

# NEXT IAS

## DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 29-05-2026

### Table of Content

- SARTHAK-PDS Scheme to Modernise Public Distribution System
- IBC Transforming India's Debt Recovery Ecosystem
- SC upheld the Constitutional Validity of Retrospective 28% GST on Online Gaming Companies
- National Health Accounts 2022-23
- News In Short**
  - NATO Strengthens Baltic Defence Architecture
  - Concerns Over Anti-Dumping Duties on Chemicals
  - Special Intensive Revision (SIR)
  - India enters Wi-Fi 7 Era
  - India-US Critical Minerals Framework
  - Coal Gasification can help substitute imports of up to ₹3 lakh crore: Union Coal Minister

## SARTHAK-PDS SCHEME TO MODERNISE PUBLIC DISTRIBUTION SYSTEM

### Context

- The Cabinet Committee on Economic Affairs (CCEA), approved the continuation and integration of two key food distribution schemes under a new umbrella programme titled “**Scheme for Assistance in Ration Transport and Handling-Income with Automation in PDS**” (SARTHAK-PDS).

### About

- The SARTHAK-PDS scheme integrates two existing initiatives;
  - ♦ **Assistance to State Agencies for intra-State movement of foodgrains and FPS dealers’ margin** under NFSA and
  - ♦ **Scheme for Modernization and Reforms through Technology in Public Distribution System (SMART PDS)** with the objective of strengthening implementation of the **National Food Security Act**.
- The scheme proposes the use of advanced technologies such as **Artificial Intelligence (AI), Machine Learning (ML), Natural Language Processing (NLP) and Blockchain** to modernise and optimise PDS operations.



### What is a PDS System?

- The **Public Distribution System (PDS)** is a food security mechanism in India through which essential food commodities are distributed to eligible beneficiaries at subsidised prices through Fair Price Shops (FPSs).
  - ♦ The system primarily distributes **rice, wheat and coarse grains** to economically weaker sections of society.
  - ♦ The PDS is a **joint responsibility** of the central and state governments.
- The **central government**, through the **Food Corporation of India (FCI)**, procures, stores, transports, and allocates food grains to the states.

- State governments** manage the system at the ground level, including allocating food within the state, identifying eligible families, and issuing ration cards.

### Evolution of the Public Distribution System (PDS) in India

- PDS in the 1960s:** The modern PDS emerged during the food shortages of the 1960s and after the Green Revolution, the system expanded to tribal, remote and poverty-prone regions during the **1970s and 1980s**.
- The **Revamped Public Distribution System (RPDS)** was launched in **1992** to strengthen food distribution in remote, hilly and tribal areas.
- The **Targeted Public Distribution System (TPDS)** was launched in **1997** to direct food subsidies specifically towards Below Poverty Line (BPL) families.
- The **Antyodaya Anna Yojana (AAY)** was launched in **2000** to provide highly subsidised food grains to the “poorest of the poor” households.

### Constitutional and Global Commitments

- Right to Food Under Article 21:** The Supreme Court has interpreted the Right to Food as an essential component of **Article 21**, which guarantees the **Right to Life**.
- Sustainable Development Goals:**
  - ♦ **SDG 2 (Zero Hunger)** aims to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture globally by **2030**.
  - ♦ **SDG 3 (Good Health and Well-being)** aims to ensure healthy lives and promote well-being for all at all ages.

### Challenges with the PDS System

- Diversion of Food Grains:** A significant portion of food grains is leaked during transportation or diverted to the black market.
- Exclusion due to Biometric Verification:** Many people lose access to their monthly rations as their names are struck off the PDS rolls after biometric verification, requiring them to apply for new ration cards.
- Inclusion and Exclusion Errors:** Non-eligible households receive benefits, burdening the system.
  - ♦ Genuine beneficiaries are excluded due to flaws in the identification process.

- **Corruption at Fair Price Shops (FPS)**, such as under-weighting food grains, selling poor-quality goods, or charging higher prices, undermines the system's effectiveness.
- **Inadequate warehousing facilities** lead to spoilage and wastage of food grains.
- **Nutritional Limitations:** The PDS largely **focuses on cereals** and does not adequately address nutritional diversity through pulses, millets and **protein-rich foods**.

#### Reforms and Modernization Efforts

- **National Food Security Act, 2013:** Enacted to provide legal entitlement to subsidized food grains to **two-thirds** of India's population.
  - ♦ Ensures the coverage of **75% of rural and 50% of urban** population.
- **The Targeted Public Distribution System (Control) Order of 2015** was issued by the Ministry of Consumer Affairs, Food and Public Distribution.
  - ♦ It established responsibilities for the Centre and States, and set up a grievance redressal mechanism.
- **Digital Ration Cards:** The introduction of digital ration cards and Aadhaar-based biometric authentication aims to eliminate fake and duplicate ration cards.
- **Direct Benefit Transfer (DBT):** In some regions, DBT has been implemented, where **money is transferred directly to the bank accounts** of beneficiaries instead of providing food grains.
- **Citizen-centric applications** such as **Mera Ration, Anna Mitra, Rightful Targeting Dashboard** and **Anna Sahayata** have also been introduced to improve access and transparency.

#### Way Ahead

- **Infrastructure Expansion:** Strengthen storage and transportation facilities to support the growing scale of operations.
- **Technological Integration:** Leverage artificial intelligence and **blockchain** for real-time tracking and reducing inefficiencies.
- **Implement social audits and public grievance redressal mechanisms** to hold PDS stakeholders accountable and address issues like corruption and leakages.
- **Expanding Nutritional Basket:** The government should include pulses and fortified food items in the Public Distribution System to improve nutritional security.

Source: DD News

## IBC TRANSFORMING INDIA'S DEBT RECOVERY ECOSYSTEM

### Context

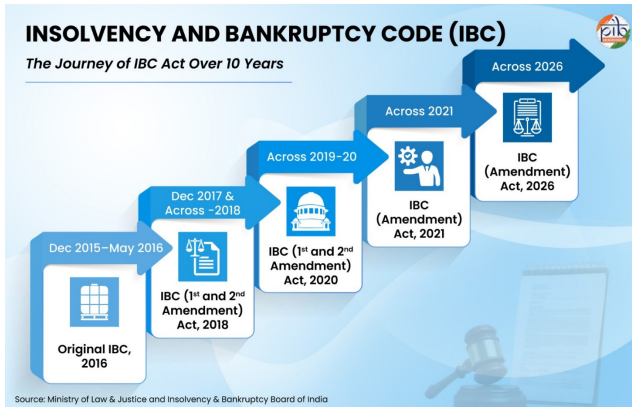
- The Insolvency and Bankruptcy Code (IBC), introduced in **2016** to create a time-bound insolvency resolution mechanism, has **completed a decade**.

### Insolvency and Bankruptcy Code (IBC) 2016

- **IBC was introduced in 2016** to address rising Non Performing Assets and ineffective debt recovery mechanisms in India.
- Objectives of the IBC resolution are;
  - ♦ **Business Revival:** To save businesses through restructuring, changes in ownership, or mergers,
  - ♦ **Maximization of Asset Value:** To preserve and maximize the value of the debtor's assets,
  - ♦ **Promoting Entrepreneurship and Credit:** To encourage entrepreneurship, improve credit availability, and balance the interests of stakeholders, including creditors and debtors.
- Currently a maximum **330 days** is allowed to find a resolution for a company admitted into the insolvency resolution process.
  - ♦ Otherwise, the company goes into **liquidation**.

### Institutional Framework under IBC

- **Insolvency and Bankruptcy Board of India (IBBI):** The apex regulatory body established to oversee the functioning of insolvency professionals, insolvency professional agencies, and information utilities.
- **National Company Law Tribunal (NCLT):** The adjudicating authority responsible for admitting insolvency petitions, declaring moratoria, and approving resolution plans for companies and LLPs.
- **Insolvency Professionals (IPs):** IPs administer the affairs of distressed entities, safeguard assets and facilitate meetings of creditors. They oversee the resolution process in compliance with the Code and applicable regulations.
- **Committee of Creditors (CoC):** The supreme decision-making body comprising the distressed entity's financial creditors. They evaluate, vote on, and approve the resolution plan.



### Need for Insolvency Reforms in India

- **Rising NPA Crisis:** India's banking sector suffered from massive **Non-Performing Assets (NPAs)**, especially after the infrastructure and corporate lending boom of the 2000s.
- **Ineffective Earlier Mechanisms:** Earlier recovery mechanisms such as the **SARFAESI Act, Debt Recovery Tribunals (DRTs) and Lok Adalats** were slow and inefficient.
  - ♦ Recovery proceedings continued for several years without effective resolution.
- **Weak Credit Discipline:** Defaulting promoters used to retain control over companies despite persistent loan defaults. The absence of strict consequences encouraged wilful defaults and poor repayment culture.
- **Improving Ease of Doing Business:** India's insolvency resolution system ranked poorly in global ease of doing business indicators before the IBC.
  - ♦ **A predictable exit mechanism was necessary** to attract domestic and foreign investment.

### Success of the Insolvency and Bankruptcy Code

- **Debt recovery framework:** Till March 2026, a total of 8,987 Corporate Insolvency Resolution Processes (CIRPs) had been admitted under the IBC framework.
  - ♦ Out of these cases, 1,419 corporate debtors were successfully resolved through approved resolution plans.
  - ♦ Several additional cases were closed through settlements, appeals, reviews and withdrawals under **Section 12A of the Code**, reflecting the behavioural impact of the IBC on borrowers.
- **Improved recovery outcomes:** As of **March 2026**, creditors realised nearly **₹4.32 lakh crore** through approved resolution plans under the IBC.

- ♦ Recoveries also amounted to more than **94.56%** of the fair value of stressed assets, indicating better value maximisation under the resolution process.
- **Strengthened financial discipline:** The fear of losing management control has improved **repayment discipline among corporate borrowers**.
  - ♦ Many firms have opted for early settlements before formal insolvency admission, thereby reducing prolonged litigation.
- **The Reserve Bank of India's "Report on Trends and Progress of Banking in India 2024-25"**, highlighted that IBC accounted for nearly **52.4%** of the total recoveries made by banks.
  - ♦ Recoveries through the IBC were significantly higher than recoveries made through SARFAESI, Debt Recovery Tribunals (DRTs) and Lok Adalats.

### What are the Concerns?

- **Rising Delays in Resolution:** The average resolution timeline increased to nearly 744 days by FY2026 against the statutory limit of 330 days.
  - ♦ Nearly 78% of insolvency cases exceeded the prescribed timeline.
  - ♦ Delays lead to erosion of asset value and reduce investor interest in stressed assets.
- **High Haircuts for Creditors:** On average, creditors face haircuts of around 67%, recovering only about one-third of their admitted claims.
- **The IBC lacks clear provisions** for handling issues unique to modern firms, such as **intellectual property valuation, employee claims**, and technology continuity.
  - ♦ This limits effective resolution of non-traditional enterprises.
- **Capacity Constraints:** The NCLT and NCLAT continue to suffer from manpower shortages and limited infrastructure.
- **Cross-Border Insolvency Challenges:** Insolvency cases involving multinational assets and creditors face legal and procedural uncertainty.

### Way Ahead

- **Strengthen NCLTs:** The government must increase the number of NCLT benches, judges and technical members to **reduce pendency and delays**.
- **Reduce Delays:** Strict timelines for appeals and insolvency proceedings must be enforced to preserve asset value.

- **Prioritise Resolution:** The insolvency framework must focus more on revival and restructuring of viable firms rather than liquidation.
- **Limit Haircuts:** Greater transparency and better valuation mechanisms are needed to reduce excessive creditor haircuts.
- **Protect MSMEs:** Operational creditors and MSMEs should receive fairer treatment under resolution plans.

Source: BS

## SC UPHELD THE CONSTITUTIONAL VALIDITY OF RETROSPECTIVE 28% GST ON ONLINE GAMING COMPANIES

### Context

- The Supreme Court upheld the **constitutional validity of the government's retrospective 28% Goods and Services Tax (GST)** levy on online gaming companies.

### About

- The gaming sector argued that the **28% GST on online gaming should apply only prospectively, from 2023**, after the amendments approved by the GST Council came into effect.
- However, the SC sided with the government's interpretation and **treated the 2023 GST amendments as clarificatory**, thereby allowing retrospective application for periods before 2023.

### Online Gaming Sector

- The Indian market generated INR 232 billion in 2024, **77% of this revenue came from transaction-based games**.
  - ♦ The sector is projected to grow at a **CAGR of 11%, reaching INR 316 billion by 2027**.
- The sector can be broadly divided into **three distinct segments**:
  - ♦ **Esports:** This refers to competitive digital sports, which are part of multi-sports events and where teams or individuals participate in organised tournaments. Success in esports requires strategy, coordination, and advanced decision-making skills.
  - ♦ **Online Social Games:** These are casual games that form part of everyday recreation. They are primarily skill-based and designed for entertainment, learning, or social interaction. Such games are generally considered safe.

- ♦ **Online Money Games:** This segment includes games involving financial stakes. These may be based on chance, skill, or both. These platforms have raised serious concerns due to reports of addiction, financial losses, money laundering and even suicides.
- ♦ It is estimated that around **45 crore people have been affected by such platforms**, with losses exceeding Rs. 20,000 crores.

### Promotion and Regulation of Online Gaming (PROG) Act, 2025

- **Scope of the Act:** The Act imposes a **complete ban on all forms of online money games**. This applies to games of chance, games of skill, and any mix of the two.
  - ♦ It allows only "online social games" and e-sports.
- **Online Gaming Authority of India:** It proposes the creation of the Online Gaming Authority of India (OGAI) as a **dedicated regulator to oversee online gaming**.
  - ♦ **The authority will have quasi-judicial powers**, including summoning individuals, examining evidence, and issuing binding orders.
  - ♦ **Composition:** Chairperson and 5 members from different ministries.
  - ♦ **Functions:** To decide whether a game is an "online money game".
    - It will register online games.
    - Impose penalties and issue directions.
    - Cancel registration if a game changes its model to involve betting or wagering.
- **Registration:** Both e-sports and social games will require compulsory registration with the authority. A certificate of registration will be valid for up to five years.
- **Regulation:** Companies must register their games with the Authority.
  - ♦ They must provide details of revenue model and user safety features.
  - ♦ Proof that revenue comes from ads, subscriptions, or access fees — not from wagers or stakes.
- **Penalties and Offences:** Offering online money gaming services may attract up to three years' imprisonment and fines of up to ₹1 crore.
  - ♦ Advertising such platforms could lead to two years' imprisonment and fines up to ₹50 lakh.

- ♦ Violations are non-bailable offences and entire company staff can be held liable for facilitating breaches.
- **Penalty Depends on:** The gain from violation, loss to users and repetition of offence.
- **Grievance Redressal Mechanism (Three-tiered):** Internal mechanism of the game company.
  - ♦ Grievance Appellate Committee (GAC) under IT Rules, 2021.
  - ♦ The Online Gaming Authority of India will have the final appeal.
- **The Role of Various Authorities: E-sports** will fall under the **Ministry of Youth Affairs**, while **social games** will be regulated by the **Ministry of Information & Broadcasting**.
  - ♦ **MeitY** will hold overall **regulatory responsibility**.
  - ♦ **The Ministry of Information & Broadcasting (I&B)** will issue codes of practice and guidelines for classifying online social games (recreational, educational, skill-based, etc.).

#### Need for the Rules

- It aims to bring **transparency, accountability, and consumer protection** in India's fast-growing online gaming sector.
- **Lack of Framework:** The lack of a legal framework has hindered the sector's structured development and the promotion of responsible gaming practices, requiring urgent policy intervention and support mechanisms.
- **Major Concerns:** The proliferation of online money games through mobile phones, computers and the internet, and offering monetary returns has led to serious social, financial, psychological and public health harms.

#### Significance

- It will establish a **uniform and national-level legal framework** in the public interest.
- It will **protect the country's youth** from predatory online Real Money Gaming apps which manipulate them through misleading monetary return promises.
- It seeks to **curb gambling, addiction, and financial risks**, while **promoting ethical, skill-based gaming**.

Source: IE

## NATIONAL HEALTH ACCOUNTS 2022-23

### Context

- The Union Health Ministry released the **National Health Accounts (NHA) estimates for India 2022-23**.

### About

- **The National Health Account (NHA)** is a tool to describe **health expenditures** and the flow of funds in both the Government and Private sectors of the country.
- Preparation of NHA estimates was institutionalised at **National Health Systems Resource Centre (NHSRC) in 2014**.
- **Published by:** NHSRC, Ministry of Health and Family Welfare.
- As of now, **9 NHA estimates** (2013-14 to 2021-22) have been prepared.
- **Methodology followed:** System of Health Accounts, 2011 (SHA 2011), a global standard framework for producing health accounts.

### Major Highlights of NHA 2022-23

- **Total Health Expenditure:** The Total Health Expenditure (THE) for India is estimated at 3.37% of GDP and Rs 6,373 per capita.
  - ♦ This constitutes current and capital expenditures incurred by Government and Private Sources, including External/Donor funds.
- **Increase in Government Expenditure:** The share of Government Health Expenditure (GHE) in the country's Gross Domestic Product (GDP) has risen from 1.15% in 2013-14 to 1.43% in 2022-23.
  - ♦ As per the new GDP series with base year 2022-23, Government Health Expenditure is 1.48 per cent of GDP.
- **GHE's share in General Government Expenditure (GGE)** has increased from 3.78% to 4.89% over the same period.
- **In per capita terms**, GHE has increased nearly 2.7 times, from Rs. 1,042 to Rs. 2,786 between 2013-14 and 2022-23.
- **Out-of-pocket expenditure (OOPE):** The report's international comparison of out-of-pocket expenditure (OOPE) showed India's per capita spending from personal pockets stood at 121 international dollars (PPP) in 2022, placing the country at rank 64 globally.

- ♦ The figures highlight that despite the expansion of public healthcare schemes and insurance coverage, households in India continue to bear a substantial share of treatment costs themselves.
- ♦ Among neighbouring countries, the OOP burden stood at 85 international dollars in Pakistan, 180 in Nepal, 130 in Bangladesh and 246 in Sri Lanka.
- **Private hospitals** take the largest share of all current health expenditure at 30.83%, followed by government hospitals at 16.73%.
- **Relatively Low Spending on Preventive Care:** Preventive care forms only 8.88% of the Current Health Expenditure (CHE) spending, while inpatient and outpatient curative care together claim over 56% as the biggest spending head, and pharmaceutical expenditure is also high.
- ♦ All India Institute of Medical Research was now promoting research on traditional medical systems and a comprehensive approach.
- **Ayushman Arogya Mandirs:** 1.75 lakh health centers functioning with 369 crore visits.
- ♦ Focus on screening hypertension, blood pressure, and diabetes for people over 30 years.
- **National Digital Health Mission (NDHM):** Launched in 2020, NDHM aims to create a digital health ecosystem, including health IDs for citizens and the establishment of a national digital health infrastructure.
- **Health and Wellness Centers (HWCs):** The government is working towards transforming primary health centers into HWCs to provide comprehensive primary healthcare services, including preventive and promotive care.

#### Concerns with Low Public Expenditure on Healthcare

- This has resulted in **inadequate health infrastructure** including human resources, and slow improvement in key health indicators.
- **Limited Access to Healthcare Services:** Low public spending hampers accessibility to healthcare services, particularly in rural and remote areas where infrastructure is already lacking. This exacerbates health disparities between urban and rural populations.
- **Neglected Preventive and Primary Care:** A large portion of healthcare spending in India is directed towards tertiary care, neglecting preventive and primary healthcare services.
- **Higher Disease Burden:** Low public spending on healthcare contributes to a higher burden of preventable diseases such as communicable diseases, malnutrition, and maternal and child health issues.
- **Increased Out-of-Pocket Expenditure:** The lack of public healthcare infrastructure has led people to **use private health services more**, and that has **increased the financial burden on citizens**.
- **Pradhan Mantri Swasthya Suraksha Yojana (PMSSY):** PMSSY aims to enhance tertiary care capacities and strengthen medical education in the country by setting up new AIIMS institutions and upgrading existing government medical colleges.
- **Research and Development Initiatives:** The government has been encouraging research and development in healthcare, including support for the development of vaccines, drugs, and medical technologies.
- **National Medical Commission (NMC) Act:** The NMC Act, passed in 2019, aims to bring reforms in medical education and practice by replacing the Medical Council of India (MCI) and promoting transparency and accountability.
- **Jan Aushadhi Scheme:** The Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) aims to provide quality generic medicines at affordable prices through Jan Aushadhi Kendras.

#### Recent steps Taken by the Government for Strengthening Healthcare Sector

- **National Health Policy 2017:** It outlines the government's vision to achieve the highest possible level of health and well-being for all and emphasizes preventive and promotive healthcare.
  - ♦ Equal treatment for modern medicine and traditional systems (Ayurveda, Yoga, Unani, Siddha, Homeopathy).
- **Way Ahead**
  - ♦ The COVID-19 pandemic had shown the cracks in India's health system and highlighted the **need for increased public investment in healthcare**.
  - ♦ Effective primary health care can prevent the occurrence of more serious health issues, meaning that overall health outcomes can be improved significantly through investing in primary healthcare.

Source: PIB

## NEWS IN SHORT

### NATO STRENGTHENS BALTIC DEFENCE ARCHITECTURE

#### Context

- NATO has restructured its Baltic command format by assigning the German-Netherlands Corps to directly oversee the tactical defense of **Estonia and Latvia**.

#### What is the German-Netherlands Corps?

- The German-Netherlands Corps is a **multinational military headquarters** based in **Muenster** jointly led by Germany and Netherlands.
  - It forms part of **NATO's rapid-response and collective defence structure**.
- The corps reportedly includes **participation from around 16 countries**.
- In wartime conditions, a corps-level command can oversee approximately **40,000–60,000 troops** across multiple divisions.
- Previous System:** All three **Baltic nations (Estonia, Latvia and Lithuania)** and northern Poland operated under the single Multinational Corps **Northeast command headquartered in Szczecin, Poland**.

#### About NATO

- NATO, or the North Atlantic Treaty Organization, is a military alliance of countries.
- Establishment:** It was founded in **1949** with the signing of the North Atlantic Treaty, more popularly known as the **Washington Treaty**.
- Aim:** To ensure the security and defense of its member countries through collective defense.
- Founding Members:** The original members of NATO were **Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States**.
- Collective Defense:** The cornerstone of NATO is **Article 5** of the North Atlantic Treaty, which states that an armed attack against one or more of its members is considered an attack against all members.
- Decision-Making:** Decisions within NATO are made on the basis of consensus among member countries.

- ♦ **The North Atlantic Council**, which includes the ambassadors of all member countries, is the principal political decision-making body.
- **Members:** It has **32 member countries**, **Finland and Sweden** became the 31st and 32nd members respectively.
  - ♦ On signing the Treaty, countries voluntarily commit themselves to participating in the political consultations and military activities of the Organization.

Source: TH

### CONCERNS OVER ANTI-DUMPING DUTIES ON CHEMICALS

#### Context

- Anti-dumping duties on chemicals have become a key conflict between large manufacturers seeking protection from cheap imports and MSME-driven downstream industries facing higher raw material costs.

#### What are Anti-Dumping Duties?

- Anti-dumping duty (ADD) is a **trade remedial measure** imposed by a country to **protect domestic industries** from **unfairly cheap imports**.
- Dumping occurs when a foreign company **exports goods at prices lower** than their **domestic market price**, or the **cost of production**.
- In India, anti-dumping duties are imposed under the **Customs Tariff Act, 1975** after investigation by the **Directorate General of Trade Remedies (DGTR)** under the **Ministry of Commerce and Industry**.
  - ♦ The WTO permits anti-dumping measures under the **Agreement on Anti-Dumping**.

#### Need for Anti-Dumping Duties on Chemicals

- NITI Aayog** noted that India's chemical manufacturing base has weakened due to **rising cheap imports**, particularly from China.
  - ♦ India **imported chemicals worth \$75 billion** compared to exports worth \$44 billion, accounting for a **trade deficit** of around **\$31 billion**.
- Anti-dumping duties aim to **prevent unfair trade practices, support domestic production and reduce excessive import dependence** in strategic sectors.

- They are also used to **strengthen India's manufacturing base** and promote self-reliance in critical chemical value chains.

### Concerns

- **Higher Input Costs:** Anti-dumping duties increase the cost of chemical raw materials for downstream industries.
- **Impact on MSMEs:** MSMEs in textiles, plastics, footwear and auto components face reduced competitiveness due to expensive inputs.
- **Burden on Exports:** Higher production costs make Indian manufactured goods less competitive in global markets.
- **Benefit to Large Manufacturers:** Large domestic producers gain protection, while smaller downstream industries bear higher operational costs.
- **Reduced Industrial Efficiency:** Long-term protection can discourage innovation, efficiency and diversification in the chemical sector.

Source: IE

## SPECIAL INTENSIVE REVISION (SIR)

### Context

- The Supreme Court **upheld the legal validity of the Special Intensive Revision (SIR) of electoral rolls** being carried out by the Election Commission of India (ECI).

### About

- It held that the SIR is **intended to secure the constitutional mandate of free and fair elections** by ensuring that the roll on which the election rests is accurate and reliable.
- SC has clarified that such an exercise **did not amount to a final determination of citizenship under the Citizenship Act, 1955**.
  - ♦ It would be incumbent upon the ECI to refer the matter to the competent authority under the Citizenship Act for adjudication in accordance with law.
  - ♦ If such individuals are ultimately found to be citizens, their names must be restored to the electoral rolls.

### Special Intensive Revision (SIR) of Electoral Rolls

- The Election Commission of India, as per the law is **empowered for preparation and revision of Electoral Rolls**.

- **To maintain the integrity of the electoral roll**, the Commission orders revision of electoral roll before every election or as per requirement.
- **ECI's 2025 order announcing the SIR lays two major reasons for the exercise:**
  - ♦ **A demographic change** due to rapid urbanisation and migration in the last 20 years since the intensive revision in 2003 which has led to repeated, multiple and defective entries on the electoral roll.
  - ♦ The mandate of the Commission under **Article 326** to ensure that only Indian citizens are on the electoral roll.
- **Section 21(3) of the Representation of the People Act, 1950** empowers the ECI to order a **"special revision" of electoral rolls** for any constituency (or part thereof) at any time, overriding routine revision schedules, provided that reasons are recorded.

Source: TH

## INDIA ENTERS WI-FI 7 ERA

### Context

- TP-Link has started local manufacturing of **Wi-Fi 7** devices in India, beginning with enterprise access points, marking India's entry into the Wi-Fi 7 era.

### About Wi-Fi 7

- Wi-Fi 7, officially called **IEEE 802.11be Extremely High Throughput (EHT)**, is the latest generation of wireless networking technology.
- Unlike Wi-Fi 6, which mainly focused on handling large numbers of connected devices, Wi-Fi 7 is designed to deliver **much higher speed, ultra-low latency, reduced congestion, and more reliable connectivity**.

	Wi-Fi 4	Wi-Fi 5	Wi-Fi 6/6E	Wi-Fi 7
Standard	802.11n	802.11ac	802.11ax	802.11be
Max Speed with 1 Spatial Stream	150 Mbps	866.7 Mbps	1.2 Gbps	2.9 Gbps
Max Speed with 2 Spatial Streams	300 Mbps	1.73 Gbps	2.5 Gbps	5.8 Gbps
Max Speed with Max # Spatial Streams	600 Mbps	6.92 Gbps	9.6 Gbps	46.4 Gbps

Speed increases: Wi-Fi 4 to 5 is x 11.5, Wi-Fi 5 to 6/6E is x 1.3, Wi-Fi 6/6E to 7 is x 4.8.

### Key Features

- Maximum theoretical speed up to **46 Gbps**, nearly **4.8 times faster** than Wi-Fi 6.
- Around **4x lower latency**, improving real-time communication and gaming.

- Uses India's licensed **5925–6425 MHz spectrum**, providing cleaner and less congested connectivity.
- Enhanced **Target Wake Time (TWT)** improves power efficiency and battery life.

#### Applications

- Supports **4K/8K streaming, Augmented/Virtual Reality, cloud computing, online gaming, Industrial IoT, smart factories, smart homes.**
- It also supports **high-density public networks** such as hospitals, airports, stations, hotels, offices, and campuses.

Source: TH

## INDIA-US CRITICAL MINERALS FRAMEWORK

#### Context

- India and the United States signed a major framework agreement to strengthen cooperation in the supply, mining, processing, recycling, and management of **critical minerals and rare earth elements (REEs)**.
- The initiative follows concerns over China's 2025 export controls on REEs, which disrupted global technology supply chains.

#### What are Critical Minerals?

- Critical minerals are minerals essential for a country's economic development, national security, and industrial growth.
- Supply disruptions or concentration of mining and processing in a few countries can create major strategic vulnerabilities.
- They are important for technologies such as **solar panels, semiconductors, wind turbines, batteries, medical devices, and electric vehicles.**
- These minerals are central to the green and digital economy and support India's energy transition and self-reliance goals.

#### Rare Earth Elements (REEs)

- REEs are a **group of 17 metallic elements**, including the **15 lanthanides** along with scandium and yttrium.
- They are widely used in **consumer electronics, defence systems, renewable energy technologies**, EVs, communication systems, and nuclear energy.
- India has the world's third-largest rare earth reserves, mainly found in **monazite** minerals.

Source: TH

## COAL GASIFICATION CAN HELP SUBSTITUTE IMPORTS OF UP TO ₹3 LAKH CRORE: UNION COAL MINISTER

#### Context

- Union Coal Minister said that the Coal gasification can help substitute imports of up to ₹3 lakh crore.

#### What is Coal Gasification?

- **Coal gasification** is a **thermochemical process** of **converting coal into synthesis gas (syngas)**, which is a mixture of fuel-rich gases like carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), hydrogen (H<sub>2</sub>), and methane (CH<sub>4</sub>).
- **The syngas can be used for** producing Synthetic Natural Gas (SNG), electricity generation, energy fuel (methanol and ethanol), ammonia for fertilisers, and chemicals.
- **The coal gasification process involves oxidation of coal at higher temperatures** and pressures to produce syngas.
- **There are two main types of gasification:** Surface gasification and Underground coal gasification (UCG).
  - ♦ **In surface coal gasification**, coal is first mined and then converted into gas in above-ground industrial reactors using oxygen, steam and high temperatures.
  - ♦ **Underground coal gasification** converts coal into gas while it is still buried deep underground by injecting air or oxygen into coal seams through wells and extracting the resulting gas to the surface.

#### Package To Boost Coal Gasification

- Recently, the Union Cabinet approved a Rs 37,500 crore scheme to promote surface coal and lignite gasification projects.
- The scheme is expected to support the **national target of gasifying 100 million tonnes of coal by 2030** while reducing dependence on imports of key products such as liquefied natural gas (LNG), urea, ammonia and methanol.
- **India currently holds around 401 billion tonnes** of coal reserves and nearly 47 billion tonnes of lignite reserves.
  - ♦ **Coal contributes more than 55% to the country's energy mix.**
  - ♦ India has the **fourth-largest coal reserves globally.**

Source: TH

