

## DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 31-01-2026

growth

The global economy is recovering

with forecast cut to 6.7%; medium-term recovery seen from govt's reforms

Economic outlook

IMF has revised global growth forecast for 2026 to 3.6%. The agency has also cut its forecast for India's growth to 6.7% in 2026, from 7.2% in its previous estimate.

One domestic analysis is assessing several key structural reforms that can help create opportunities for citizens that support growth.

India can Give UBI of ₹ 2,650 by Ending Food & Energy Subsidy: IMF

The report estimates that India can save ₹ 2,650 a year on average per household by ending its food and energy subsidies.

Red Tape Kills Indian Pilot's Dream

India's pilot training industry is facing a major challenge due to strict regulations.

Bankruptcy Courts

Say erod

ready to set aside

more for bad loans

Sonita Mehta

WTF's

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## ECONOMIC SURVEY: INDIA MUST SHIFT TO ENTREPRENEURIAL STATE

### Context

- **The Economic Survey 2025-26** borrows a phrase from Mariana Mazzucato to describe what Indian governance must become: **an Entrepreneurial State**.

### What is an Entrepreneurial State?

- It is a deeper shift towards **entrepreneurial policy making under uncertainty**: a state that can act before certainty emerges, structures risk rather than avoiding it, learns systematically from experimentation, and corrects course without paralysis.
  - ◆ It does not mean state capitalism, nor does it imply the commercialisation of government functions or privileging private interests.
- **Key Elements:**
  - ◆ **Bounded Experimentation:** Creating institutional “safe spaces” where innovation is permitted with accountable review mechanisms.
  - ◆ **Regulatory Sandboxes:** Extending beyond fintech to sectors like labour and environmental regulation to encourage innovation.
  - ◆ **Legal Protection for Good-Faith Decisions:** Ensuring officials can innovate without fear of punitive repercussions.
  - ◆ **Independent Ex-post Review Mechanisms:** Assessing decisions based on the information available at the time rather than only based on outcomes.
- **India has already begun to see elements of this approach in practice:** from the creation of mission-mode platforms in semiconductors and green hydrogen, to the restructuring of public procurement to enable first-of-a-kind domestic innovation.

### Challenges in Current Approach

- The chapter highlights structural and behavioural issues that limit performance, including:
  - ◆ **Risk Aversion:** Bureaucratic culture often prioritizes procedural compliance over judgement and experimentation.
  - ◆ **Hysteresis and Permanence:** Temporary policies often become permanent, raising the stakes and disincentivizing experimentation.
  - ◆ **Accountability Systems:** Retrospective scrutiny (through audits, judicial review, etc.) discourages innovative or adaptive actions.

### Need for Entrepreneurial State

- **Impact of Global Political Scenario:** A lingering concern that the negative effects of the ongoing

global political and economic turmoil may manifest with a lag.

- **Trade Wars:** As strategic rivalry intensifies, trade turns coercive, sanctions multiply, supply chains are politically realigned, and financial shocks spread faster across borders amid weaker institutional buffers.
  - ◆ Policy is increasingly nationalised, forcing countries to choose more sharply between autonomy, growth, and stability.
- **Global Financial Crisis:** The risk of a systemic shock cascade in which financial, technological, and geopolitical stresses amplify one another rather than unfolding independently.
  - ◆ While this remains a lower-probability scenario, its consequences would be significantly asymmetric.
  - ◆ The macroeconomic consequences could be worse than those of the 2008 global financial crisis.
- **The three scenarios pose a common risk for India:** disruption of capital flows and the consequent impact on the rupee.

### Conclusion

- State capacity is not just administrative resources, it's about **incentive structures, risk-taking capacity, and governance culture**.
- The chapter **moves beyond traditional policy analysis** to emphasize **institutional design and adaptive governance**.
- India's economic strategy must balance stability and democratic legitimacy with entrepreneurial action and institutional innovation.

### Source: PIB

## MENSTRUAL HEALTH FUNDAMENTAL RIGHT UNDER ARTICLE 21: SC

### Context

- In **Dr. Jaya Thakur v. Union of India**, the Supreme Court has ruled that the **right to menstrual hygiene** is an integral part of the **right to life under Article 21 of the Constitution**.

### Key Highlights of Judicial Intervention

- **Fundamental Right:** Menstrual health is now legally recognized as an essential facet of the Right to Life (Art. 21) and the Right to Education (Art. 21A).
  - ◆ Also, inaccessibility of menstrual hygiene measures **strips away the right to participate** on equal terms in schools (**Article 14**).
- **Free Bio-degradable Pads:** All government and private schools must provide free bio-degradable sanitary napkins to girl students (Classes 6–12).

- Mandatory Infrastructure:** Schools must have functional, gender-segregated toilets with water connectivity. Non-compliance can lead to the de-recognition of private schools.
- Stigma Reduction:** The court mandated NCERT to incorporate gender-responsive curricula to educate both boys and girls, breaking the “hushed whispers” culture.

### Article 21 of Constitution

- Article 21 is part of the Fundamental Rights,** Part III of the Constitution. It is guaranteed to all persons, citizens and non-citizens alike.
  - No person shall be deprived of his life or personal liberty except according to procedure established by law.
  - It places a restriction on the state from arbitrarily interfering with a person's life and liberty.
- Expanded scope through Supreme Court judgments:** Over time, courts have interpreted it to also impose positive obligations on the state to ensure a dignified life.
  - Right to live with human dignity;
  - Right to privacy (Puttaswamy, 2017);
  - Right to livelihood (Olga Tellis);
  - Right to health and medical care;
  - Right to clean environment;
  - Right to legal aid and speedy trial;
  - Right to education (later made explicit via Article 21A);
  - Protection against custodial torture;
  - Right to sleep, shelter and food.

### Menstrual Health Related Policy of Government of India

- Menstrual Hygiene Scheme (MHS):** Supported by National Health Mission (NHM). ASHAs distribute packs of 6 napkins (Freedays) at a subsidized rate of 6.
- PM Bharatiya Janaushadhi Pariyojna:** Over 16,000 Kendras provide ‘Suvidha’ (Oxo-biodegradable pads) at 1 per pad.
- Samagra Shiksha:** Funds the installation of vending machines and incinerators. States must now prioritize bio-degradable options following the 2026 SC ruling.
- Swachh Bharat Mission (Grameen) Phase 2:** Focuses on Menstrual Waste Management (MWM) using small-scale incinerators and deep burial pits to prevent environmental clogging.

- Menstrual Hygiene Policy (2024-25):** Formulated by the Ministry of Health, it streamlines access to low-cost products, prioritizes “Green” (biodegradable) initiatives, and integrates MHM into the formal school curriculum.
- Standardization of Products:** The Department of Health Research is studying sustainable alternatives like menstrual cups and recyclable pads to evaluate their safety and feasibility among rural women.

Source: AIR

## GREEN STEEL & INDIA'S CLIMATE GOALS TRAJECTORY

### Context

- India pledged and committed to submitting a revised and more ambitious **Nationally Determined Contribution (NDC)** at COP30 in Belém with a clear plan for **economy-wide decarbonisation**, especially in the **steel sector**.

### Why Steel Matters?

- Steel is a critical component of **India's eight core infrastructure industries**, holding a significant **weight of 17.92%** in the **Index of Eight Core Industries (ICI)**.
- Steel production in India currently is **about 125 million tonnes** and accounts for **nearly 12% of India's carbon emissions**, with an emission intensity of 2.55 tonnes CO2 per tonne of crude steel, higher than the global average of 1.9 tonnes CO2, largely due to **coal-based production**.
- India needs to increase its production by **over 400 million tonnes by mid-century** to unlock its full economic potential.

### What Is the Green Steel Taxonomy?

- It is a **classification framework** (*notified by the Ministry of Steel in December 2024*) that categorises steel based on its **carbon emission intensity** (measured as tonnes of CO per tonne of crude steel).
- It is **outcome-based**, allowing multiple production routes as long as they meet defined emission thresholds, instead of focusing on a single technology.
- Its core objective is to **differentiate steel products by their climate impact** and enable credible claims of ‘green steel’.

### Key Features of India's Green Steel Taxonomy

- Emissions-Based Classification:** Steel is classified into **graded categories** based on lifecycle greenhouse gas emissions.

- Lower emission intensity corresponds to higher 'greenness', creating a **clear transition pathway** rather than a binary green/non-green label.
- Technology-Neutral Design:** The taxonomy does not mandate a specific technology. It accommodates **hydrogen-based DRI routes**, **scrap-based electric arc furnaces**, **natural gas as a transition fuel**, and **Carbon Capture, Utilisation and Storage (CCUS)**.
- Alignment with MRV Frameworks:** The taxonomy is designed to work alongside **robust Monitoring, Reporting and Verification (MRV)** systems, ensuring emissions claims are measurable, comparable and auditable.

### Why Is the Green Steel Taxonomy Important?

- Investment Clarity:** Low-carbon steel projects require **30–50% higher capital investment**.
  - The taxonomy reduces uncertainty for lenders and investors by clearly identifying which projects qualify as green and therefore deserve preferential finance.
- Market Creation:** By enabling certification and labelling, the taxonomy lays the foundation for **public procurement of green steel**, green product premiums, and corporate demand from climate-conscious buyers.
  - Markets for green steel cannot function without a definition.
- Global Trade Readiness:** International mechanisms such as the **EU's Carbon Border Adjustment Mechanism (CBAM)** assess steel based on embedded emissions.
  - China** is expanding **scrap-based steel production** and investing heavily in green hydrogen to reduce coal dependence.
  - India's taxonomy helps domestic producers **measure, disclose and reduce emissions** in line with global norms, protecting export competitiveness.
- Policy Coordination:** The taxonomy acts as a bridge between industrial policy, climate policy, and climate finance and disclosure frameworks.
  - It enables alignment across ministries and financial regulators, a key requirement for scaling the green industry.

### Barriers to Green Steel

- High cost and limited availability of green hydrogen;
- Insufficient renewable energy dedicated to industry;
- Fragmented and informal scrap markets;
- Uncertain access to affordable natural gas as a transition fuel;

- Limited carbon sequestration infrastructure;
- Lack of long-term, low-cost financing;
- Need for workforce upskilling and technology support;
  - Many of these barriers are policy-driven.
  - India's rapid transformation in renewable energy over the past decade shows what is possible when **ambition, regulation, and investment align**.

### What India Needs Now?

- Firm carbon emission targets** across short, medium, and long-term horizons;
- Early rollout of a carbon pricing mechanism** to internalise emissions costs across the value chain;
- Public procurement policies** to create domestic demand for green steel;
- Clear certification and labelling frameworks** to build market trust;
- Strategic green steel hubs**, where shared infrastructure for renewable power, hydrogen, gas, and CO transport reduces costs;
- Targeted fiscal and financial support**, especially for smaller producers;
  - International experience shows that near-zero steel technologies become viable only with robust carbon pricing.
  - India can learn from this while designing a framework suited to its own economic context.
- However, the **Greening Steel Roadmap**, **National Green Hydrogen Mission**, and emissions intensity targets under the **Carbon Credit Trading Scheme (CCTS)** signal intent and momentum.

Source: TH

## USE OF STEM CELLS TO TREAT AUTISM UNETHICAL: SC

### In News

- The Supreme Court of India (SC) ruled that offering Stem Cell Therapy (SCT) as a routine clinical treatment for **Autism Spectrum Disorder (ASD)** is unethical and constitutes medical malpractice.
  - Autism Spectrum Disorder (ASD) is a neurodevelopmental condition affecting social interaction, communication, and behavior of the person.

### Why Did the Supreme Court Term It Unethical?

- Lack of Scientific Evidence:** There is no conclusive clinical proof that stem cell therapy can improve or cure autism and when a procedure

lacks a scientific “standard of care,” a practitioner cannot provide adequate information regarding risks and outcomes.

- **Violation of Medical Ethics:** Offering unproven therapies violates principle of non-maleficence (do no harm) & informed consent, as patients may be misled by exaggerated claims.
- **Therapeutic Misconception:** Clinics often exploit the emotional vulnerability of parents of children with ASD by framing “experimental trials” as “proven cures.” This is an ethical failure of Transparency and Honesty.
- **Regulatory Non-Compliance:** In India, stem cell use is regulated by Indian Council of Medical Research (ICMR) & National Guidelines for Stem Cell Research. These guidelines do not permit stem cell therapy for autism outside approved clinical trials.

#### What are Stem Cells?

- Stem cells are undifferentiated cells that can develop into different specialised cells.
- Types include:
  - **Embryonic stem cells** (Pluripotent: Can become any cell type in the body.)
  - **Adult stem cells** (Multipotent: Usually limited to becoming the cell type of their origin (e.g., blood cells))
  - **Induced pluripotent stem cells** (iPSCs) (Reprogrammed: Lab-altered to act like embryonic stem cells)
  - **Umbilical Cord Cells** (Often used in treating blood-related disorders like Leukemia)

#### What is Stem Cell Therapy?

- Stem Cell Therapy is a medical treatment in which stem cells are used to repair, replace, or regenerate damaged cells, tissues, or organs in the human body.
- As per the Indian Council of Medical Research (2021), stem cell therapy is recognised as standard treatment only for hematological disorders.

**Source:** TH

## AMENDMENTS TO NEW DRUGS AND CLINICAL TRIALS RULES, 2019

#### Context

- The Union Ministry of Health and Family Welfare has notified key amendments to the New Drugs and Clinical Trials (NDCT) Rules, 2019, to reduce regulatory burden and promote ease of doing business.

#### Rational behind the reforms

- India is one of the world's largest suppliers of generic medicines and vaccines, accounting for nearly **20% of global generic drug exports** by volume, according to the World Health Organization (WHO).
- **Issue:** The industry stakeholders have long flagged lengthy regulatory timelines as a barrier to faster innovation and global competitiveness.
- **Significance:** By cutting approval timelines, reducing licensing requirements, and enabling online intimation mechanisms, the amendments are expected to significantly strengthen India's pharmaceutical R&D ecosystem while maintaining robust regulatory oversight.

#### What are the Amendments?

- **Test Licence Replaced with Prior Intimation:** The requirement of obtaining a test licence from CDSCO for **non-commercial manufacture of small quantities** of drugs for research, examination, or analysis has been replaced with a **prior online intimation mechanism**.
  - **Exceptions:** High-risk categories such as cytotoxic drugs, narcotic drugs, and psychotropic substances continue to require licences.
- **Reduced Timelines:** The overall statutory processing time for test license applications will be reduced from **90 to 45 days**.
- **Waiver of Prior Approval for Low-Risk BA/BE Studies:** Prior permission has been waived for specified low-risk Bioavailability/Bioequivalence (BA/BE) studies.
  - Such studies can now commence after simple online intimation to CDSCO.
- **Digital Enablement of Compliance:** Dedicated online modules will be operationalised on:
  - National Single Window System (NSWS)
  - SUGAM portal

#### Significance of the Amendments

- **Ease of Doing Business:** Simplification aligns Indian regulations with global best practices, reducing delays in drug development and approvals.
- **Global Competitiveness:** With India currently holding only an **8% share** in global clinical trials, the reform will make India more attractive for pharmaceutical R&D.
- **Resource Optimization:** By reducing redundant licensing processes, CDSCO will better deploy its human resources toward high-priority regulatory tasks.

- **Industry Confidence:** Builds investor and industry confidence by ensuring a faster, transparent, and predictable regulatory environment.

### What are the Challenges?

- **Ethical Safeguards:** Oversight is essential to ensure informed consent, transparency, and protection of trial participants.
- **Regulatory Oversight:** A lighter compliance burden must not dilute the stringency of safety checks for vulnerable populations.
- **Public Trust:** Any perception of compromise on safety standards could erode confidence in India's pharmaceutical regulatory system.

### Way Ahead

- **Balanced Regulation:** While simplifying rules will boost clinical research and industry confidence, India must ensure that speed does not compromise safety and ethics.
- **Capacity Building of Regulators:** Continuous training and upskilling of CDSCO officials are essential to manage a more facilitative, technology-driven regulatory framework effectively.
- **Stakeholder Feedback Loops:** Regular consultation with industry, researchers, patient groups, and regulators can help fine-tune the framework and sustain trust-based governance.

Source: TH

## SPACE SPINOFFS

### Context

- Space exploration has generated powerful **healthcare spinoffs** forming an invisible backbone of modern diagnostics, medical devices, and healthcare delivery systems on Earth.

### What are Space Spinoffs?

- Space spinoffs are **civilian applications of technologies originally** developed for space missions.
- NASA has documented over 2,000 spin offs since **1976**.
- ISRO has transferred 350+ technologies to Indian industries, including health and biomedical sectors.

### Key Healthcare Transformations from Space Research

- **Diagnostics and Medical Imaging:** Digital image-processing techniques used in **MRI, CT scans, ultrasound, and mammography** originated in planetary and astronomical image analysis.

- **Point-of-Care Diagnostics:** Miniaturised blood analysers and lab-on-chip devices emerged from the need for medical testing in microgravity.
- **Wearables and Biomedical Monitoring:** Modern wearables (ECG, heart rate, respiration trackers) evolved from astronaut biotelemetry systems.
- **Infection Control and Hospital Safety:** Air and water **purification systems** (HEPA filters, catalytic oxidisers) were developed for closed spacecraft.
- **Telemedicine and Health Logistics:** Satellite-based telemedicine enables remote consultations, disaster response and teleradiology.
  - ◆ **Earth-observation satellites** support disease surveillance, epidemiological mapping and disaster-health assessment.
  - ◆ **Solar-powered vaccine refrigerators** and **drone-based medical delivery** rely on satellite navigation and communication.
- **Healthcare Systems and Clinical Practice:** Studies on bone loss, muscle atrophy, and cardiovascular deconditioning in astronauts have enhanced understanding of osteoporosis, sarcopenia, ageing, and prolonged bed rest on Earth.
  - ◆ **Radiobiology research** from deep-space missions informs cancer risk assessment and radiotherapy safety.
- **Medical Devices and Interventions:** Expertise in fluid dynamics contributed to the development of **compact ventricular assist devices** with low blood-shear stress.
  - ◆ **Advances in radiation-hardened electronics** and miniaturisation supported the evolution of programmable pacemakers and cardiac rhythm-management devices.

Source: TH

## PROPOSAL TO ACCELERATE THE DEVELOPMENT OF HYDRO PUMPED-STORAGE PROJECTS (PSPS)

### In News

- The Central Electricity Authority (CEA) has proposed a regulatory overhaul to accelerate the development of **hydro pumped-storage projects (PSPs)**.

### Background

- Eco-sensitive zones (ESZs) protect fragile ecosystems, and currently PSPs and hydropower projects are banned within ESZs and a 10-km buffer around protected areas.

- Environmental concerns and local protests in states like Tamil Nadu, Karnataka, Rajasthan, and Maharashtra's Western Ghats highlight risks to forests and wildlife.
- The CEA roadmap notes that cumbersome environmental and forest clearances, treating PSPs like conventional hydro, are a key barrier to development.

### Major Highlight of the Proposal

- Policy Shift for PSPs:** The CEA has recommended allowing hydro PSPs within eco-sensitive zones (ESZs) and up to a 10-km aerial distance from protected areas where ESZs have not been formally notified.
  - It has also called for a differentiated regulatory framework for renewable energy projects and relaxation of stringent conditions applicable to the Western Ghats.
  - PSPs are prioritized over Battery Energy Storage Systems (BESS) due to long-duration storage and grid balancing capabilities.
- Capacity Targets:** India's PSP capacity to rise from 7.1 GW currently to 87 GW by 2033-34 and 100 GW by 2035-36.
  - Roadmap targets 100 GW of PSP capacity by 2035-36 to meet growing renewable integration and storage needs.
- Regulatory and Environmental Reforms:** PSPs treated as a distinct category for environmental and forest clearances, especially off-the-river or on existing reservoirs, due to lower displacement and environmental impact.
  - The proposal proposed a differentiated regulatory framework for renewable-linked PSPs.
- Easing forest clearance hurdles:** The CEA proposes easing environmental and land norms for PSPs by allowing degraded forest land to be used for compensatory afforestation at twice the diverted area, instead of non-forest land, a rule previously limited to certain public and coal projects.
  - It also recommends establishing a **national-level land bank** with mapped degraded land, a GIS-based repository, and a monitoring framework to streamline afforestation processes and support project approvals.
- Environmental Considerations:** The CEA prioritizes pumped-storage projects (PSPs) over battery storage due to their long-duration energy storage and fast, flexible grid-balancing capabilities.
  - PSPs store energy by pumping water to an upper reservoir during low demand or excess

renewable generation and releasing it through turbines to generate electricity during peak demand.

- PSPs generally have minimal environmental impact compared to conventional hydro
- Off-stream PSPs recommended to be classified under the "White Category" due to minimal environmental impact, simplifying environmental and forest clearances.
- Financial and Implementation Support:** Extend Viability Gap Funding (VGF) to PSPs to offset high capital costs.
  - Focus on rapid development to support renewable energy integration and grid stability.

### Key Challenges Identified

- Difficulty finding suitable non-forest land for compensatory afforestation.
- Regulatory barriers due to blanket ESZ prohibitions and 10-km buffers.
- Delays in state-level approvals for rehabilitation and resettlement.
- Requirement of fresh environmental clearances for minor capacity increases.

### Conclusion

- The roadmap seeks to address India's growing energy storage challenge arising from the increasing penetration of variable and intermittent renewable energy sources such as solar and wind in the power mix.
- It aims to fast-track PSP development through regulatory relaxation, environmental simplification, and financial support, targeting 100 GW capacity by 2035-36 while balancing ecological and social concerns.

### Central Electricity Authority (CEA)

- It is an attached office of the Ministry of Power, advises the government on technical and economic electricity matters.
- It is headed by a Chairman and six full-time members.
- It prepares the National Electricity Plan every five years, approves hydro projects, sets technical, safety, and grid standards, promotes project completion, skill development, research, and data collection
- It advises the central and state governments on improving generation, transmission, distribution, and utilization of electricity under the Electricity Act, 2003.

Source :IE

## NEWS IN SHORT

### KALBELIA COMMUNITY

#### In News

- The National Human Rights Commission (NHRC) issued a notice to the Rajasthan government over protests by the **Kalbelia community** in Barmer, who placed a dead body on the road demanding a designated burial ground.

#### Kalbeliyas

- Kalbelia are a **snake charming folk community** from the region of Rajasthan, India.
- Their traditional occupation used to be catching snakes and **trading snake venom**.
- They are known for their **vibrant dances and black embroidered attire**.
- In 2010, their songs and dances were added to **UNESCO's Intangible Cultural Heritage list**, recognizing them as a key marker of identity as the community adapts to changing social and economic conditions.
- Kalbelias follow the **Nath tradition**, under which their dead kin are buried and not cremated.

#### Do you know?

- The Kalbelia dance, also called **Sapera dance**, is a folk dance central to Kalbelia culture, a nomadic tribe traditionally known as snake charmers.
- The dance reflects their **close association with snakes through movements** and costumes.
- Women perform the dance, while men provide musical accompaniment using instruments like the pakhawaj, dholak, jhanjhar, harmonium, sarangi, and especially the pungi (been).
- It is a **fast-paced dance highlighting flexibility**, with dancers wearing black lehengas and ornate jewellery.

Source: TH

### BOMB CYCLONE

#### In News

- A bomb cyclone is expected to bring another round of **heavy snow and severe winter** weather to the eastern United States.

#### Bomb Cyclone

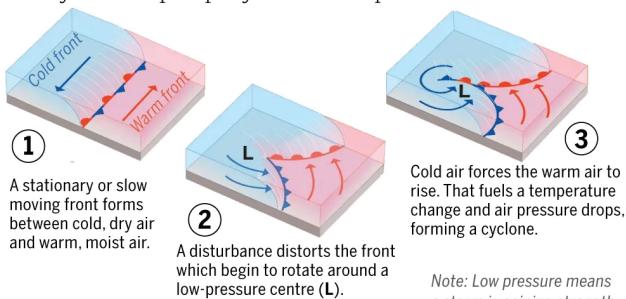
- A bomb cyclone occurs when a low-pressure system's pressure drops at least 24 millibars in 24 hours, rapidly strengthening winds due to the

increased pressure gradient—a process called **bombogenesis**.

- It forms when **cold polar air collides with warm subtropical air**, often over warm ocean currents, with rapid intensification driven by temperature contrasts and latent heat from condensation.
- Bomb cyclones most often form over the **western North Atlantic**, where cold North American air meets warm Atlantic air, with the Gulf Stream helping intensify storms.

#### HOW BOMB CYCLONES ARE FORMED

Bomb cyclones are intense storms created through a process called "bombogenesis" which occurs when barometric pressure in a cyclone drops rapidly in a 24 hour period.



Note: Low pressure means a storm is gaining strength.

SOURCE: ENCYCLOPEDIA BRITANNICA, ECCC, NOAA, POSTMEDIA NEWS

- Bomb cyclones bring heavy precipitation, including intense snowfall, with blizzard conditions and occasional lightning during rapid intensification.

Source: BBC

### KAVACH 4.0

#### In News

- Indian Railways commissioned 472.3 route kilometres (RKm) of Kavach Version 4.0.

#### About

- Originally known as the **Train Collision Avoidance System (TCAS)**, Kavach was adopted as the National ATP system in 2020. The 4.0 version, approved in July 2024 and significantly rolled out by January 30, 2026.
- Kavach 4.0 creates a "digital shield" by integrating several high-tech components:
  - GPS & Radio Communication:** Uses GPS for precise location tracking and UHF/Radio towers to maintain a constant "talk" between the locomotive and the station.
  - Microprocessors:** Onboard computers process real-time data to make split-second braking decisions.
  - RFID Tags:** Placed every kilometer on the tracks to "reset" the train's location and direction accurately.

- ♦ **Optical Fibre Network:** Ensures high-speed data transfer between stations, even in remote terrains.

Source: PIB

## NEW CONSUMER PRICE INDEX (CPI) SERIES

### Context

- The Union Ministry of Statistics and Programme Implementation (MoSPI) has published the recommendations of an expert group revising the Consumer Price Index (CPI) base year from 2011–12 to 2023–24.

### Consumer Price Index (CPI)

- CPI is an economic measure that **tracks the average change in the prices** paid by consumers for a basket of goods and services over time.
- The **CPI in India** is compiled by the **National Statistical Office (NSO)** and is categorized into CPI for **urban** and **rural** areas.
- These indices are then combined to calculate the **CPI (Combined)**, which gives a comprehensive overview of inflation for the entire country.
- **Significance:**
  - ♦ CPI is the primary measure of **retail inflation in India**.
  - ♦ It is used by the Reserve Bank of India (RBI) for **inflation targeting** and monetary policy formulation.
  - ♦ CPI serves as the basis for **indexing Dearness Allowance (DA)** for government employees and pensioners. It is also used as a **deflator in national accounts**.

Source: DTE

## NEW COUNTRY PARTNERSHIP FRAMEWORK

### In News

- India and the World Bank group announced a **new Country Partnership Framework (CPF)** to help accelerate India's next phase of growth and support its vision of Viksit Bharat.

### About

- CPF is the strategic roadmap that guides the **World Bank Group's financial, technical, and knowledge support to a country**.
- The new CPF for India will provide \$8–10 billion annually over the next five years.
- The Country Partnership Framework (CPF) is designed to achieve four specific results:

- ♦ **Rural Prosperity:** Diversifying income beyond farming and strengthening agri-value chains.
- ♦ **Urban Transformation:** Making cities "livable" and sustainable as the urban population heads toward 800 million by 2050.
- ♦ **Investing in People:** Scaling up health, nutrition, and market-aligned skills.
- ♦ **Energy & Resilience:** Strengthening energy security (e.g., Green Hydrogen, E-mobility) and climate resilience.

### Key Projects Under Implementation

- **PM-SETU (Skilling):** Upgrading 1,000 ITIs via a "Hub-and-Spoke" model to make 1 million youth job-ready.
- **Maharashtra PoCRA-II:** Using precision farming and digital tech to boost smallholder resilience and profitability.
- **Kerala Health Systems:** Strengthening digital health and cybersecurity in state-wide medical services.

Source: BL

## FPI OUTFLOWS HIT FIVE-MONTH HIGH

### Context

- Foreign Portfolio Investors (FPIs) recorded net outflows of **₹35,962 crore** from Indian equities in January 2026.

### Foreign portfolio investment (FPI)

- FPI consists of securities and other financial assets held by investors in another country.
- It does **not provide the investor with direct ownership of a company's assets** and is relatively liquid depending on the volatility of the market.
- **FPI holdings can include** stocks, American Depository Receipts (ADRs), Global Depository Receipts (GDRs), bonds, mutual funds, and Exchange-traded funds (ETFs).
- It is different from **Foreign direct investment (FDI)**, which is an ownership stake in a foreign company or project made by an investor, company, or government from another country.

### Key Drivers of FPI Selling

- **Weak corporate earnings momentum** remains a major concern for foreign investors.
- **Continued depreciation** of the Indian rupee has added to currency risk perceptions.

Source: TH

## COKING COAL AS CRITICAL & STRATEGIC MINERAL UNDER MMDR ACT, 1957

### Context

- The government has notified **Coking Coal as a Critical and Strategic Mineral** under the **Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act)**.

### About

- The decision has been taken on the basis of the **recommendations of the High-Level Committee** on Implementation of Viksit Bharat Goals (HLC-VB) and policy inputs from NITI Aayog.
- India has an estimated **37.37 billion tonnes** of coking coal resources, largely located in **Jharkhand, with additional reserves in Madhya Pradesh, West Bengal and Chhattisgarh**.
- Despite this domestic availability, **imports of coking coal have increased** from 51.20 million tonnes in 2020–21 to 57.58 million tonnes in 2024–25.
- Currently, around 95 % of the coking coal requirement** of the steel sector is met through imports, leading to **significant foreign exchange outgo**.

#### Coking Coal

- Coking coal, also known as **metallurgical coal** or “**met coal**,” is a type of coal that is used in the **steelmaking process**.
- It’s **essential in the production of coke**, a key component in the steelmaking process.
- Coking coal needs to have **specific properties such as high carbon content, low sulfur and phosphorus content**, and strong coking properties to be suitable for steelmaking.

### Significance

- The inclusion of coking coal in this category is expected to facilitate faster approvals, improve ease of doing business, and accelerate exploration and mining activities, including of deep-seated deposits.
- The reform is anticipated to reduce import dependence, strengthen supply-chain resilience for the steel sector, and support the objectives of the National Steel Policy.

Source: PIB

## WORLD NUCLEAR OUTLOOK REPORT

### In News

- According to the new World Nuclear Outlook Report, Five countries — China, France, India, Russia and the United States — could together

account for nearly 980 GWe of global capacity in 2050.

### World Nuclear Outlook Report

- It reviews national targets for nuclear capacity and assesses these against the global goal to triple nuclear capacity by 2050.
- It also reviews the current and future contribution of nuclear technology to energy provision and summarises the range of different nuclear reactor technologies available.

### Key Findings

- Global nuclear capacity** could reach 1,446 GWe by 2050, exceeding the tripling target of 1,200 GWe, with growth driven by reactors under construction, planned projects, and proposed or government-driven programs.
  - China, France, India, Russia, and the USA** would account for most capacity, while newcomer nations aim for 157 GWe.
- South Asia, led by India**, is emerging as a key growth region due to rising electricity demand, urbanization, and industrialization.

### Recommendations

- Governments, financial institutions, and industry should work together to expand nuclear energy by integrating it into climate plans, extending reactor lifetimes, reforming markets, supporting neutral financing, and scaling up supply chains and deployment, including new reactor technologies.

### India's progress

- India is steadily expanding its nuclear energy capacity under strict safety, cost, and regulatory oversight, with projects like a new facility near Kanyakumari progressing cautiously.
- Current nuclear capacity stands at about **8.8GW, with a long-term target of 100GW by 2047**, supported by policy reforms that allow private and foreign participation while the state retains majority control.
- Nuclear is positioned as part of **India's low-carbon energy transition**, complementing renewables, hydro, and pumped storage, while ensuring affordability, grid stability, and safety.
- India is recognized as a key driver of global nuclear growth through 2050**, reflecting its dual focus on operating existing plants and developing new projects to meet rising electricity demand and climate goals.

Source :DTE

