ocean. INCOIS already provides Ocean State Forecasts used by fishermen to find fish and avoid dangerous seas. The El Niño Bulletins add a longer-range, climate-scale layer to this — helping maritime sectors plan weeks and months ahead rather than just days.

Key Terms:

Term	Definition
El Niño	Periodic warming of central/eastern Pacific Ocean surface temperatures; occurs every 2-7 years; weakens Indian monsoon, disrupts marine ecosystems
INCOIS	Indian National Centre for Ocean Information Services, Hyderabad — under MoES; provides ocean state forecasts, tsunami warnings, fish potential zones
La Niña	Opposite of El Niño: cooling of Pacific; strengthens Indian monsoon; alternates with El Niño in ENSO cycle
ENSO	El Niño-Southern Oscillation — climate pattern coupling Pacific Ocean temperatures with atmospheric pressure changes; affects global weather
Potential Fishing Zone (PFZ)	INCOIS advisory identifying areas with high fish concentration based on ocean temperature and chlorophyll satellite data; used by 4 lakh+ fishermen daily
Ocean State Forecast	INCOIS's daily forecast of wave height, wind speed, sea surface temperature, current direction — used by fishermen and ships for safety planning

Important Points for UPSC:



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- INCOIS established 1999 in Hyderabad; under Ministry of Earth Sciences; provides ocean information and advisory services for fisheries, shipping, climate, and disaster management
- El Niño 2023-24 was one of the strongest on record; weakened India's 2023 monsoon; contributed to low groundwater recharge and crop stress in many states
- El Niño impact on fisheries: Warm surface water suppresses upwelling of cold, nutrient-rich deep water; plankton and fish populations decline; fishermen catch less per trip
- INCOIS specialised bulletins: Cover fishing sectors (fish location shifts), shipping (wave height forecasts), offshore platforms (extreme weather alerts), and coastal tourism (beach safety)
- Potential Fishing Zone (PFZ) advisories: Sent to fishermen via SMS, app, and radio in regional languages; reduces fuel cost by 20-30% (fishermen don't waste fuel searching for fish)
- Tsunami Early Warning: INCOIS operates India's Tsunami Early Warning Centre since 2007; alerts issued within 10 minutes of a submarine earthquake; covers Indian Ocean nations
- 2023 El Niño impact: IMD linked deficient monsoon (-8% from normal) to El Niño; Kharif production fell; inflation in vegetables spiked — INCOIS bulletins help mitigate this through early preparedness
- Connects to: Climate change (El Niño events are becoming more intense), Blue Economy (India's fisheries sector, ₹2.8 lakh crore), Disaster Management (INCOIS-MHA coordination)

ETHANOL BLENDING PROGRAMME — GOVERNMENT CLARIFICATION

Ministry: Ministry of Petroleum & Natural Gas

PIB Date: 23rd June 2026

Easy Explanation

Petrol at your local fuel station contains a percentage of ethanol — alcohol made from sugarcane or grains — blended in to reduce dependence on imported crude oil and lower carbon emissions. India's Ethanol Blending Programme (EBP) is one of the world's most ambitious: India achieved 15% ethanol blending (E15) in petrol and is targeting 20% blending (E20) on a national scale. This week, the Ministry of Petroleum & Natural Gas issued a clarification statement after misleading claims and old images circulated on social media suggesting ethanol blending was causing engine damage and vehicle problems. The government confirmed that ethanol blending is scientifically validated, follows international standards, and is monitored by the Bureau of Indian Standards (BIS) and quality testing labs. The clarification also highlighted the programme's achievements: in 9 ethanol supply years (2013-14 to 2022-23), India blended 654 crore litres of ethanol, saving ₹87,320 crore in foreign exchange and reducing 318 lakh metric tonnes of carbon emissions. The programme also paid ₹1,13,000 crore to sugarcane farmers as ethanol price. The government's need to issue a clarification reflects the information ecosystem challenge — even successful government programmes face misinformation campaigns that need proactive communication.

Key Terms:

Term	Definition
EBP	Ethanol Blending Programme — blending ethanol (produced from sugarcane, maize, damaged grains) with petrol; reduces oil imports and carbon emissions



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E20	20% ethanol blended with 80% petrol; India's national target; vehicles need minor modifications for optimal performance; being rolled out 2025-26
1G Ethanol	First Generation ethanol from sugarcane juice, molasses, or food grains; current dominant source for EBP
2G Ethanol	Second Generation ethanol from agricultural waste (rice straw, wheat straw, bagasse); no food vs fuel conflict; India building 2G plants
BIS	Bureau of Indian Standards — certifies quality standards for ethanol blended petrol; ensures engine compatibility
Carbon Savings	654 crore litres blended (2013-2023) saved 318 lakh MT of CO ₂ equivalent — significant climate contribution from EBP

Important Points for UPSC:

- EBP achievements: E15 achieved nationally in 2024; E20 rollout underway 2025-26; 654 crore litres ethanol blended in 9 years; ₹87,320 crore forex saved; ₹1.13 lakh crore paid to farmers
- Ethanol sources for EBP: Sugarcane (molasses, juice) — primary; broken rice and maize — secondary; 2G ethanol from agri waste — future; damaged grains — emergency source
- Sugarcane farmer benefit: EBP has been called the 'sugarcane farmer's MSP' — government buys ethanol at fixed price (₹63.19/litre for sugarcane juice ethanol in 2024-25), giving farmers a reliable market beyond sugar
- Vehicle compatibility: Modern vehicles (post-2019 BS-VI) are flex-fuel compatible up to E20; older vehicles may need minor adjustments; two-wheelers most susceptible to fuel quality variation
- 2G Ethanol plants: IOC built India's first commercial 2G ethanol plant at Panipat (2022); produces ethanol from rice straw — directly connects to stubble burning problem (uses straw instead of burning it)
- SATAT scheme: Compressed Biogas from biomass including agricultural waste; complementary to EBP; government purchases CBG at fixed price ₹46/kg — another biofuel avenue
- International comparison: Brazil (E27 blending, 50+ years experience), USA (E10 nationally, E85 in flex-fuel vehicles) — India's E20 is catching up to global leaders
- Misinformation context: Social media videos showed old carburettor-era engine problems falsely attributed to ethanol blending; BIS-certified E20 petrol meets IS 2796 standard; no evidence of modern vehicle damage

VOC PORT — 45% CARBON EMISSION REDUCTION, GREEN MARITIME MODEL

Ministry: Ministry of Ports, Shipping and Waterways

PIB Date: 23rd June 2026

Easy Explanation

V.O. Chidambaranar Port (VOC Port), formerly Tuticorin Port, in Tamil Nadu is one of India's 12 major ports. Ports are significant carbon emitters — ships idling and manoeuvring in port burn heavy fuel oil, refrigerated containers run diesel generators, cargo handling equipment uses diesel, and lighting and administration buildings consume



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electricity. VOC Port has cut its carbon emissions by 45% in recent years, making it a model green port in Asia. How? A combination of measures: switching port equipment from diesel to electric (electric cranes, electric port vehicles), installing rooftop solar across the port campus, connecting shore power (allowing ships to plug into grid electricity while berthed instead of running their engines), using LED lighting across the entire facility, and tracking emissions in real-time. Union Minister Sonowal highlighted VOC Port's achievement at an event this week as India's flagship example of green maritime development. The port is also applying to be listed under the International Maritime Organization's (IMO) Green Voyage 2050 initiative. Why does this matter beyond the environment? Because the EU's Carbon Border Adjustment Mechanism (CBAM) is extending to shipping — ships calling at EU ports will face carbon taxes if their emissions are too high. Indian ports that demonstrate green credentials will attract more international shipping traffic.

Key Terms:

Term	Definition
VOC Port	V.O. Chidambaranar Port, Tuticorin, Tamil Nadu; one of India's 12 major ports; 45% carbon emission reduction — model green port
Shore Power	Electrical connection from port grid to berthed ship; ship turns off its engines and uses grid power — eliminates diesel burning while in port
Green Port	Port with certified low carbon operations; uses renewable energy, electric equipment, shore power, waste management protocols
IMO Green Voyage 2050	International Maritime Organization's strategy to decarbonise global shipping by 50% by 2050 relative to 2008 levels
CBAM (Shipping)	EU's Carbon Border Adjustment Mechanism being extended to maritime sector; ships emitting above thresholds pay carbon tax at EU ports
Maritime India Vision 2030 (MIV 2030)	Blueprint for India's maritime sector; includes green ports, ship recycling, port capacity expansion, cruise tourism development

Important Points for UPSC:

- VOC Port: 12 major ports in India administered under Major Port Authorities Act 2021; each has its own board — VOC Port Trust renamed VOC Port Authority
- 45% emission reduction: Achieved through electric cargo handling equipment, 100% LED lighting, rooftop solar, shore power for berthed vessels, and electric port vehicles
- IMO's carbon targets for shipping: 40% carbon intensity reduction by 2030; 70% by 2050 (relative to 2008); zero emissions 'by or around' 2050 — Indian ports must align
- India's 12 major ports: Deendayal (Kandla), Mumbai, JNPA, Mormugao, New Mangalore, Cochin, Chennai, Kamrajar, VOC, Visakhapatnam, Paradip, Kolkata/Haldia — together handle 65% of India's maritime trade
- Major Port Authorities Act 2021: Replaced Major Port Trusts Act 1963; gives ports corporate governance, more financial autonomy, power to set tariffs — enables green investments





- CBAM shipping extension: India's exporters to EU will be affected if their goods are shipped on high-carbon vessels; Indian port green certification becomes a competitive trade advantage
- Blue economy: India's maritime sector contributes ~4% of GDP; potential to reach 10% — green ports are enablers of this growth by attracting international shipping
- Sagarmala Programme: India's port-led development initiative; port modernisation, coastal shipping, port-led industrialisation — green ports are the latest dimension of Sagarmala

NAFEX.IN — NAFED'S E-AUCTION PORTAL LAUNCHED

Ministry: Ministry of Cooperation / NAFED

PIB Date: 23rd June 2026

Easy Explanation

A farmer in Maharashtra grows onions. When harvest comes, there are too many onions in the market and the price crashes to ₹1-2 per kg — not even enough to cover harvest cost. The farmer throws onions on the road in frustration. This is a real scene that has repeated itself for decades in India. Simultaneously, in Delhi, a restaurant owner is paying ₹60 per kg for onions. The farmer gets ₹2 and the consumer pays ₹60 — someone in the middle is capturing almost all the value. NAFED (National Agricultural Cooperative Export and Development federation) is the government's primary agency to prevent this — it buys agricultural commodities directly from farmers at market prices, stores them, and releases them to prevent price spikes. NAFEX.in is NAFED's new e-auction portal, launched by Home Minister Amit Shah this week. It creates a transparent, real-time digital marketplace where buyers (traders, processors, exporters) can bid in competitive auctions for NAFED's stored stocks of onions, pulses, oilseeds, and other commodities. The farmer benefits because NAFED's guaranteed procurement gives them a price floor. The consumer benefits because NAFED can release stocks to prevent price spikes. The transparency benefits everyone — auction results are public, prices are discovered competitively, and the middleman's information advantage is eliminated.

Key Terms:

Term	Definition
NAFED	National Agricultural Cooperative Export and Development Federation — apex cooperative for agricultural marketing; procures, stores, and markets farm produce
NAFEX.in	NAFED's e-auction portal; digital platform for transparent, competitive bidding on NAFED's stored agricultural commodity stocks
Price Discovery	Market process of determining fair price through supply and demand; e-auctions improve price discovery by making bids transparent and competitive
Price Stabilisation Fund (PSF)	Government fund used by NAFED to procure commodities when prices fall below MSP and release when prices spike — market intervention mechanism



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MSP	Minimum Support Price — government-declared floor price for agricultural commodities; NAFED procures at MSP to protect farmers from distress sale
e-NAM	National Agriculture Market — government platform connecting APMC mandis digitally; different from NAFEX which is for NAFED's own stocks

Important Points for UPSC:

- NAFED established 1958; apex agricultural cooperative; procures oilseeds, pulses, cereals, spices, onions, cotton under PSS (Price Stabilisation Scheme) and PSF (Price Stabilisation Fund)
- NAFEX.in: Real-time e-auction platform; buyers register, verify credentials, and bid competitively for NAFED lots; auction results publicly displayed — eliminates price opacity
- PSS (Price Support Scheme): NAFED procures commodities when market prices fall below MSP; storage costs borne by government; released when prices recover — important stabilisation tool
- NAFED's onion buffer: Government directed NAFED to build 5 lakh tonne onion buffer stock; released in tranches to prevent price spikes (2023 onion crisis required exports ban + buffer release)
- Cooperative sector reforms: Home Minister Amit Shah also heads Ministry of Cooperation (created 2021); NAFEX.in launch is part of broader cooperative sector digitisation drive
- Primary Agricultural Cooperative Societies (PACS): 1 lakh+ PACs to be computerised; NAFEX.in connects with this network to improve farmer access to NAFED's marketing services
- e-NAM vs NAFEX: e-NAM connects physical mandis digitally for fresh produce trade; NAFEX.in is specifically for NAFED's own procurement stocks — different purpose, complementary systems
- Price volatility problem: India loses ₹1.5 lakh crore annually in post-harvest losses; price volatility causes ₹40,000+ crore farmer income loss per year; digital marketing platforms address both

COAL GASIFICATION — BHARAT COAL GASIFICATION & CHEMICALS LIMITED (BCGCL), ODISHA

Ministry: Ministry of Coal

PIB Date: 20th June 2026

Easy Explanation

India has 361 billion tonnes of coal reserves — one of the world's largest. For decades, nearly all of it has been burned to generate electricity. But burning coal directly is the dirtiest way to use it: high CO₂, particulate pollution, ash disposal problems. Coal gasification is a cleaner alternative that does not burn coal — instead, it converts coal into a gas (called syngas — a mixture of hydrogen, carbon monoxide, and CO₂) by reacting it with steam and oxygen under high pressure and temperature. This syngas can then be used to make chemicals, fertilisers, fuels, and even hydrogen. President Droupadi Murmu and PM Modi laid the foundation stone of Bharat Coal Gasification & Chemicals Limited (BCGCL) at Lakhanpur, Odisha this week. BCGCL will use India's coal to produce ammonium nitrate — a critical industrial explosive used in coal mining, infrastructure construction, and quarrying. Currently, India imports most of its ammonium nitrate. The project will make India self-sufficient in this critical industrial input. More broadly, it



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is India's attempt to transition from 'coal as fuel for burning' to 'coal as feedstock for chemicals' — a fundamental shift in how India uses its vast coal reserves. The government has a target: gasify 100 million tonnes of coal per year by 2030.

Key Terms:

Term	Definition
Coal Gasification	Converting coal to syngas ($H_2 + CO + CO_2$) using steam and oxygen; cleaner than burning; syngas used for chemicals, fertilisers, hydrogen
BCGCL	Bharat Coal Gasification & Chemicals Limited — new entity; foundation stone laid at Lakhanpur, Odisha; will produce ammonium nitrate from Indian coal
Syngas	Synthetic gas ($H_2 + CO$ mixture) produced from coal gasification; feedstock for multiple chemical products including ammonia, methanol, hydrogen
Ammonium Nitrate	Industrial explosive; critical for mining, construction, quarrying; currently heavily imported by India — BCGCL aims to make India self-sufficient
Underground Coal Gasification (UCG)	In-situ gasification of coal seams without mining; India exploring this for deep/difficult coal seams not economically minable
100 MT Gasification Target	Government target to gasify 100 million tonnes of coal annually by 2030 through multiple projects across coal-bearing states

Important Points for UPSC:

- India's coal reserves: 361 billion tonnes (5th largest globally); Odisha, Jharkhand, Chhattisgarh, West Bengal, MP are major coal states — Lakhanpur (Odisha) is strategically located
- Coal gasification vs coal burning: Burning = direct CO_2 + particulates; Gasification = syngas with captured CO_2 option (CCUS possible); cleaner chemistry but not zero-carbon
- BCGCL product: Ammonium nitrate — used in mining explosives, quarrying, construction blasting; India imports ~8-10 lakh tonnes/year; strategic industrial input
- 100 MT gasification target by 2030: Massive scale-up from near-zero currently; requires 6-7 large-scale gasification projects across coal belt states
- Methanol economy connection: Coal gasification → methanol → methanol blended with petrol (M15, M20); India's Methanol Economy programme aims to use coal-derived methanol as transport fuel
- CIL (Coal India Limited) role: World's largest coal mining company; Coal India has coal gasification projects at Dankuni (WB) and Talcher (Odisha) — BCGCL is a new addition to this ecosystem
- CCUS relevance: Carbon Capture, Utilisation and Storage can be integrated with coal gasification to produce 'blue hydrogen' from coal; India's hydrogen mission includes this pathway
- Employment: Lakhanpur, Odisha project will generate 5,000+ direct and indirect jobs; Odisha's coal belt districts have high poverty and limited industrial employment — project has social dimension







PRACTICE QUESTIONS

10 PRELIMS QUESTIONS

Q1. Consider the following statements about the vessels commissioned in Kolkata on June 21, 2026:

1. INS Dunagiri is a Project 17A stealth frigate — the fifth of its class.
2. INS Sanshodhak is an Anti-Submarine Warfare Shallow Water Craft equipped with torpedoes and sonar.
3. INS Agray is the fifth vessel of the Arnala-class, designed for shallow water anti-submarine operations.
4. All three vessels were designed by the Warship Design Bureau and built at Garden Reach Shipbuilders and Engineers, Kolkata.

How many of the above statements are correct?

- (a) Only two
- (b) Only three
- (c) All four
- (d) Only one

Q2. With reference to India's Critical Minerals Mission, consider the following:

1. The 7th Tranche of critical mineral auctions resulted in 56 cumulative blocks being successfully auctioned out of 88 offered.
2. Exploration Licence (EL) blocks were auctioned for the first time in Arunachal Pradesh, Uttar Pradesh and Odisha.
3. Minerals auctioned include graphite, rare earth elements, vanadium, titanium and rock phosphate.
4. India's Critical Mineral Mission is implemented under the Ministry of Environment.

Which of the statements given above are correct?

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

Q3. The Rakhigarhi archaeological site is significant because:

1. It is the largest known settlement of the Indus-Saraswati Civilisation at approximately 550 hectares.
2. Skeletal remains from the site have been transferred to the Anthropological Survey of India's repository in New Delhi.
3. Human skeletal remains from the site could provide genetic evidence about ancestry and migration patterns of Harappan people.

Select the correct answer using the code given below:

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





Q4. India emerged as the world's top ship recycling nation in 2025. Which of the following statements about this are correct?

1. India's global share of ship recycling rose to 35.4% in 2025 from 30.1% in 2024, according to UNCTAD data.
 2. The Alang Ship Recycling Yard in Gujarat is India's primary ship recycling facility.
 3. This achievement fulfilled the ship recycling target under Maritime India Vision 2030 five years ahead of schedule.
 4. India passed the Recycling of Ships Act in 2019 aligning with the Hong Kong Convention.
- (a) 1, 2 and 3 only
(b) 1, 3 and 4 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4

Q5. The Access and Benefit Sharing (ABS) framework in India is implemented under which legislation?

- (a) Environment (Protection) Act, 1986
(b) Wildlife (Protection) Act, 1972
(c) Biological Diversity Act, 2002
(d) Forest Rights Act, 2006

Q6. With reference to the DISHA 2.0 scheme, consider the following statements:

1. DISHA stands for Designing Innovative Solutions for Holistic Access to Justice.
2. The scheme covers tele-law consultations via Common Service Centres, Lok Adalats, and prison legal aid clinics.
3. Under the Indian Constitution, free legal aid is guaranteed under Article 39A.
4. NALSA (National Legal Services Authority) is chaired by the Chief Justice of India.

Which of the above are correct?

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

Q7. INCOIS, which launched specialised El Niño bulletins this week, is primarily associated with which ministry?

- (a) Ministry of Agriculture & Farmers Welfare
(b) Ministry of Earth Sciences
(c) Ministry of Environment, Forest and Climate Change
(d) Ministry of Fisheries, Animal Husbandry and Dairying

Q8. Consider the following pairs relating to India's space programme:

Mission/Programme		Correct Description
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- | | |
|--------------|--|
| 1. Gaganyaan | — India's crewed spaceflight programme |
| 2. SpaDeX | — Space Docking Experiment; tests docking technology |
| 3. PSLV | — Heavy-lift rocket used for Chandrayaan-3 |
| 4. IN-SPACe | — Regulator for India's private space sector |

How many pairs are correctly matched?

- (a) Only two
- (b) Only three
- (c) All four
- (d) Only one

Q9. With reference to India's Ethanol Blending Programme, which of the following statements is/are correct?

- 1. India has a national target of 20% ethanol blending (E20) in petrol.
- 2. 2G ethanol is produced from agricultural residues such as rice straw and bagasse, avoiding food vs fuel conflict.
- 3. The programme has resulted in savings of over ₹87,000 crore in foreign exchange over nine ethanol supply years.

Select the correct answer:

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

Q10. Bharat Coal Gasification & Chemicals Limited (BCGCL) foundation stone was laid at Laxmanpur in Odisha. Which of the following best describes the primary product BCGCL will manufacture?

- (a) Synthetic methanol for use as a transport fuel blend
- (b) Ammonium nitrate for use as an industrial explosive in mining and construction
- (c) Blue hydrogen for use in green energy applications
- (d) Syngas for direct use in thermal power generation

2 MAINS QUESTIONS

MAINS QUESTION 1 — 150 WORDS:

India's emergence as the world's top ship recycling nation, the tri-commissioning of INS Dunagiri, Sanshodhak and Agray, and the launch of NAFEX.in all took place in the same week. What common thread links these apparently unrelated developments, and what do they collectively signal about India's maritime and economic ambitions?

MAINS QUESTION 2 — 250 WORDS:



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'The PIB Backgrounders on India's Space Odyssey and Emerging Technology Ecosystem reveal a country that is simultaneously proud of what it has built and honest about the distance it must still travel.' Critically examine India's technology journey — its genuine achievements and its structural constraints — and suggest a policy pathway for the next decade.

PRELIMS ANSWERS & EXPLANATIONS

Q1. Answer: (b) Only three

Explanation: Statements 1, 3, and 4 are correct. Statement 2 is WRONG — INS Sanshodhak is a Survey Vessel (Large), NOT an Anti-Submarine Warfare craft. It is designed for hydrographic surveys and oceanographic research. INS Agray is the ASW-SWC with torpedoes and sonar. Confusing Sanshodhak (survey) with Agray (ASW) is the classic trap here. Three statements are correct.

Q2. Answer: (a) 1, 2 and 3 only

Explanation: Statements 1, 2, and 3 are correct. Statement 4 is WRONG — Critical Minerals Mission is under the Ministry of Mines, NOT Environment. MoEFCC handles environment clearances for mining projects but is not the nodal ministry for the Critical Mineral Mission. Ministry of Mines is the correct answer.

Q3. Answer: (a) 1 and 3 only

Explanation: Statement 2 is WRONG — skeletal remains were transferred to AnSI's repository in KOLKATA, not New Delhi. This is a frequently tested factual trap. AnSI's ancient human skeletal repository and laboratory is in Kolkata. Statements 1 (550 hectares, largest Harappan site) and 3 (genetic research potential) are correct.

Q4. Answer: (d) 1, 2, 3 and 4

Explanation: All four statements are correct. 35.4% market share (UNCTAD data), Alang Gujarat (primary yard), MIV 2030 target achieved 5 years early, Recycling of Ships Act 2019 (Hong Kong Convention) — all confirmed facts from PIB. Another all-correct answer — every number and detail must be memorised accurately.

Q5. Answer: (c)

Explanation: ABS framework in India is implemented under the Biological Diversity Act, 2002. This act established the NBA, State Biodiversity Boards, and BMCs and mandates benefit sharing from utilisation of biological resources. It implements India's obligations under the Convention on Biological Diversity (CBD) and its Nagoya Protocol. Other acts mentioned are different legislation.

Q6. Answer: (c) 1, 2, 3 and 4

Explanation: All four statements are correct. DISHA = Designing Innovative Solutions for Holistic Access to Justice (1). Tele-law, Lok Adalats, prison legal aid are all components (2). Article 39A of the Constitution mandates free legal aid (3). NALSA is chaired by the Chief Justice of India (4). All four correct — standard legal aid facts for UPSC.



**Q7. Answer: (b)**

Explanation: INCOIS (Indian National Centre for Ocean Information Services) is under the Ministry of Earth Sciences (MoES), headquartered in Hyderabad. It provides ocean state forecasts, tsunami early warnings, potential fishing zone advisories — all ocean-related services. Not under Agriculture, Environment, or Fisheries ministries.

Q8. Answer: (b) Only three

Explanation: Statement 3 is WRONG — PSLV (Polar Satellite Launch Vehicle) is India's workhorse rocket but Chandrayaan-3 was launched by LVM3 (Launch Vehicle Mark 3, formerly GSLV Mk III), not PSLV. PSLV lacks the payload capacity for Chandrayaan-class missions. Statements 1 (Gaganyaan — crewed), 2 (SpaDeX — docking experiment), and 4 (IN-SPACe — private sector regulator) are all correct.

Q9. Answer: (d) 1, 2 and 3

Explanation: All three statements are correct. E20 is India's national petrol blending target (1). 2G ethanol uses agricultural residues like rice straw — no food vs fuel conflict unlike 1G (2). ₹87,320 crore forex saved over 9 ethanol supply years (3) — confirmed in government's own clarification PIB this week. All three correct.

Q10. Answer: (b)

Explanation: BCGCL's primary product is ammonium nitrate — an industrial explosive used in mining, quarrying, and construction. The PIB release specifically mentions this is a 'Coal-to-Ammonium Nitrate Project.' Option (a) — methanol is a different coal gasification product. Option (c) — blue hydrogen is another pathway. Option (d) — syngas for power generation is a different application. BCGCL is specifically for ammonium nitrate.

MAINS MODEL ANSWERS**MAINS Q1 — Model Answer (150 words):**

The common thread is maritime power — India's systematic, multi-dimensional effort to dominate its oceanic neighbourhood economically, militarily, and institutionally.

The tri-commissioning of INS Dunagiri, Sanshodhak, and Agray demonstrates naval Atmanirbharta — India no longer buys its warships abroad; it builds them, designs them, and now commissions three simultaneously. Maritime power is increasingly the currency of strategic influence in the Indo-Pacific.

Becoming the world's top ship recycling nation reflects economic maritime mastery — India's ports are not just import/export terminals; they are circular economy hubs converting retired global vessels into steel, metals, and jobs.

NAFEX.in is the agricultural face of maritime economics — India's agricultural commodities (pulses, oilseeds, onions) flow through ports to global markets; transparent price discovery through NAFEX improves India's export competitiveness.

Together, these developments signal India's conscious transition from a country with a coastline to a country with a maritime strategy — covering warships, trade, recycling, and farmer price realisation simultaneously.

MAINS Q2 — Model Answer (250 words):

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India's technology story is genuinely remarkable and genuinely incomplete — and honest policy requires holding both truths simultaneously.

The achievements are real. PSLV's 60+ successful launches represent world-class reliability. Chandrayaan-3's south pole landing was a genuine planetary first. The startup ecosystem producing 2.3 lakh startups and 119 unicorns in two decades is organic and deep. The bioeconomy's 19x growth (\$10B to \$190B) shows that science-to-commerce translation is working in life sciences. IndiaAI Mission's Varya demonstrates that frugal innovation — doing more with less — is a legitimate technological strategy, not just budget constraint.

But the constraints are structural and serious. India spends 0.65% of GDP on R&D — a third of China's ratio and a quarter of South Korea's. Without sustained R&D investment, India remains an excellent applier of others' frontier science, not a creator of it. The semiconductor mission is starting from near-zero manufacturing capability; Taiwan and South Korea have 40-year head starts. India's chip design strength (Qualcomm, AMD, Intel all have large R&D centres here) has not translated to manufacturing — the 'design to fab' bridge remains unbuilt. AI infrastructure (GPU clusters) is being built but access for smaller startups and academic researchers remains limited.

The policy pathway for the next decade must do three things. First, double R&D expenditure to 1.5% of GDP through a combination of public funding (DST, DBT, DRDO) and tax incentives for corporate R&D. Second, build technology commons — shared infrastructure (GPU clusters, biotech labs, quantum computers) accessible to startups, academia, and MSMEs at subsidised rates. Third, link education to innovation — India's IIT output is world-class but the IIT-startup-IP pipeline needs strengthening through patent filing support, technology transfer offices, and industry-academia joint research mandates.

The Space Odyssey backgrounder's narrative arc — from borrowing Soviet rockets to landing on the Moon's south pole — is India's technology policy in microcosm: patient investment, frugal innovation, and disciplined execution across decades. The emerging tech ecosystem needs the same patience, applied now.





WEEK 05

**25 JUNE –
03 JULY
2026**

PIB

WEEKLY BRIEF

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IAF NETRA — FINAL OPERATIONAL CLEARANCE FOR INDIGENOUS AEW&C SYSTEM

Ministry: Ministry of Defence / DRDO / Indian Air Force

PIB Date: 25th June 2026

Easy Explanation

Imagine you are defending a country's airspace. Ground radars can only see as far as the horizon — mountains, the curvature of the earth, and altitude limitations all create blind spots. A fighter jet flying low can sneak in below radar coverage. That is where an Airborne Early Warning and Control (AEW&C) system comes in. It is essentially a flying radar station — an aircraft carrying a powerful radar that flies high up and can see everything for hundreds of kilometres: enemy jets, cruise missiles, drones, even ships on the sea surface. It then instantly shares this picture with all Indian fighters and ground



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command centres, acting as a battlefield coordinator in the sky. India had imported such a system from Israel — the Phalcon AWACS on a Russian IL-76 aircraft. But having a foreign system has risks: technology denial in a crisis, supply chain dependence, high maintenance costs. So DRDO developed India's own — called Netra, meaning 'eye' in Sanskrit. On June 25, Netra received its Final Operational Clearance (FOC), meaning it has completed every test, every trial, every validation, and is declared fully combat-ready. Netra has already proven itself in real operations — it was used during the Balakot strikes in 2019 and Operation Sindoor in 2025.

Key Terms:

Term	Definition
AEW&C	Airborne Early Warning and Control — flying radar station extending radar horizon far beyond ground systems; provides battle management
AWACS	Airborne Warning and Control System — similar to AEW&C; Phalcon is India's imported AWACS on IL-76 with Israeli EL/W-2090 radar
Netra	India's indigenous AEW&C; Sanskrit for 'eye'; developed by DRDO's CABS + LRDE; mounted on Embraer ERJ-145 aircraft
FOC	Final Operational Clearance — full, final certification that a system has completed all trials and is combat-ready for unrestricted operations
IOC	Initial Operational Clearance — first partial certification; Netra received IOC in 2017; FOC in 2026 marks full maturity
AESA Radar	Active Electronically Scanned Array — advanced radar with no moving parts; faster, more accurate, harder to jam; used in Netra
CABS	Centre for Airborne Systems, Bengaluru — DRDO lab that led Netra development; overall system design and flight-testing
Phalcon AWACS	Israel's EL/W-2090 radar on Russian IL-76 aircraft; India's imported AWACS; Netra is the smaller, indigenous complement

Important Points for UPSC:

- Netra = DRDO (CABS + LRDE Bengaluru) AESA radar on Embraer ERJ-145 aircraft — memorise this formula for MCQs
- LRDE (Electronics & Radar Development Establishment), Bengaluru designed the AESA radar — distinct from CABS which did overall integration





- Netra provides ~240 degree azimuthal radar coverage; detects targets at up to 375 km range — fighter jets, cruise missiles, UAVs, surface vessels
- IOC (2017) to FOC (2026): 9-year journey from initial induction to full combat certification — similar pattern to Tejas LCA
- India currently operates 3 Netra aircraft; plans for Netra Mk1A (improved gallium nitride TRMs) and Netra Mk2 on Airbus A321 platform (6 aircraft cleared)
- Netra complements Phalcon AWACS: Phalcon = larger, longer endurance, 360 degree coverage (imported on IL-76); Netra = medium, rapid deployment, indigenous (on ERJ-145)
- Combat proven: Netra used during Balakot strikes (2019) and Operation Sindoor (2025) — not just a demonstration system
- India joins a small club of nations (USA, Russia, China, Israel, EU) capable of developing indigenous AEW&C systems domestically

DAE — WORLD'S FIRST NUCLEAR HYDROGEN FACILITY USING COPPER-CHLORINE CYCLE

Ministry: Department of Atomic Energy / IGCAR / BARC

PIB Date: 26th June 2026

Easy Explanation

The world needs vast quantities of hydrogen to replace fossil fuels — for steel manufacturing, fertiliser production, transportation, and power generation. But making 'green' hydrogen today requires enormous amounts of electricity from solar or wind farms, and costs Rs 400-500 per kg. Scientists have long known there is another way: thermochemical cycles — chemical reactions that split water into hydrogen and oxygen using heat alone, with very little electricity. The Copper-Chlorine (Cu-Cl) cycle uses a series of chemical reactions involving copper and chlorine compounds, cycling them to continuously extract hydrogen from water. It only needs heat at around 500 degrees C — much lower than other thermochemical processes — and uses very little electricity. Where does the heat come from? From a nuclear reactor. India's Fast Breeder Test Reactor (FBTR) at Kalpakkam generates enormous heat as part of its operation. Now, this nuclear heat has been channelled to drive the Cu-Cl hydrogen production cycle. On June 26, the Department of Atomic Energy inaugurated the world's first facility that combines nuclear process heat with the Cu-Cl thermochemical cycle to produce hydrogen. Developed indigenously by BARC (Mumbai), this is a technology demonstration plant — proving the concept works and opening a pathway to carbon-free hydrogen at potentially much lower cost than electrolysis.

Key Terms:

Term	Definition
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Cu-Cl Thermochemical Cycle	Series of copper-chlorine reactions that split water into H ₂ and O ₂ using heat (~500 deg C); developed indigenously by BARC
FBTR	Fast Breeder Test Reactor — India's only operating sodium-cooled fast reactor; at IGCAR Kalpakkam; provides nuclear process heat
IGCAR	Indira Gandhi Centre for Atomic Research, Kalpakkam, Tamil Nadu — India's premier fast reactor research institution; established 1971
BARC	Bhabha Atomic Research Centre, Mumbai — developed the Cu-Cl process indigenously; India's primary nuclear research centre
Nuclear Hydrogen	Hydrogen produced using nuclear heat (thermochemical) or nuclear electricity (electrolysis); carbon-free if nuclear energy is used
PFBR	Prototype Fast Breeder Reactor — 500 MW; being completed at Kalpakkam; 2nd stage of India's 3-stage nuclear programme
India's 3-Stage Nuclear Programme	Stage 1: PHWRs (natural uranium); Stage 2: FBRs (plutonium); Stage 3: Thorium reactors — FBTR bridges Stage 1 to Stage 2

Important Points for UPSC:

- World's first: No country has previously combined nuclear process heat from a fast reactor with the Cu-Cl thermochemical hydrogen production cycle — India is the pioneer
- Cu-Cl cycle temperature: ~500 degrees C maximum (vs Sulfur-Iodine cycle which needs 850+ degrees C); makes it compatible with a wider range of nuclear reactors
- Electrolysis comparison: Cu-Cl cycle uses only 0.5-1.0 volts for its electrolysis step (vs 1.23+ volts for conventional water electrolysis) — significantly less electricity
- FBTR at Kalpakkam: India's only operational sodium-cooled fast reactor; 40+ years of operation; uses plutonium-uranium mixed oxide fuel; process heat now used for hydrogen
- PFBR (Prototype Fast Breeder Reactor, 500 MW): Under construction at Kalpakkam; once operational, will provide far more process heat for potential large-scale hydrogen production
- Connection to National Green Hydrogen Mission: This technology offers a 'nuclear hydrogen' pathway — carbon-free, potentially cheaper than green hydrogen from renewables
- BARC developed the process; IGCAR hosts the facility — distinction between who developed vs where the facility is located





- Technology demonstration stage: Proof of concept; scale-up to industrial hydrogen production would require dedicated nuclear heat allocation and larger reactors

PM MODI STATE VISIT TO SEYCHELLES — 19 BILATERAL OUTCOMES

Ministry: Prime Minister's Office / Ministry of External Affairs

PIB Date: 27th–29th June 2026

Easy Explanation

Seychelles is a tiny island nation in the Indian Ocean — 115 islands, 1.3 lakh people, and an economy based on tourism and fishing. It sounds like an unusual destination for an Indian PM's state visit. But in geopolitics, size does not determine importance. Seychelles sits in the middle of the western Indian Ocean, right along the shipping routes that carry 40% of the world's container traffic. China has been investing heavily across the Indian Ocean — trying to establish a 'String of Pearls' presence. India has been pushing back through its own Indian Ocean outreach. PM Modi's June 27-29 visit to Seychelles was the first ever by an Indian Prime Minister and produced 19 bilateral outcomes covering maritime security, defence, digital payments (UPI launched in Seychelles), healthcare, agriculture, space, and education. India announced a \$175 million Special Economic Package. PM Modi was conferred with 'Guardian of the Blue Horizon' — Seychelles' highest Presidential Distinction, instituted just days before the visit — recognising his environmental leadership, Blue Economy advocacy, and support for Small Island Developing States (SIDS). Modi also addressed Seychelles' National Assembly and attended the 50th anniversary of Seychelles' independence — a golden jubilee year.

Key Terms:

Term	Definition
SIDS	Small Island Developing States — UN category; Seychelles is a SIDS; face climate vulnerability, small economies, ocean-dependent livelihoods
Blue Economy	Economic activities from oceans and seas — fisheries, shipping, offshore energy, marine tourism; Seychelles' entire economy is Blue Economy
Guardian of Blue Horizon	Seychelles' highest Presidential Distinction; first-ever recipient PM Modi; recognises environmental leadership and SIDS advocacy
String of Pearls	China's strategy of building ports and facilities across Indian Ocean; counter-balance is India's goal



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IORA	Indian Ocean Rim Association — 23 member countries; India and Seychelles are members; promotes Blue Economy and maritime cooperation
\$175 Million SEP	Special Economic Package announced by PM Modi; grants and lines of credit for Seychelles' infrastructure and development
SAGAR	Security and Growth for All in the Region — PM Modi's Indian Ocean vision; India as net security provider

Important Points for UPSC:

- First-ever Indian PM visit to Seychelles — significant diplomatic milestone given the nation's strategic Indian Ocean location
- 19 bilateral outcomes: defence (maritime patrol vessel delivery), digital (UPI launched in Seychelles), healthcare, space (ISRO satellite data sharing), education, agriculture, culture
- \$175 million Special Economic Package: mix of grants and lines of credit for infrastructure, climate resilience, and economic diversification
- 'Guardian of Blue Horizon': Seychelles' highest Presidential Distinction; first-ever recipient; instituted June 24, 2026 — just 4 days before the ceremony
- Modi addressed Seychelles' National Assembly — rare privilege extended to foreign leaders; emphasised SAGAR doctrine
- Golden Jubilee: Seychelles independence June 29, 1976; PM Modi attended 50th anniversary celebrations
- UPI in Seychelles: Expands India's digital payment footprint to yet another Indian Ocean island nation — Maldives, Sri Lanka, Mauritius already have UPI
- China counter: China has provided Seychelles with patrol vessels and infrastructure; India countering with deeper engagement under 'neighbourhood first' extended to island states

INDIA-JAPAN 16TH ANNUAL SUMMIT — 16-POINT STRATEGIC ROADMAP

Ministry: Prime Minister's Office / Ministry of External Affairs

PIB Date: 2nd July 2026

Easy Explanation

Japan's Prime Minister Sanae Takaichi visited India from July 1-3, 2026, for the 16th India-Japan Annual Summit — a meeting that happens every year alternating between the two countries. The 2026 summit was particularly rich, producing 16 agreements across an extraordinary range of sectors. The headline themes were three: Economic Security (protecting supply chains for semiconductors, critical minerals, pharma, AI), Artificial Intelligence (India's AI talent plus Japan's AI investment), and Energy Resilience



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(both countries vulnerable to West Asia oil disruption). Three formal documents were adopted: the India-Japan Joint Declaration on Economic Security; the Joint Statement on AI Cooperation; and the Joint Statement on Energy Resilience. Additionally, Japan will help set up 1,000 biogas plants across India through dairy cooperatives (CBG Initiative), invest in battery supply chains, and cooperate on pharmaceutical APIs. Both countries declared 2027 as 'India-Japan Year of Shared Horizons' marking 75 years of diplomatic relations. PM Takaichi is Japan's first woman Prime Minister and made India one of her first bilateral visits — signalling the strategic importance of the India-Japan relationship.

Key Terms:

Term	Definition
Special Strategic and Global Partnership	India-Japan's highest bilateral designation since 2014; annual summit alternates between capitals
Economic Security Declaration	Joint commitment to build resilient supply chains in semiconductors, critical minerals, AI, clean energy, pharma
Joint AI Statement	First-ever bilateral AI cooperation statement; roadmap for safe, human-centric AI R&D; IndiaAI Mission + Japan's METI sign MoC
Energy Resilience Statement	Coordinates strategic petroleum reserves management, maritime energy transport, clean hydrogen and ammonia cooperation
CBG Initiative	India-Japan Cooperative Biogas for Growth — Japan funds 1,000 biogas and organic fertiliser plants in India via dairy cooperative networks
LUPEX	Lunar Polar Exploration Mission — India-Japan joint Moon mission; mentioned in Year of Shared Horizons 2027 activities
PM Sanae Takaichi	Japan's first woman Prime Minister; visited India July 1-3, 2026; Japan's LDP leader; India-Japan summit held in New Delhi

Important Points for UPSC:

- 16 outcomes: India-Japan Joint Declaration on Economic Security; Joint Statement on AI; Joint Statement on Energy Resilience; plus 13 MoCs and MoUs across batteries, pharma, biogas, mobility, biotech, internet governance, financial services
- AI cooperation: IndiaAI Mission + Japan's METI MoC for computing resource sharing; IIT Bombay + BharatGen + Japan's NII to develop scientific reasoning LLMs; SarvamAI + Preferred Networks for foundation models
- 500 Indian AI professionals to Japan by 2030: Bilateral commitment to facilitate AI talent mobility — India's engineers, Japan's industry demand





- Batteries MoC: Japan (Panasonic, etc.) is a global battery leader; India needs batteries for EVs; cooperation builds trusted supply chains reducing China dependence
- LUPLEX: India-Japan collaborative Moon mission; ISRO-JAXA partnership; to explore lunar south pole water ice
- India-Japan relationship: Annual summit since 2000; both are Quad members; both have concerns about China's supply chain concentration and economic coercion
- CBG Initiative: 1,000 biogas plants through dairy cooperatives directly links Japan's technical support to India's rural energy and agriculture sector
- 2027 = 75 years of India-Japan diplomatic relations; year-long celebrations planned including cultural festivals, youth exchanges, academic and sports events

NCORD 10TH APEX MEETING — VISION DOCUMENT ON DRUG CONTROL 2026-2029

Ministry: Ministry of Home Affairs / Narcotics Control Bureau

PIB Date: 26th June 2026

Easy Explanation

India has a serious drug problem. Punjab's chitta (synthetic heroin) crisis has devastated a generation. The Northeast faces opium cultivation linked to Myanmar's Golden Triangle. Ports in Gujarat and Maharashtra are entry points for cocaine and heroin smuggling syndicates. And darknet markets are making it possible to order drugs to your doorstep in any city. The Narco-Coordination Centre (NCORD) is India's apex inter-agency drug coordination body — it brings together the NCB, state police, customs, revenue intelligence, coast guard, and 44 central ministries on one platform. On June 26, Home Minister Amit Shah chaired the 10th apex-level NCORD meeting and released the Vision Document on Drug Control 2026-2029 — India's three-year roadmap for fighting narcotics. The strategy has four pillars: Enforcement and Operations (intelligence-led targeted action), Precursors and Synthetic Drugs (controlling chemical ingredients before they become drugs), Demand and Harm Reduction (keeping youth away from drugs, expanding rehab centres), and Capacity Building and Coordination (training agencies, establishing NDPS courts). Shah also launched an Online Drugs Disposal Fortnight — destroying 2,09,500 kg of seized drugs worth Rs 6,000 crore across India. The strategy is summarised as: 'Detect, Disrupt, Destroy.'

Key Terms:

Term	Definition
NCORD	Narco-Coordination Centre — India's apex narcotics coordination body; brings together NCB, state police, customs, coast guard, 44 central ministries



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NCB	Narcotics Control Bureau — India's national drug law enforcement agency; implements NDPS Act; coordinates with UNODC, Interpol
NDPS Act 1985	Narcotic Drugs and Psychotropic Substances Act — India's primary anti-drug law; defines offences, penalties; mandatory minimum sentences for commercial quantities
Vision Document 2026-2029	3-year roadmap; four pillars: enforcement, precursor control, demand reduction, capacity building; strategy: Detect, Disrupt, Destroy
Precursor Chemicals	Legal chemicals that can be diverted to make drugs (e.g., acetic anhydride for heroin, pseudoephedrine for meth); controlling these is critical
Synthetic Drugs	Chemically manufactured drugs (meth, fentanyl, MDMA); increasingly replacing plant-based drugs; darknet enables their distribution
ANTF	Anti-Narcotics Task Force — state-level specialised units; Shah directed states to convert ANTFs into full-time dedicated units

Important Points for UPSC:

- NCORD structure: 15,876 district-level meetings, 266 state-level meetings, 7 Executive Committee meetings, and 10 apex-level meetings since inception — massive coordination infrastructure
- 2014-2026 enforcement: Drugs worth Rs 1.84 lakh crore seized; Rs 89,896 crore destroyed; 8,75,000 cases registered; 10,97,000 arrests — vs 2004-2014: Rs 8,000 crore destroyed, 1,73,000 cases
- Drug Disposal Fortnight: 2,09,500 kg worth Rs 6,000 crore to be destroyed — one of the world's largest single drug destruction drives
- Four pillars: (1) Enforcement, Intelligence and Operations; (2) Precursors and Synthetic Drug Control; (3) Demand and Harm Reduction; (4) Capacity Building, Coordination and Monitoring
- Darknet threat: Vision Document specifically addresses darknet-enabled trafficking — drugs ordered online, delivered via courier; AI-based monitoring required
- Exclusive NDPS courts: Shah directed states to establish dedicated courts for NDPS Act cases — reduces delay, improves conviction rates
- Financial investigation mandate: In commercial quantity cases, financial investigation (tracing assets, money flows) must become standard — dismantles cartels economically
- Nasha Mukt Bharat Abhiyaan: National drug prevention programme complementing enforcement; focuses on youth, schools, colleges; demand-reduction pillar





AAROGYA SETU 2.0 & DIGITAL HEALTH LAUNCHES — 16TH CCHFW

Ministry: Ministry of Health and Family Welfare

PIB Date: 29th June 2026

Easy Explanation

June 29, 2026 was one of the most consequential days in India's digital health history. At the 16th Conference of the Central Council of Health and Family Welfare (CCHFW) in Delhi, Health Minister JP Nadda launched eight major digital health initiatives simultaneously. The centrepiece was Aarogya Setu 2.0 — the revamped version of the COVID-era contact tracing app — now India's 'national health app for every citizen,' integrating electronic health records, appointment booking, lab reports, prescription history, vaccination records, and health scheme benefits into one platform, linked to the citizen's Aadhaar and ABHA ID. Alongside, the Unified Health Interface (UHI) was launched — a 'UPI moment for healthcare,' an interoperability protocol that lets any hospital system, diagnostic lab, pharmacy, or health app talk to each other seamlessly. A prescription written in Delhi can be filled in Mumbai; a blood test done in one lab can be read by any doctor anywhere. The SUMAN Roadmap 2030 set new maternal and newborn health targets. SSBSK revamped child health delivery. NAS 2026 standardised emergency ambulance care. And Ayushman Sarathi — a WhatsApp chatbot — puts PM-JAY scheme guidance on every citizen's phone in 12 languages.

Key Terms:

Term	Definition
Aarogya Setu 2.0	India's national health app; integrates ABHA, health records, prescriptions, vaccines, lab reports, scheme benefits
ABHA	Ayushman Bharat Health Account — unique 14-digit health ID for every Indian; links all health records across institutions, lifetime
Unified Health Interface (UHI)	Interoperability protocol for healthcare — like UPI for payments but for health data; any health app or hospital can exchange patient data
ABDM	Ayushman Bharat Digital Mission — umbrella framework; ABHA, PHR, UHI all fall under ABDM; India's digital health ecosystem architecture
CCHFW	Central Council of Health and Family Welfare — apex advisory body comprising Union and State Health Ministers; meets every few years



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SUMAN Roadmap 2030	Targets for Surakshit Matritva Aashwasan — zero preventable maternal and newborn deaths; updated with 2030 milestones
SSBSK	Samagra Shishu Bal Swasthya Karyakram — comprehensive child health programme covering nutrition, immunisation, early childhood development
Ayushman Sarathi	PM-JAY WhatsApp chatbot; guides citizens on eligibility, hospital lists, claim status in 12 regional languages

Important Points for UPSC:

- 16th CCHFW: Constituted under Article 263-like provision; brings Union and State health ministers together; sets national health policy direction
- Aarogya Setu evolved from COVID-19 contact tracing app (2020) to a comprehensive national health app; 24+ crore downloads originally; 2.0 expands to full ABHA integration
- UHI significance: Currently health data is siloed — Apollo Hospital records cannot be seen at AIIMS; UHI breaks these silos through open protocol (like UPI did for payments)
- ABHA ID: Every Indian will have a unique 14-digit health ID; already 67+ crore ABHAs created; links health records across providers, lifetime
- NAS 2026 (National Ambulance Services): Standardised protocols for response time (8 min cities, 20 min rural), equipment, training — addresses India's critical emergency care gap
- eSushrut@clinic: C-DAC built ABDM-enabled HMIS for small clinics — digitises small-town and rural clinics' record-keeping
- Drug Registry: Standardises medicine information (names, dosages, interactions) across India's healthcare ecosystem — prevents prescription errors
- Connects to: PM-JAY (insurance), PMSMA (maternal care), ABHA as DPI — all part of India's health system digital transformation

VB-G RAM G ACT — INDIA'S REVISED RURAL EMPLOYMENT GUARANTEE IN FORCE

Ministry: Ministry of Rural Development

PIB Date: 1st July 2026

Easy Explanation

MGNREGA — the Mahatma Gandhi National Rural Employment Guarantee Act — is one of India's most significant social protection programmes. Since 2005, it has guaranteed 100 days of wage employment per year to any rural household whose adult members demand unskilled manual work. It has been a lifeline for the rural poor: building roads, ponds, check dams, and public assets while



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paying wages that give families income during lean agricultural seasons. But MGNREGA had problems over 20 years: wage rates not keeping up with inflation, delayed payment sometimes taking months, a limited 100-day ceiling, and assets sometimes of poor quality. The Viksit Bharat — Grameen Rozgar Maha Guarantee (VB-G RAM G) Act, 2025 came into force today — July 1, 2026 — replacing MGNREGA with a significantly enhanced framework. Key changes: wages are now indexed to the Consumer Price Index for Agricultural Labour (CPI-AL) automatically. The scheme now covers 150 days per year for households with differently-abled members. A new AI-enabled Rural Internal Audit Portal monitors asset quality and wage payment timelines in real-time. And the programme now explicitly links wage employment with skill development — MGNREGA work can now credit towards vocational training qualifications.

Key Terms:

Term	Definition
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act, 2005 — predecessor; 100 days guaranteed unskilled employment per rural household per year
VB-G RAM G Act	Viksit Bharat – Grameen Rozgar Maha Guarantee Act, 2025 — successor; in force from July 1, 2026; enhanced rural employment framework
CPI-AL	Consumer Price Index for Agricultural Labour — wage indexation to this ensures wages keep pace with rural inflation automatically
Job Card	Unique household identifier under MGNREGA and VB-G RAM G; registers household's eligibility; records work demanded and wages paid
Demand-Driven	Key principle: work must be provided within 15 days of demand; if not provided, unemployment allowance must be paid — legal right
Rural Internal Audit Portal	AI-enabled real-time monitoring of asset quality and wage payment; launched alongside VB-G RAM G Act coming into force
150-Day Extension	Enhanced provision for households with differently-abled members; previous limit was 100 days for all; social equity dimension

Important Points for UPSC:



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- MGNREGA 2005 was landmark social legislation: Part IX-A right to work; demand-driven; any adult rural household member can demand work
- VB-G RAM G Act 2025 key changes: (1) CPI-AL wage indexation — automatic; (2) 150 days for differently-abled households; (3) AI audit portal; (4) skill development linkage; (5) convergence with PM Awas Yojana assets
- CPI-AL indexation: MGNREGA wage rates were revised annually through government notification — often delayed; new automatic indexation removes this gap
- Wage payment timeline: VB-G RAM G mandates wages within 15 days; AI portal flags delays automatically; reduces the infamous delayed payment problem
- PM Modi launched VB-G RAM G nationally from Andhra Pradesh with CM Chandrababu Naidu — political significance of NDA ally's participation
- MGNREGA in numbers (2024-25): 25 crore registered households; 8-9 crore active in peak demand; Rs 80,000-90,000 crore annual budget; 2.5 billion person-days generated
- Political context: MGNREGA was a Congress programme; renaming to VB-G RAM G while retaining the core framework shows continuity with branding change

DIGITAL INDIA — 11 YEARS: PIB BACKGROUNDER

Ministry: Ministry of Electronics & IT (MeitY)

PIB Date: 1st July 2026

Easy Explanation

On July 1, 2015, Prime Minister Modi launched Digital India with a simple but audacious vision: transform India into a digitally empowered society and knowledge economy. Eleven years later, the PIB released a comprehensive backgrounder cataloguing what has been built. The numbers are staggering: UPI handles 14+ billion transactions per month and is now operational in 10+ countries. BharatNet has connected 2.1 lakh gram panchayats with optical fibre internet. DigiLocker has 35 crore users and 800 crore documents. Aadhaar has been issued to 133 crore Indians. Common Service Centres provide digital services in 5.5 lakh villages. UMANG app offers 2,000+ government services on one platform. Digital India is not just about schemes — it fundamentally changed how government works and how citizens access services. A farmer can now check PM-KISAN payment status on his phone. A patient can book appointments at AIIMS from a village in Bihar. A small businessman can register his MSME, apply for a loan, and sell on government marketplace — all online. The backgrounder also signals the next phase: AI-driven governance, semiconductor manufacturing (India becoming a chip producer), and 6G (India wants to be a 6G standard setter).

Key Terms:

Term	Definition
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Digital India	PM Modi's flagship programme launched July 1, 2015; three pillars: digital infrastructure, digital services, digital literacy
DPI (Digital Public Infrastructure)	Government-built open digital systems: Aadhaar, UPI, DigiLocker, ABDM, ONDC — India's model now global
BharatNet	Project to connect all gram panchayats with optical fibre broadband; 2.1 lakh GPs connected; enables rural digital access
UMANG	Unified Mobile Application for New-age Governance — single app providing 2,000+ government services across ministries
Common Service Centres (CSCs)	Digital service delivery kiosks in villages; 5.5 lakh CSCs; provide digital literacy, banking, insurance, government services
IndiaStack	India's DPI ecosystem: Aadhaar (identity) + UPI (payments) + DigiLocker (documents) + ABDM (health) + ONDC (commerce)
6G India	India's ambition to participate in setting 6G standards; TSDSI (India's telecom standards body) active in ITU

Important Points for UPSC:

- Digital India Phase 1 (2015-2019): Build the pipes — Aadhaar, BharatNet, CSCs, Jan Dhan accounts, mobile connectivity
- Digital India Phase 2 (2019-2024): Build the services — UPI dominance, Aarogya Setu, CoWIN, PM-KISAN, DigiLocker expansion
- Digital India Phase 3 (2024-2030): Build the frontier — AI, semiconductors, 6G, quantum, deep-tech
- UPI journey: July 2016 to 2026 — 0 to 14+ billion monthly transactions; 10+ countries; Rs 22 lakh crore monthly value; made India a global fintech leader
- BharatNet: 6 lakh km of optical fibre laid; 2.1 lakh+ GPs connected; reduces rural digital divide; enables rural BPO, telemedicine, online education
- India's DPI model: World Bank, IMF, G20 studying India's DPI for replication in developing nations; India shared DPI at G20 Presidency 2023 as global public good
- Semiconductor: Micron, Tata Electronics fabs under construction — Digital India's hardware dimension; India moving from 'consumer to maker' of chips
- Digital divide remaining: 35% of rural India still lacks smartphones; digital literacy for elderly and women still limited — Phase 3 must address these gaps





TIGER REINTRODUCTION — NATIONAL WORKSHOP, ALWAR, RAJASTHAN

Ministry: Ministry of Environment, Forest and Climate Change / NTCA

PIB Date: 28th–29th June 2026

Easy Explanation

India has a remarkable tiger conservation success story. In 2006, Project Tiger census counted only 1,411 tigers. By 2022, that number had risen to 3,682 — more than 70% of the world's wild tigers live in India. But this success has created a new problem: tiger populations in several reserves are now at or above carrying capacity, causing tiger-human conflict as tigers venture into human habitation looking for territory. Meanwhile, several forest areas that historically had tigers — but lost them due to hunting and habitat destruction — are now ready to receive tigers back. The National Workshop on Tiger Reintroduction at Alwar, Rajasthan (June 28-29), inaugurated by Environment Minister Bhupender Yadav, addressed the science, policy, and challenges of moving tigers from overcrowded reserves to new locations. Rajasthan's Sariska Tiger Reserve is the key context: Sariska lost all its tigers to poaching in 2004-2005 and tigers were successfully reintroduced from Ranthambore in 2008 — India's first tiger reintroduction. Now the question is: where else should tigers be reintroduced? Potential sites include forests in Rajasthan, Madhya Pradesh, and Odisha where prey base and habitat are adequate but tigers are absent.

Key Terms:

Term	Definition
Tiger Reintroduction	Scientific process of moving tigers from source populations to historically tiger-inhabited areas that are now tiger-free
NTCA	National Tiger Conservation Authority — statutory body under MoEFCC; implements Project Tiger; manages 55 tiger reserves across India
Project Tiger	India's tiger conservation programme launched 1973; covers 55 tiger reserves across 18 states; Rs 1,000+ crore annual budget
Source Population	Tiger reserve with excess tigers that can donate individuals for reintroduction; Ranthambore is a key source reserve
Carrying Capacity	Maximum tigers an ecosystem can support given prey availability and territory; reserves at capacity trigger dispersal and conflict
Sariska Tiger Reserve	Alwar, Rajasthan; lost all tigers to poaching (2004-05); first successful tiger reintroduction in India (2008); now has 30+ tigers



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**Tiger Census 2022**

India's 5th tiger census; counted 3,682 wild tigers; India holds 75%+ of world's wild tiger population

Important Points for UPSC:

- India's tiger numbers: 1,411 (2006) to 1,706 (2010) to 2,226 (2014) to 2,967 (2018) to 3,682 (2022) — consistent increase showing conservation success
- World Wild Tiger Day: July 29; India's last count (3,682) represents 75%+ of global wild tiger population
- Sariska precedent: All tigers poached by 2004-05; tigers reintroduced from Ranthambore from 2008; now 30+ tigers — world's first successful tiger reintroduction at reserve scale
- Tiger-human conflict: As reserves fill up, tigers disperse into farmland and villages; 50-60 human deaths from tigers annually; reintroduction must account for this
- Reintroduction criteria: Adequate prey base (deer, wild pig), human-free core area, community support, anti-poaching infrastructure must all be in place before reintroduction
- IUCN reintroduction guidelines: Must demonstrate original cause of extinction is addressed; genetic diversity in donor population; habitat restoration complete
- Potential new sites: Mukundra Hills (Rajasthan), Sanjay-Dubri Tiger Reserve (MP), Satkosia (Odisha) — historical tiger presence and current prey base

INDIA-EU SHIP RECYCLING — THREE ALANG YARDS READY FOR EU RECOGNITION

Ministry: Ministry of Ports, Shipping and Waterways

PIB Date: 1st July 2026

Easy Explanation

Last week India became the world's top ship recycling nation in 2025 with a 35.4% global market share. This week brings the next chapter. The biggest untapped opportunity for India's ship recycling industry is EU-flagged ships — vessels carrying the flag of a European Union member country. The EU has its own Ship Recycling Regulation (EUSRR) which requires EU-flagged ships to be recycled only at yards on an EU-approved list. Currently, most approved yards are in Europe and Turkey — none are in India, despite India having 35%+ of global capacity. Three Indian yards at Alang, Gujarat have now completed the compliance verification process and are ready for formal EU recognition: Shree Ram Group, Leela Ship Yard, and IHX Recycling. If approved by the EU (the formal decision rests with the European Commission), these yards can receive EU-flagged vessels, potentially increasing India's market share significantly. Getting on the EU list requires demonstrating compliance with Hong Kong Convention (HKC) standards — environmental and safety standards for handling asbestos, heavy metals, and hazardous materials.



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Key Terms:

Term	Definition
EUSRR	EU Ship Recycling Regulation — EU law requiring EU-flagged ships to be recycled only at EU-approved facilities
Hong Kong Convention (HKC)	International treaty for safe and environmentally sound ship recycling; India ratified via Ships Recycling Act 2019
EU Approved List	European Commission's list of globally approved yards to recycle EU-flagged ships; Indian yards currently applying
EU-Flagged Ships	~25% of world's commercial fleet flies EU member state flags; getting access to this fleet would significantly boost India's market
Alang-Sosiya	India's primary ship recycling cluster; Gulf of Khambhat, Gujarat; 150+ plots; 50,000+ workers; world's largest beaching-type facility
Recycling of Ships Act 2019	India's domestic legislation implementing HKC; mandatory Inventory of Hazardous Materials (IHM); Ship Recycling Plan required

Important Points for UPSC:

- Current gap: EU-flagged vessels cannot be sent to Alang under EUSRR because Indian yards are not on EU approved list — a major market gap
- Three yards ready: Shree Ram Group, Leela Ship Yard, IHX Recycling — all at Alang, Gujarat; completed compliance verification; submitted applications to European Commission
- EU approval process: European Commission conducts technical audit; if satisfied, adds yards to approved list — typical timeline 6-12 months
- Market impact: EU-flagged fleet = ~25% of global commercial tonnage; if approved, India's market share could rise from 35% to 50%+
- Environmental upgrade: EU recognition requires higher environmental standards — green recycling, worker PPE, waste treatment; raises overall Alang quality
- Ships Recycling Act 2019 requirement: Every ship must maintain Inventory of Hazardous Materials (IHM) — key document EU auditors examine for yard approval
- India-EU Sustainable Ship Recycling Cooperation: Bilateral engagement ongoing; EU views India as a critical partner for sustainable maritime sector development

NINE YEARS OF GST — PIB BACKGROUNDER



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Ministry: Ministry of Finance / GST Council

PIB Date: 29th June 2026

Easy Explanation

On July 1, 2017, India replaced a complex web of 17 central and state taxes with one unified Goods and Services Tax (GST). It was described as India's biggest tax reform since independence. Nine years later, the PIB released a comprehensive backgrounder assessing the journey. The vision was 'One Nation, One Tax, One Market' — eliminating the cascading 'tax on tax' problem, removing inter-state check-posts that slowed goods movement, and creating a unified national market. GST collection has more than doubled: from Rs 7.2 lakh crore in FY2017-18 to Rs 20.18 lakh crore in FY2025-26 — with April 2024 hitting a record single-month collection of Rs 2.10 lakh crore. The number of GST registrants has grown from 60 lakh to 1.46 crore — meaning more businesses are in the formal tax net. Average tax rates have come down from a pre-GST effective rate of ~15% to ~11.6% under GST — goods are cheaper. But challenges remain: GST has four main rates (5%, 12%, 18%, 28%) plus exemptions; petroleum, alcohol, and real estate are outside GST; and compensation cess arrangements for states have been controversial.

Key Terms:

Term	Definition
GST	Goods and Services Tax — destination-based, multi-stage consumption tax; replaces excise duty, service tax, VAT, octroi, entry tax etc.
GST Council	Constitutional body (101st Amendment); Finance Ministers of Centre and all states; decides GST rates and policies; 3/4th majority decisions
IGST	Integrated GST — levied on inter-state supply; collected by Centre, shared with destination state
CGST/SGST	Central GST and State GST — levied on intra-state supply; CGST to Centre, SGST to state in equal proportions
Input Tax Credit (ITC)	GST paid on inputs can be deducted from GST payable on outputs — eliminates tax cascading; key feature of GST design
E-Way Bill	Electronic permit for movement of goods worth over Rs 50,000 across state borders; digitised cargo tracking; replaced physical check-posts
Compensation Cess	States guaranteed 14% annual revenue growth for 5 years post-GST; cess on luxury/sin goods funded compensation; period ended, issue remains



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Important Points for UPSC:

- GST collection trend: FY17-18: Rs 7.19 lakh crore to FY22-23: Rs 18.1 lakh crore to FY25-26: Rs 20.18 lakh crore — 2.8x growth in 9 years
- Record month: April 2024 collected Rs 2.10 lakh crore GST — highest ever single-month collection
- Taxpayer base: 60 lakh registrants (2017) to 1.46 crore (2026) — significant formalisation of economy
- Average rate reduction: Pre-GST effective tax rate ~15% vs post-GST ~11.6%; consumer prices on many goods fell
- 101st Constitutional Amendment: Inserted Article 246A (concurrent power to levy GST), 279A (GST Council), 269A (IGST)
- Items outside GST: Petroleum products (petrol, diesel, ATF, natural gas, crude oil), alcohol for human consumption, real estate (partially) — create cascading in supply chains
- E-way bill impact: 9 crore+ e-way bills generated per month; eliminated inter-state check-posts (reducing truck transit time by ~30%)
- Pending reforms: Petroleum under GST (Centre-state revenue sharing issue), rate rationalisation (reducing 4 slabs to fewer), real estate cleanup — reform agenda continues

FCRA 2.0 PORTAL + e-OCI CARD — HOME MINISTRY LAUNCHES

Ministry: Ministry of Home Affairs

PIB Date: 30th June 2026

Easy Explanation

Two separate but significant Home Ministry digital launches happened on June 30. First: FCRA 2.0 Portal. The Foreign Contribution (Regulation) Act (FCRA) controls how Indian NGOs, religious organisations, and political parties can receive money from foreign sources. Foreign money flowing into India without oversight can be used to influence politics, fund protests, or support activities against national interest. The new FCRA 2.0 portal makes the entire process — registration, renewal, prior permission applications, annual returns, compliance monitoring — fully digital and transparent. It also tightens compliance: stricter utilisation monitoring, AI-based flagging of suspicious transactions, and mandatory reporting of foreign contributions within 48 hours of receipt. Second: e-OCI Card. The Overseas Citizen of India (OCI) card is India's 'lifelong visa' for people of Indian origin living abroad — it gives them the right to live, work, and study in India indefinitely, with some restrictions (cannot vote, buy agricultural land, work in government). Currently, OCI cardholders must carry both the OCI booklet and their current passport. The e-OCI card will be a fully digital document stored in DigiLocker, eliminating the need for the physical booklet — making life simpler for 1.5 crore+ OCI cardholders worldwide.

Key Terms:



| Click to Connect Now.



Term	Definition
FCRA	Foreign Contribution (Regulation) Act 2010 — regulates receipt and utilisation of foreign contributions by NGOs, religious bodies, associations in India
FCRA 2.0 Portal	Fully digital platform for FCRA registration, renewal, prior permission, annual compliance reporting, and utilisation monitoring
OCI	Overseas Citizen of India — not citizenship; a long-term multipurpose visa status; granted to people of Indian origin; lifelong visa-free entry to India
e-OCI Card	Digital OCI card stored in DigiLocker; eliminates need for physical OCI booklet; accepted equally with digital verification
Foreign Contribution	Any donation, delivery, or transfer of currency, article, or security by a foreign source to an Indian citizen or organisation
FCRA 2020 Amendment	Tightened rules: banned sub-granting, mandatory SBI account, stricter spending limits (admin less than 20%), mandatory Aadhaar linking

Important Points for UPSC:

- FCRA 2010 replaced FCRA 1976; key amendment in 2020: banned sub-granting to other NGOs, mandatory government SBI account (New Delhi), admin cost cap at 20%
- FCRA 2020 controversy: Several foreign-funded NGOs lost registration; Amnesty India, Greenpeace India left after FCRA cancellations — civil society freedom debate
- FCRA 2.0 innovations: AI-based transaction monitoring; 48-hour mandatory foreign contribution reporting; PAN linkage for all FCRA accounts — tighter accountability
- OCI cards: 1.5 crore+ OCI cardholders globally; major diaspora in USA, UK, Australia, Canada; key group for Indian diaspora engagement and remittances
- OCI restrictions: Cannot vote, hold constitutional posts, serve in armed forces or civil services, or buy agricultural/plantation land — these restrictions remain with e-OCI
- e-OCI advantage: No more mandatory re-issuance when passport is renewed (a major pain point); DigiLocker stores current OCI details linked to Aadhaar
- Dual citizenship vs OCI: OCI is NOT dual citizenship — India does not permit dual citizenship (Article 9 of Constitution); OCI is a special long-term residency status





UPI GOES LIVE IN GREECE — INDIA'S PAYMENT TECH GOES EUROPEAN

Ministry: Ministry of Commerce & Industry / NPCI International

PIB Date: 30th June 2026

Easy Explanation

Commerce and Industry Minister Piyush Goyal was leading a business delegation to Greece following the India-UK CETA celebrations in London. On June 30, at Eurobank — one of Greece's largest banks — Minister Goyal personally witnessed the activation of UPI (Unified Payments Interface) in Greece. This means Indian tourists, business travellers, and diaspora in Greece can now pay at any participating Greek merchant simply by scanning a QR code with their UPI app. No cash, no currency exchange, no international card fees. Greece is particularly significant for two reasons: it is India's entry point into the European Union's payment ecosystem, and Greece hosts a significant Indian tourist flow. Strategically, this is India's digital payment technology expanding into a G7-adjacent economy. UPI is now accepted in 10+ countries: UAE, Singapore, Mauritius, Bhutan, Nepal, Sri Lanka, France, UK, Malaysia, and now Greece. The goal is to make UPI the world's preferred cross-border payment system — a 'digital export' from India that creates goodwill and trade facilitation simultaneously.

Key Terms:

Term	Definition
UPI	Unified Payments Interface — India's real-time digital payment system; developed by NPCI; processes 14+ billion monthly transactions
NPCI International	National Payments Corporation of India's subsidiary for international expansion; partners with foreign banks for UPI adoption
Eurobank	One of Greece's four largest banks; first Greek bank to integrate UPI; enables UPI acceptance at its merchant network
QR Code Payment	Universal merchant payment method; Indian tourists scan merchant's QR code with UPI app; payment deducted from Indian account in real-time
G20 Cross-Border Payments	Under India's G20 Presidency 2023, faster cheaper cross-border payments was a key deliverable; UPI internationalisation is the implementation
RuPay International	India's domestic card network (like Visa or Mastercard); also expanding internationally alongside UPI; complementary digital payment export



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Important Points for UPSC:

- UPI countries (10+): UAE, Singapore, Mauritius, Bhutan, Nepal, Sri Lanka, France, UK, Malaysia, Fiji, and now Greece — expanding across tourism and diaspora corridors
- Greece significance: First EU country where UPI is live at merchant level; opens door to broader EU-UPI integration
- Indian tourists to Greece: 2+ lakh Indian tourists visit annually; UPI removes FX friction; particularly relevant for Greek island tourism
- Digital export strategy: UPI adoption in other countries means NPCI gets per-transaction fees; India's payment technology becoming a revenue-generating export
- Eurobank integration: UPI QR codes displayed at all Eurobank-affiliated merchants across Greece; Indian banks (SBI, HDFC, ICICI) have enabled international UPI for their customers
- India-Greece bilateral: Goyal's delegation signed MoUs on trade, marble imports (India is a major buyer), Greek pharmaceuticals, and tourism cooperation
- Competition: Alipay (China) in 50+ countries; Mastercard/Visa dominate globally; UPI at 10 countries is growing but needs acceleration to compete for international remittance share

NPPA + PHARMA JAN SAMADHAN — INTEGRATED DRUG PRICE GRIEVANCE SYSTEM

Ministry: Ministry of Chemicals and Fertilizers / National Pharmaceutical Pricing Authority

PIB Date: 25th June 2026

Easy Explanation

Buying medicines in India can be confusing and sometimes exploitative. A medicine might be sold at the MRP (Maximum Retail Price) — or a chemist might overcharge, or a patient might not know that the same drug is available far cheaper at a Jan Aushadhi Kendra. The National Pharmaceutical Pricing Authority (NPPA) regulates drug prices in India — it sets ceiling prices for essential medicines under the Drug Price Control Order (DPCO). When a citizen is overcharged for a medicine or wants to report a violation, they now have the 'Pharma Jan Samadhan' portal — a dedicated grievance system. This week, NPPA integrated the Pharma Jan Samadhan portal with the 'Pharma Sahi Daam' portal (which shows the correct MRP and availability of medicines). The integration means: a citizen can check the correct price on Pharma Sahi Daam, and if overcharged, file a complaint on Pharma Jan Samadhan — both from the same platform. Separately, this week the Ministry of Health extended QR code-based drug traceability to vaccines, antimicrobials, and anti-cancer medicines — ensuring authenticity and tracking the supply chain of these critical drugs.

Key Terms:

Term	Definition
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NPPA	National Pharmaceutical Pricing Authority — statutory body under DoP; sets and monitors ceiling prices for essential medicines; enforces DPCO
DPCO 2013	Drug Price Control Order 2013 — under Essential Commodities Act; allows NPPA to fix ceiling prices for essential medicines in NLEM
NLEM	National List of Essential Medicines — list of ~384 medicines that must be available and affordable; prices controlled under DPCO
Pharma Sahi Daam	NPPA portal showing correct MRP of medicines; consumers can verify before purchase; available as app and website
Pharma Jan Samadhan	NPPA grievance portal for medicine price complaints, overcharging, unavailability; now integrated with Pharma Sahi Daam
Jan Aushadhi Kendra	PM Bharatiya Jan Aushadhi Pariyojana stores; sell generic medicines at 50-90% below branded prices; 12,000+ stores across India

Important Points for UPSC:

- NPPA regulates drug prices under DPCO 2013; essential medicines in NLEM (~384 drugs) have controlled ceiling prices; trade margin also regulated
- Pharma Sahi Daam app: Launched 2017; allows citizens to scan barcode or search medicine name to check actual MRP; 1 crore+ downloads
- Integration significance: Previously, checking price (Sahi Daam) and filing complaint (Jan Samadhan) were separate systems; integration creates seamless experience
- Jan Aushadhi Kendras: 12,000+ stores; saving patients estimated Rs 2,000 crore annually in medicine costs vs branded alternatives
- QR Code Drug Traceability: Extended to vaccines, antimicrobials, and anti-cancer medicines — ensures authenticity, tracks supply chain, prevents counterfeiting
- India's pharma market: Rs 2.1 lakh crore annually; India is 'pharmacy of the world' for exports but domestic affordability remains a challenge
- Overcharging problem: Despite DPCO, overcharging common in small chemist shops; NPPA received 20,000+ complaints annually; integrated portal improves response

AIR SUVIDHA 2.0 — EBOLA HEALTH SCREENING AT POINTS OF ENTRY



| Click to Connect Now.



Ministry: Ministry of Civil Aviation / Ministry of Health and Family Welfare

PIB Date: 25th June 2026

Easy Explanation

WHO declared the Ebola outbreak in Africa a Public Health Emergency of International Concern (PHEIC) — India's response was to upgrade its health screening at all international airports. Air Suvidha was originally launched during COVID-19 as a digital self-declaration portal for international travellers. Air Suvidha 2.0, launched jointly by the Ministry of Civil Aviation and Delhi International Airport Limited (DIAL), is an enhanced version specifically designed for Ebola-era screening at all Points of Entry (PoEs) — international airports, seaports, and land border crossings. Travellers from high-risk countries must now complete a health declaration before departure, undergo thermal screening on arrival, and are monitored by Port Health Officers (PHOs) stationed at 76 airports. The system integrates with India's Integrated Disease Surveillance Programme (IDSP) in real-time — so if a traveller shows symptoms, the alert goes to IDSP, state health departments, and district hospitals simultaneously. This is a much smarter system than the paper-based declarations that existed before COVID, and far superior to the chaotic first-response during COVID-19 when digital systems were being built from scratch.

Key Terms:

Term	Definition
Air Suvidha 2.0	Enhanced digital health declaration and screening portal for international travellers; joint MoCA-MoHFW initiative; operational at all PoEs
PoE	Point of Entry — international airport, seaport, or land border crossing where travellers from abroad enter India; PHOs stationed at all PoEs
PHO	Port Health Organization — screens international travellers; stationed at 76 airports; conducts thermal screening and health declaration review
IDSP	Integrated Disease Surveillance Programme — India's disease monitoring backbone; covers 100+ diseases; real-time data from 3,500+ sentinel sites
PHEIC	Public Health Emergency of International Concern — WHO's highest alert level; triggers IHR 2005 compliance obligations for all member states
IHR 2005	International Health Regulations 2005 — binding WHO treaty; requires member states to detect, report, and respond to public health risks at PoEs



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**DIAL**

Delhi International Airport Limited — operates IGI Airport; partnered with MoCA for Air Suvidha 2.0 rollout; India's largest airport by traffic

Important Points for UPSC:

- Air Suvidha originally launched April 2021 for COVID-19 health declarations; Air Suvidha 2.0 is the Ebola-adapted, upgraded version
- Ebola risk for India: 60% of India's population can be exposed via 3-4 major international airports; Ebola incubation is 2-21 days — traveller can be infectious before symptoms appear
- Thermal screening upgraded: 76 airports now have thermal cameras; IDSP integration means any positive screen triggers a coordinated multi-agency response
- Traveller health declaration: Online form completed before departure from high-risk country; data visible to PHO on arrival; reduces manual paperwork
- IHR 2005 obligation: India is legally bound under IHR 2005 to screen travellers from PHEIC-affected countries and report cases to WHO within 24-48 hours
- Air Suvidha 2.0 also integrates with CoWIN/ABHA for vaccination history — can verify yellow fever vaccination (required from some African countries) digitally

INS TRIKAND RESPONDS TO PIRACY — MV GOLDEN ARSENAL, GULF OF ADEN

Ministry: Ministry of Defence / Indian Navy

PIB Date: 2nd July 2026

Easy Explanation

On July 2, the Indian Navy's guided-missile frigate INS Trikand received a distress call in the Gulf of Aden. A Bahamas-flagged bulk carrier, MV Golden Arsenal, was under attack by armed pirates attempting to board the vessel. INS Trikand, on anti-piracy patrol in the region, responded immediately. The frigate's crew launched a Marine Commando (MARCOS) team by boat and helicopter. The MARCOS secured the ship's deck, apprehended the armed pirates, and freed the crew — all 18 crew members had barricaded themselves in a citadel (a specially hardened room designed for this purpose) while the pirates attempted to cut through. All crew were safe. Nine pirates were apprehended. The Gulf of Aden is one of the world's most piracy-prone shipping lanes — connecting the Red Sea to the Indian Ocean, it carries 12-15% of global trade. India has been conducting continuous anti-piracy patrols here since 2008 under Operation Sankalp and its successors. This operation is a reminder that while Houthi attacks dominate headlines, traditional Somali piracy (by non-state criminal groups) also continues in the region.

Key Terms:

Term	Definition
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INS Trikand	Indian Navy guided-missile frigate; Talwar-class (Krivak-III); deployed on anti-piracy patrol in Gulf of Aden; name means 'trident'
Gulf of Aden	Sea between Yemen and Somalia; connects Red Sea to Arabian Sea; critical chokepoint for global trade; historically piracy-prone
MARCOS	Marine Commandos — India's elite naval special operations force; specialised in maritime counter-terrorism and anti-piracy boardings
Citadel	Hardened room on merchant vessels where crew shelter during pirate attacks; designed to resist access while awaiting rescue
Operation Sankalp	Indian Navy's Gulf of Aden anti-piracy operation launched 2008; continuous deployment; escorted 4,000+ ships; rescued dozens of pirated vessels
Maritime Anti-Piracy Act 2022	India's domestic law enabling prosecution of pirates captured by Indian Navy; piracy is now a cognizable offence in India
SAGAR	Security and Growth for All in the Region — PM Modi's Indian Ocean policy; anti-piracy patrols are a direct implementation

Important Points for UPSC:

- **INS Trikand:** Talwar-class guided-missile frigate; Krivak-III design from Russia; commissioned 2012; 4,000+ tonnes displacement; carries BrahMos missiles, torpedoes, helicopter
- **Operation Sankalp (2019 onwards):** India's Arabian Sea anti-piracy operations; India has deployed 150+ naval vessels since 2008
- **Piracy statistics:** Gulf of Aden incidents peaked 2011 (200+ incidents); declined to less than 10 per year by 2019; rising again in 2024-26 due to Yemen conflict security vacuum
- **MARCOS capability:** India's elite maritime commandos trained for hostage rescue, anti-piracy, counter-terrorism at sea; comparable to US Navy SEALs in maritime operations
- **9 pirates apprehended:** Under UNCLOS provisions, pirates on high seas can be tried by any nation that captures them; India typically transfers to Kenyan or Seychellois courts
- **Maritime Anti-Piracy Act 2022:** India's domestic law enabling prosecution of pirates; piracy is a cognizable offence under Indian law since 2022
- **Houthi vs Somali piracy distinction:** Houthi attacks are state-sponsored, politically motivated; Somali piracy is criminal enterprise by non-state actors — different legal and operational response





RAJASTHAN-HARYANA YAMUNA WATER PROJECT AGREEMENT

Ministry: Ministry of Home Affairs / Ministry of Jal Shakti

PIB Date: 29th June 2026

Easy Explanation

While most of India's attention this week was on Seychelles and digital health, a quietly significant agreement was signed in the presence of Home Minister Amit Shah: Rajasthan and Haryana inked an agreement for the construction and implementation of a Yamuna Water Project. Rajasthan is a water-scarce state — it has the largest land area in India but less than 2% of India's water resources. Its western districts depend on the Indira Gandhi Canal, but eastern Rajasthan districts near the Aravalli range have almost no reliable perennial water source. The Yamuna Water Project will divert water from the Yamuna river — specifically from Haryana's Yamuna canal network — to supply eastern Rajasthan districts including Jaipur, Alwar, Dausa, and nearby areas. The agreement defines the quantum of water to be allocated, the cost-sharing formula, the infrastructure to be built (headworks, canals, pipelines), and the timeline. This is a classic example of cooperative federalism — two BJP-ruled states, facilitated by the Home Minister, resolving a long-standing inter-state water allocation issue through negotiation rather than litigation.

Key Terms:

Term	Definition
Yamuna Water Project	Inter-state agreement to divert Yamuna water through Haryana's canal network to water-scarce eastern Rajasthan districts
Inter-State River Water Disputes Act 1956	Law governing river water disputes between states; tribunals constituted under it; Yamuna agreement avoids tribunal by mutual consent
Upper Yamuna River Board	Statutory body managing allocation of Yamuna water among 6 basin states: HP, UK, Delhi, Haryana, Rajasthan, UP
Eastern Rajasthan Canal Project (ERCP)	Rajasthan's mega project to link rivers in the state; Yamuna agreement supplements ERCP for eastern districts
Haryana Canal Network	Haryana receives water from Yamuna via Western and Eastern Yamuna Canals; surplus water to be shared with Rajasthan
Cooperative Federalism	Centre and states working together as equal partners; Home Minister facilitated this inter-state agreement



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Important Points for UPSC:

- Rajasthan water stress: 60% of Rajasthan is arid or semi-arid; per capita water availability among India's lowest; eastern districts often lack even drinking water
- Yamuna basin states: HP, Uttarakhand, Delhi, Haryana, Rajasthan, UP — all share Yamuna water; Upper Yamuna River Board coordinates allocation
- ERCP: Large Rajasthan state project to link Ken, Betwa, Banas rivers to provide water to 13 eastern districts; this Yamuna agreement is complementary
- HM Amit Shah's role: Same pattern as Kishau Dam agreement — Union Home Minister facilitating inter-state agreements; reflects MHA's role in cooperative federalism
- Both BJP-ruled states: Political alignment between Rajasthan (CM Bhajanlal Sharma) and Haryana (CM Nayab Singh Saini) facilitated agreement
- Historical warning: Haryana-Rajasthan water sharing has been contentious; SYL (Sutlej-Yamuna Link) canal dispute between Punjab-Haryana shows how such disputes can remain unresolved for decades
- JJM 2.0 link: Yamuna water in eastern Rajasthan districts will enable Jal Jeevan Mission 2.0 targets in currently water-scarce areas

INDIA-JAPAN AI JOINT STATEMENT — FIRST BILATERAL AI PARTNERSHIP

Ministry: Ministry of Electronics & IT / IndiaAI Mission

PIB Date: 2nd July 2026

Easy Explanation

We covered the India-Japan Summit broadly in Article 4 of this week. The AI Joint Statement deserves its own deeper look because it is historically significant — it is the first time India has signed a bilateral AI cooperation agreement at the government-to-government level with any country. The joint statement covers the entire AI technology stack: research (joint development of foundation models), infrastructure (shared computing resources), safety (common standards for trustworthy AI), talent (500 Indian AI professionals to Japan by 2030), and applications (AI for healthcare, agriculture, smart cities). The IndiaAI Mission and Japan's METI signed an MoC — this is the institutional backbone. Two specific academic collaborations: IIT Bombay plus BharatGen plus Japan's NII to develop scientific reasoning LLMs; and SarvamAI (Indian AI startup) plus Japan's Preferred Networks to build foundation models. Both countries explicitly want 'human-centric, safe, and trusted AI' — positioning themselves as an alternative to the US-China AI race that prioritises capability over safety. India's AI strength (talent, software, frugal innovation) combined with Japan's AI strength (robotics, semiconductor, manufacturing applications) creates a genuinely complementary partnership.

Key Terms:

Term	Definition
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India-Japan AI Joint Statement	First-ever bilateral government-to-government AI cooperation agreement; elevates relationship to 'strategic AI research and development partnership'
IndiaAI Mission	Rs 10,371 crore government programme for India's AI ecosystem; signatory to MoC with Japan's METI
METI	Ministry of Economy, Trade and Industry, Japan — Japan's industry and technology ministry; oversees Japan's AI strategy
BharatGen	India's indigenous multilingual large language model initiative; IIT Bombay-led; government supported
SarvamAI	Indian AI startup building Indian-language foundation models; partnering with Japan's Preferred Networks under this agreement
Preferred Networks	Japan's leading AI company; specialises in deep learning, robotics AI; partnering with SarvamAI on foundation models
Human-Centric AI	AI development philosophy prioritising human values, safety, and control over pure capability maximisation; shared India-Japan approach

Important Points for UPSC:

- First bilateral AI statement: India had AI mentions in multilateral agreements (G20, Quad) but this is the first dedicated bilateral government AI cooperation framework
- Full AI stack coverage: Research (LLM development) to Infrastructure (compute sharing) to Safety (trusted AI standards) to Talent (500 AI professionals) to Applications (healthcare, agriculture, smart cities)
- 500 Indian AI professionals to Japan by 2030: Addresses Japan's severe AI talent shortage (aging population); India's large AI and ML workforce is the solution
- IIT Bombay + BharatGen + NII LLM: Focus on scientific reasoning LLMs — AI that can understand research papers and assist in scientific discovery
- SarvamAI significance: Multilingual AI (22 Indian languages) plus Japan's robotics AI = intersection of India's linguistic diversity and Japan's manufacturing automation needs
- Safety dimension: India and Japan both endorse 'AI Seoul Summit' principles (2024) and G7 Hiroshima AI process — this agreement implements those multilateral commitments bilaterally
- Geopolitical context: USA leads AI with export controls; China has closed AI ecosystem; India-Japan 'trusted AI' partnership creates a third pathway — open, safe, democratic
- JCM connection: India-Japan already have carbon credit cooperation (JCM, Article 6.2); AI statement follows same model of structured bilateral framework in a new sector





BHASHINI — MULTILINGUAL AI SHOWCASED AT NCeG 2026

Ministry: Ministry of Electronics & IT (MeitY)

PIB Date: 2nd July 2026

Easy Explanation

India has 22 officially recognised languages and hundreds of dialects. For decades, digital India was essentially 'English India' — government websites, forms, apps, and services were primarily in English, excluding the vast majority of Indians who are more comfortable in Hindi, Tamil, Bengali, Telugu, Marathi, or their regional language. BHASHINI (Bharat ki Bhasha Interfaces for India) is the government's mission to make all digital content and services accessible in all major Indian languages, using AI-powered translation, transcription, and voice synthesis. Developed under MeitY's Bhashini programme, it is built on the open-source Dhruva AI stack and uses AI models trained specifically on Indian language data — something global models like Google Translate underperform on for regional languages. This week at the National e-Governance Conference (NCeG) 2026 in Jaipur, BHASHINI showcased its multilingual AI innovations — including launching the Rajasthan Language Model Training Hackathon. Key capabilities demonstrated: real-time speech-to-speech translation between Indian languages (someone speaks in Tamil, another hears in Hindi instantly), AI-powered transcription of court proceedings in regional languages, and government chatbots that respond in the citizen's preferred language.

Key Terms:

Term	Definition
BHASHINI	Bharat ki Bhasha Interfaces for India — MeitY's national language translation mission; AI-powered multilingual digital services in 22+ Indian languages
Dhruva AI	Open-source multilingual AI stack powering BHASHINI; trained on Indian language datasets; foundation for BHASHINI applications
NCeG	National Conference on e-Governance — annual conference; 2026 edition in Jaipur; showcases digital governance innovations
ASR	Automatic Speech Recognition — converts spoken words to text; BHASHINI's ASR works for 22+ Indian languages
TTS	Text-to-Speech — converts text to spoken audio; BHASHINI's TTS makes digital content audible in regional languages for low-literacy users



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MT	Machine Translation — AI translation between languages; BHASHINI's MT accuracy for Indian languages significantly better than generic tools
Rajasthan Language Model Hackathon	Developer competition to build AI models for Rajasthani dialect; deepens BHASHINI's coverage of less-resourced Indian languages

Important Points for UPSC:

- BHASHINI mission: Make internet and digital services accessible in all major Indian languages; target: 100% of key government services available in 22 official languages
- Why BHASHINI matters: 55% of Indian internet users prefer regional language content; English-only interfaces exclude over 700 million Indians from digital governance benefits
- Dhruva stack: Open-source; any developer can build applications on it; 100+ models for ASR, MT, TTS across 22 languages; comparable to or better than commercial solutions for Indian languages
- Court transcription: BHASHINI piloted for real-time transcription of court proceedings in regional languages; key for access to justice for non-English speaking litigants
- BHASHINI in Aarogya Setu 2.0: Health services in regional languages; Ayushman Sarathi WhatsApp chatbot in 12 languages uses BHASHINI-powered translation
- Government use: 100+ government chatbots now powered by BHASHINI; e-court, Jan Samarth portal, Kisan Sarathi all use BHASHINI for regional language support
- India-Japan link: SarvamAI and BharatGen (both from India-Japan AI statement) build on BHASHINI's language dataset ecosystem
- Private sector adoption: Zomato, IRCTC, UIDAI have integrated BHASHINI APIs for regional language user interfaces

BHARAT TAXI — COOPERATIVE-BASED TAXI SERVICE LAUNCHED IN GUJARAT

Ministry: Ministry of Cooperation / Ministry of Home Affairs

PIB Date: 27th June 2026

Easy Explanation

Ola and Uber have transformed urban mobility in India. But there is a structural problem with app-based cab aggregators: drivers earn less and less as platform commissions rise (sometimes 30-35% of each fare), they have no job security, no benefits, no say in pricing, and no ownership of the platform they work on. Home Minister Amit Shah, who also heads the Ministry of Cooperation, launched Bharat Taxi in Gujarat on June 27 — a cooperative-based taxi service where the drivers themselves are the owners of the platform. Here is how it works: Drivers form a cooperative society. The cooperative owns



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the app and the brand. When a passenger pays Rs 100, 95% goes back to the drivers' cooperative — no external investor or corporation taking a large cut. Pricing is transparent and regulated by the cooperative's own democratic governance. The model draws directly from the AMUL dairy cooperative model that made Gujarat famous — where milk producers own the cooperative that brands and sells their milk, capturing far more value than selling to a private dairy company. Bharat Taxi starts in Ahmedabad, Surat, and Rajkot. If successful, the plan is to roll out nationally, potentially offering an alternative to Ola and Uber's corporate platform model.

Key Terms:

Term	Definition
Bharat Taxi	Cooperative-based taxi aggregator launched in Gujarat; driver-owned platform; modelled on cooperative economics; approximately 5% commission structure
Cooperative Society	Member-owned organisation; democratic governance (one member one vote); profits shared among members; registered under State Cooperative Societies Act
Ministry of Cooperation	Created 2021; headed by Amit Shah; promotes cooperative sector; National Cooperation Policy being formulated
AMUL Model	Anand Milk Union Limited — world's largest dairy cooperative; Gujarat-origin; producer-owned; model being extended to Bharat Taxi
Platform Cooperative	Digital platform owned by its users or workers rather than external investors; contrasts with Ola and Uber's investor-owned model
Gig Economy	Work arrangement where individuals work on temporary, flexible basis without formal employment; Ola and Uber drivers are gig workers with no protections

Important Points for UPSC:

- Ministry of Cooperation created August 2021 — first time India has a dedicated ministry for cooperatives; Amit Shah holding dual charge (Home + Cooperation) signals political priority
- AMUL precedent: 36 lakh dairy farmer members; Rs 72,000 crore annual turnover; farmers receive 80% of consumer price vs 20-30% in private dairy supply chains — Bharat Taxi aims for similar structure
- Driver economics: Ola and Uber typically charge 20-35% commission per ride; Bharat Taxi charges approximately 5% administrative fee; drivers keep 95% — dramatically higher earnings





- Governance: Drivers elect cooperative board democratically; board sets prices, policies, service standards — workers have genuine voice unlike corporate platforms
- Gujarat rollout: Ahmedabad, Surat, Rajkot first; combined population of 12+ million; if successful, proof of concept for national expansion
- National cooperative ecosystem: India has 8.5 lakh cooperatives employing 13 crore people; sugar, dairy, fisheries, housing cooperatives are established; urban transport cooperatives are new
- Challenge: Ola and Uber have massive network effects (millions of existing drivers and riders); Bharat Taxi faces cold-start problem — getting enough drivers and riders simultaneously
- National Cooperation Policy: Being formulated under Ministry of Cooperation; Bharat Taxi is a pilot of what a cooperative urban services economy could look like

HIGH-SPEED RAIL — PIB BACKGROUNDER ON INDIA'S BULLET TRAIN JOURNEY

Ministry: Ministry of Railways / National High Speed Rail Corporation

PIB Date: 3rd July 2026

Easy Explanation

India's first bullet train project — the Mumbai-Ahmedabad High Speed Rail (MAHSR) Corridor — has been under construction for several years. The PIB this week released a backgrounder on 'India's High-Speed Rail Future: Building a Standardised Path for Expansion.' The MAHSR project uses Japan's Shinkansen (E5 series) technology, will run at 320 km/h, cover 508 km between Mumbai and Ahmedabad in about 3 hours (vs 6+ hours by current trains), and have 12 stations. India is co-funding with Japan's ODA — Japan provided Rs 88,000 crore (approximately \$12 billion) in low-interest loans at 0.1% interest for 50 years. Construction status: viaduct construction is progressing well in Gujarat (approximately 80% complete); the Bandra Kurla Complex underground station in Mumbai is the most complex challenge; land acquisition in Maharashtra's Palghar district was the primary bottleneck and is now largely resolved. The PIB backgrounder also outlined India's plans for six more HSR corridors: Delhi-Varanasi, Delhi-Ahmedabad, Mumbai-Nagpur, Mumbai-Hyderabad, Chennai-Bengaluru, Delhi-Amritsar — with technology standardisation underway to reduce costs and enable indigenous manufacturing for these future corridors.

Key Terms:

Term	Definition
MAHSR	Mumbai-Ahmedabad High Speed Rail; 508 km; 12 stations; 320 km/h speed; Japan's Shinkansen E5 technology; operational target 2028-29



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NHSRCL	National High Speed Rail Corporation Limited — special purpose vehicle implementing MAHSR; joint venture of Central and state governments
Shinkansen	Japan's bullet train system; world's first HSR (1964 Tokyo Olympics); known for punctuality (average delay under 1 minute) and zero passenger fatalities in 60 years
ODA	Official Development Assistance — Japan's JICA loan of Rs 88,000 crore at 0.1% interest for 50 years; among world's most concessional loans
Viaduct	Elevated structure (bridge-like) on which HSR tracks are laid; 92% of MAHSR is on viaduct; only 7 km underground (in Mumbai)
Six Future HSR Corridors	Delhi-Varanasi, Delhi-Ahmedabad, Mumbai-Nagpur, Mumbai-Hyderabad, Chennai-Bengaluru, Delhi-Amritsar — in early planning; technology standardisation underway
Technology Standardisation	India developing uniform HSR technical standards across all corridors to reduce costs and enable indigenous manufacturing

Important Points for UPSC:

- MAHSR route: Mumbai BKC (underground) to Thane to Virar to Surat to Vadodara to Anand to Ahmedabad; 12 stations; 508 km; speed up to 320 km/h
- Construction status: Gujarat section (352 km) viaduct approximately 80% complete; Maharashtra section (156 km) slower due to urban complexities and earlier land acquisition issues
- Land acquisition: 1,396 hectares required; largely acquired; Palghar (Maharashtra) was the major pending area — mostly resolved, some litigation remains
- Japan ODA terms: Rs 88,000 crore at 0.1% interest, 50-year repayment, 15-year grace period — among the most concessional loans in the world; reflects Japan's strategic interest in India
- Operational target: Gujarat section partial opening announced for 2027; full corridor operational 2028-29 — these targets have been revised multiple times since original 2023 target
- Economic case: MAHSR will reduce Mumbai-Ahmedabad travel to 3 hours (vs 6+ hours); capacity for 35,000 passengers per day; connects India's 4th and 5th largest cities
- Technology transfer: Japanese companies (Hitachi, Kawasaki) required to partner with Indian firms; 70% indigenous content target for additional HSR corridors after MAHSR
- India-Japan connection: HSR backgrounder released same week as India-Japan Summit; Next Generation Mobility Partnership (NGMP) signed includes railways and HSR cooperation





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PRACTICE QUESTIONS

10 PRELIMS QUESTIONS — UPSC PRELIMS STYLE

Q1. With reference to the Netra AEW&C system, consider the following statements:

1. It was developed by DRDO's Centre for Airborne Systems (CABS), Bengaluru.
2. The system is mounted on an Ilyushin IL-76 aircraft platform.
3. Its AESA radar was designed by the Electronics & Radar Development Establishment (LRDE).
4. Initial Operational Clearance (IOC) was received in 2017 and Final Operational Clearance (FOC) in 2026.

How many of the above statements are correct?

- (a) Only two
- (b) Only three
- (c) All four
- (d) Only one

Q2. The world's first hydrogen production facility based on the Copper-Chlorine (Cu-Cl) thermochemical cycle was inaugurated at:

- (a) Bhabha Atomic Research Centre (BARC), Mumbai
- (b) Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam
- (c) Nuclear Power Corporation of India, Tarapur
- (d) Indian Institute of Science, Bengaluru

Q3. Consider the following about PM Modi's state visit to Seychelles (June 27-29, 2026):

1. It was the first-ever state visit by an Indian Prime Minister to Seychelles.
2. PM Modi was conferred the 'Guardian of the Blue Horizon' — Seychelles' highest Presidential Distinction.
3. India announced a \$250 million Special Economic Package for Seychelles.
4. The visit produced 19 bilateral outcomes spanning defence, digital payments, healthcare and space.

Which of the above are correct?

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





Q4. The Vision Document on Drug Control 2026-2029, released at the 10th NCORD apex meeting, is based on how many major pillars?

- (a) Three
- (b) Four
- (c) Five
- (d) Six

Q5. With reference to digital health launches at the 16th CCHFW, which pair is INCORRECTLY matched?

- (a) Unified Health Interface — Interoperability protocol for seamless health data exchange
- (b) ABHA — 14-digit unique health account ID for every Indian
- (c) Ayushman Sarathi — WhatsApp chatbot for PM-JAY scheme guidance in 12 languages
- (d) SSBSK — National ambulance service operational guidelines

Q6. The VB-G RAM G Act, 2025 came into force on July 1, 2026. Which of the following correctly describes a key change from MGNREGA?

- 1. Wage rates are automatically indexed to the Consumer Price Index for Agricultural Labour (CPI-AL).
 - 2. The guaranteed employment period is increased from 100 to 200 days for all rural households.
 - 3. Households with differently-abled members can access 150 days of employment instead of 100.
 - 4. An AI-enabled Rural Internal Audit Portal monitors asset quality and wage payment timelines.
- (a) 1, 3 and 4 only
 - (b) 1, 2 and 3 only
 - (c) 2 and 4 only
 - (d) 1, 2, 3 and 4

Q7. 'Guardian of the Blue Horizon' is associated with which country's highest Presidential Distinction?

- (a) Mauritius
- (b) Maldives
- (c) Seychelles
- (d) Comoros

Q8. Consider the following about the India-Japan 16th Annual Summit outcomes:

- 1. Three key documents were adopted: Joint Declaration on Economic Security, Joint Statement on AI, and Joint Statement on Energy Resilience.
- 2. Japan will support establishment of 1,000 biogas and organic fertiliser plants in India through the CBG Initiative.
- 3. Both countries declared 2027 as the 'India-Japan Year of Shared Horizons' to mark 75 years of diplomatic relations.





4. India agreed to send 500 Japanese AI professionals to India by 2030.

How many of the above are correct?

- (a) Only two
- (b) Only three
- (c) All four
- (d) Only one

Q9. BHASHINI, showcased at the National e-Governance Conference 2026, is best described as:

- (a) India's national cybersecurity framework for protecting critical digital infrastructure
- (b) An AI-powered multilingual platform making digital services accessible in 22+ Indian languages
- (c) A blockchain-based system for securing government digital records and documents
- (d) India's national cloud computing infrastructure for government data storage

Q10. Bharat Taxi, launched in Gujarat, is primarily based on which model?

- (a) A public sector undertaking model where government owns and operates the taxi service
- (b) A franchise model where private operators pay fees to use the government's brand and technology
- (c) A cooperative model where drivers own the platform, inspired by the AMUL cooperative structure
- (d) A PPP model where a private company operates the service on government infrastructure

2 MAINS QUESTIONS

MAINS QUESTION 1 — 150 WORDS:

'The IAF Netra FOC, the DAE copper-chlorine hydrogen facility, and Digital India's 11-year journey all illustrate the same underlying principle: India's technology autonomy is not acquired — it is patiently constructed.' Using this week's developments, critically examine this assertion and identify the common threads in India's technological self-reliance strategy.

MAINS QUESTION 2 — 250 WORDS:

PM Modi's visit to Seychelles and the India-Japan Summit in the same week reflect two different but complementary dimensions of India's foreign policy: 'security provider in the Indian Ocean' and 'technology partner in the Indo-Pacific.' Analyse both visits together as a unified strategic foreign policy statement, and evaluate whether India is succeeding in positioning itself as an indispensable partner simultaneously in the Indian Ocean, the Indo-Pacific, and the Global South.



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PRELIMS ANSWERS & EXPLANATIONS

Q1. Answer: (b) Only three

Explanation: Statement 2 is WRONG — Netra AEW&C is mounted on the Embraer ERJ-145, NOT the IL-76. The IL-76 carries the imported Phalcon AWACS. This is the classic Netra vs Phalcon trap. Statements 1 (CABS, Bengaluru), 3 (LRDE designed AESA radar), and 4 (IOC 2017, FOC 2026) are all correct. Three statements correct.

Q2. Answer: (b)

Explanation: The Cu-Cl hydrogen facility is at IGCAR (Indira Gandhi Centre for Atomic Research), Kalpakkam, Tamil Nadu — using the Fast Breeder Test Reactor's process heat. BARC (Mumbai) developed the Cu-Cl process but the facility is at IGCAR. Distinction between who DEVELOPED the process (BARC) and where the FACILITY is (IGCAR) is the trap here.

Q3. Answer: (a) 1, 2 and 4 only

Explanation: Statement 3 is WRONG — India announced a \$175 million (not \$250 million) Special Economic Package for Seychelles. Statements 1 (first-ever Indian PM visit), 2 (Guardian of Blue Horizon conferred), and 4 (19 bilateral outcomes) are correct. Numbers are always tested in UPSC — \$175 million must be memorised.

Q4. Answer: (b) Four

Explanation: The Vision Document on Drug Control 2026-2029 has four pillars: (1) Enforcement, Intelligence and Operations; (2) Precursors and Synthetic Drug Control; (3) Demand and Harm Reduction; (4) Capacity Building, Coordination and Monitoring. Strategy summary: 'Detect, Disrupt, Destroy.'

Q5. Answer: (d)

Explanation: Option (d) is INCORRECTLY matched — SSBSK (Samagra Shishu Bal Swasthya Karyakram) is a comprehensive CHILD HEALTH programme, not ambulance services. The National Ambulance Services operational guidelines are called NAS 2026. Options (a) UHI = interoperability, (b) ABHA = 14-digit health ID, (c) Ayushman Sarathi = WhatsApp chatbot — all correctly matched.

Q6. Answer: (a) 1, 3 and 4 only

Explanation: Statement 2 is WRONG — VB-G RAM G Act increases to 150 days only for households with differently-abled members, NOT 200 days for all rural households. The general entitlement remains 100 days (with additional days possible in distress). Statements 1 (CPI-AL indexation automatic), 3 (150 days for differently-abled), and 4 (AI audit portal) are correct.





Q7. Answer: (c)

Explanation: 'Guardian of the Blue Horizon' is Seychelles' highest Presidential Distinction, conferred on PM Modi on June 28, 2026 during his state visit. It was newly instituted by the Seychelles Cabinet on June 24, 2026 — just 4 days before the ceremony. Not Mauritius, not Maldives, not Comoros.

Q8. Answer: (b) Only three

Explanation: Statement 4 is WRONG — it is 500 Indian AI professionals going TO JAPAN (not Japanese to India) by 2030. India has the AI talent; Japan has the industry demand and talent shortage. Statements 1 (three documents), 2 (1,000 biogas plants via CBG Initiative), and 3 (2027 = 75 years of ties = Year of Shared Horizons) are all correct.

Q9. Answer: (b)

Explanation: BHASHINI is India's AI-powered multilingual platform for making digital services accessible in 22+ Indian languages — developed under MeitY's Bhashini programme using the Dhruva AI stack. Not cybersecurity (that is CERT-In/NCIIPC), not blockchain, not cloud infrastructure (that is MeghRaj/NIC).

Q10. Answer: (c)

Explanation: Bharat Taxi is a cooperative model where taxi drivers own the platform — inspired directly by the AMUL cooperative structure from Gujarat. It is NOT a PSU (government-owned), not a franchise, not a PPP. The key distinction: drivers are owners, not employees or contractors. This cooperative economics angle is what makes it UPSC-relevant.

