Today's Prelims Topics

Retail Inflation

Context

India's retail inflation declined to a near six-year low of 3.16% in April from 3.34% in March, according to data released by the National Statistics Office (NSO).

What is Meant by Retail Inflation (CPI-Based Inflation)?

- **Retail Inflation** refers to the rate at which the prices of goods and services consumed by households **increase at the retail level** over a period of time.
- It is measured by the Consumer Price Index (CPI)
    - CPI tracks the price changes in a fixed basket of essential items such as food, clothing, housing, transportation, education, etc.
        - When prices **rise**, it indicates **inflation**.
        - When prices **fall**, it indicates **deflation**.
- **Uses of Retail Inflation (CPI-Based Inflation)**
    - **Policy Decision-Making (Monetary Policy):** The Reserve Bank of India (RBI) uses retail inflation data to set **interest rates** and control inflation through its monetary policy.
    - **Inflation Targeting:** The Government and RBI use CPI as the **official inflation target** metric (currently 4% ± 2%) under the **Inflation Targeting Framework**.
    - **Wage and Pension Adjustment:** CPI is used to **adjust salaries, wages, and pensions** to maintain the real income of employees and pensioners against rising prices.
    - **Measuring Cost of Living:** CPI reflects the **cost of living** and purchasing power of consumers, making it useful for understanding economic well-being.
    - **As a Deflator in National Accounts:** CPI is used to convert **nominal values to real values** (e.g., real GDP), helping to isolate the effect of inflation from economic growth data.
    - **Economic Health Indicator:** It serves as a **barometer of the economy**, indicating whether inflation is under control or if corrective steps are needed.

Difference between WPI & CPI

Feature	Wholesale Price Index (WPI)	Consumer Price Index (CPI)
Definition	Measures average changes in prices at the wholesale level for goods and services.	Measures average changes in prices at the retail level for a basket of consumer goods and services.
Released By	Office of Economic Advisor, Ministry of Commerce & Industry.	National Statistical Office (NSO), Ministry of Statistics and Programme Implementation.
Coverage	Primarily covers goods only, focusing on manufacturing inputs and intermediate goods.	Covers both goods and services, including food, housing, transportation, and medical care.
Base Year	2011-12	2012

Source: The Hindu: Retail Inflation falls to 3.16, lowest level in 69 months

World Bank Land Conference 2025

Context

The 2025 World Bank Land Conference was held in Washington, DC.

About the Conference

- It serves as a platform to **present research with policy implications**, **address technical challenges**, and **share best practices** in the field.
- The conference also **promotes cross-sector collaboration** and has served as a **starting point** for several key initiatives, investments, and research efforts — including the **Voluntary Guidelines on the Responsible Governance of Tenure (VGGTs), the Land Governance Assessment Framework, and the Stand for Her Land Campaign.**
- In 2025, the conference theme is all about **moving from awareness to action** to secure land tenure.

India's Stance at the Conference

- India showcased its commitment to inclusive, technology-led rural governance by highlighting two of its flagship initiatives — the **SVAMITVA Scheme and the Gram Manchitra platform** — as global models of innovation and scalability in land management.

SVAMITVA (Survey of Villages and Mapping with Improvised Technology in Village Areas) Scheme

- Provides **property cards** to rural households using **drone-based land surveys.**
- Empowers rural citizens with land ownership, improves access to credit, and helps in better dispute resolution.

Gram Manchitra Platform

- A **geospatial planning tool** for **Gram Panchayats**.
- Helps **integrate spatial and non-spatial data** to make effective and **climate-resilient development plans**.
- Promotes **evidence-based governance** at the village level.

Source: [PIB: World Bank Land Conference 2025 concludes]

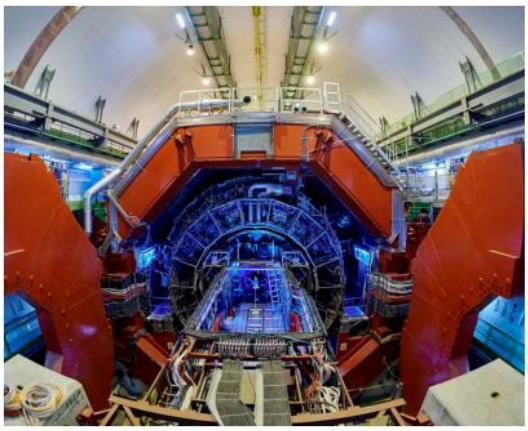
CERN Large Hadron Collider (LHC)

Context

In a new study, scientists working with Large Hadron Collider (LHC) in Europe have reported turning lead atoms into gold atoms for a fraction of a second.

About CERN LHC

- The LHC (Large Hadron Collider) is the **largest and most powerful particle accelerator** ever built.
- It is built in the form of a **27-kilometre-long circular tunnel**, equipped with **superconducting magnets** and various **accelerating structures** to increase the energy of particles.
- Inside the LHC, **two beams of high-energy particles** (such as protons) travel in opposite directions at speeds **close to the speed of light**.
- These beams are eventually made to **collide**, enabling scientists to study fundamental particles and forces by analyzing the results of these collisions.



The ALICE detector, which researchers used to track near-miss collisions between lead nuclei in the LHC. CERN

What is a Particle Accelerator?

- A **particle accelerator** is a scientific device that uses **electromagnetic fields** to propel **charged particles** (like protons or electrons) to **very high speeds** and guide them along a specific path.
    - It is used to **study the basic building blocks of matter** by smashing particles together and analyzing the resulting interactions.
    - Particle accelerators are crucial in fields like **nuclear physics**, **medical therapy**, and **materials science**.

Source: The Hindu: Gold, as usual at great cost

Jute Crop

Context

The Jute Corporation of India (JCI) has **increased the MSP** (minimum selling price) of jute to discourage distress selling of crops by farmers for the crop year 2025-26.

About Jute Crop

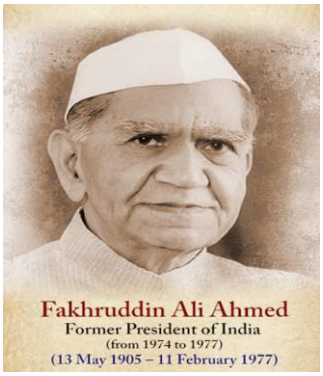
- It is popularly known as the **"Golden Fibre"**
- It is a "**cash crop".**
- **Soil Requirements**: Alluvial or loamy soils.
- **Crop Type and Climate**:
    - **Type**: Kharif crop (sown in the monsoon season)
    - **Temperature**: Ideal range is **25–35°C**
    - **Rainfall**: Requires **150–250 cm** of rainfall
    - **Humidity**: Thrives in **80–90% relative humidity**
- **India's Global Standing**: India leading jute goods producing country, contributes 70% to world jute production.
- **Major Producing States:**
    - **West Bengal**: Leads with about **75%** of India's jute output
    - Other key states: **Bihar, Assam, Odisha, and Meghalaya**

Source: The Hindu: JCI increases MSP of Jute to stop distress selling of crop

News in Short

Fakhruddin Ali Ahmed

News? Recently the 121st birth anniversary of Fakhruddin Ali Ahmed was celebrated in Rashtrapati Bhavan.



About Fakhruddin Ali Ahmed

- **Born:** May 13, 1905
- **Tenure** as President: August 24, 1974 – February 11, 1977 (5th President of independent India)
- **Died:** February 11, 1977, **while in office.**
- **Significance: Second Muslim** to become the **President of India**, after Dr. Zakir Husain.
    - **Proclaimed Emergency** in India on June 25, 1975, under Article 352 of the Constitution.

Related Facts

- **Emergency Provisions in India:**
    - **Article 352**: Proclamation of Emergency due to war, external aggression, or armed rebellion.
    - **Article 356**: State Emergency (President's Rule).
    - **Article 360:** Financial Emergency.
- **Presidents Who Died in Office:**
    - Dr. Zakir Husain- 3rd President (1969).
    - Fakhruddin Ali Ahmed (1977).

Mearim River And Tidal Bore

News? A pororoca tidal bore wave witnessed on Mearim River.

What is a Tidal Bore?

- A **tidal bore** is a rare natural phenomenon in which a strong **tide pushes up a river or narrow bay**, creating a **sudden surge of water** that travels **against the direction of the river's current**.
- It often appears as a **wall or wave of water** moving upstream.

Facts

- The Mearim River is **located in northern Brazil**, in the state of **Maranhão.**

Indian-origin Anita Anand is new Canada foreign minister

- Appointed by Prime Minister **Mark Carney**.
- Member of Parliament (MP) for **Oakville East** (2025–present); previously MP for **Oakville** (2019–2025).
- **First Hindu** to serve in Canada's federal Cabinet (2019).
- **Past Cabinet Roles:**
    - **Minister of Public Services and Procurement** (oversaw Canada's COVID-19 vaccine procurement).
    - **Minister of National Defence** (notably managed military sexual misconduct crisis).
    - **President of the Treasury Board**
    - **Minister of Transport and Internal Trade**

Places in News

Adampur Airbase

News? PM Modi visited Adampur airbase and hailed the success of Operation Sindoor.

- **Location**: Punjab.
- **2nd largest airbase** of the Indian Air Force.
- Serves both **military and limited civilian (domestic airport) operations.**

Editorial Summary

India's Dairy paradox

Context

Reports have suggested that retaliatory tariffs against American dairy may create an opening for India.

Opportunities for India

- **Retaliatory Tariffs on U.S. Dairy:** Tariffs on U.S. dairy exports by countries like China create a temporary vacuum in global markets that India could potentially explore.
- **Large Domestic Production Base:** India is the **world's largest milk producer** (240 million tonnes/year), giving it a substantial raw material base.
- **Existing Presence in Regional Markets:** India already exports to nearby countries like **Bangladesh, Nepal, Bhutan, UAE, Saudi Arabia**, etc., which could be further consolidated.
- **Proximity Advantage:** Cultural and geographic proximity gives India a natural edge in certain Asian and Gulf markets.

Challenges Facing Indian Dairy Exports

- **Product Composition Mismatch:** India focuses on **butter and milk fats**, while global markets demand **cheese, whey proteins, and functional dairy products** — areas where India lacks capacity.
- **Volatile and Inconsistent Export Trends:** Products like skimmed milk powder (SMP) show **volatile export patterns**, indicating lack of sustained competitiveness.
- **High Cost of Production:** According to **IFCN**, India's milk production cost ($50–60 per 100 kg SCM) is **not globally competitive** anymore.
- **Weak Infrastructure:** Poor **processing capacity**, limited **cold chain**, and high **logistics costs** weaken India's global competitiveness.
- **Regulatory and Quality Barriers:** India fails to meet **international standards** on residues and feed quality.
    - **E.g.,** the **EU still hasn't approved India's Residue Monitoring Plan (RMP)**.
- **Lack of Product Diversification and Innovation:** India has not invested sufficiently in **value-added dairy segments** like **functional dairy, cheese, and whey-based products**.
- **Limited Global Market Access:** Unlike the **EU, New Zealand, Australia**, India lacks strong **bilateral trade agreements** with major dairy importers.

Way Forward

- **Invest in Value-Added Product Lines:** Focus on developing **cheese varieties, whey proteins, and functional dairy ingredients** that align with global demand.
- **Upgrade Infrastructure:** Strengthen **milk processing capacity**, cold chains, and storage facilities to ensure cost-effective and high-quality exports.
- **Reduce Cost of Production:** Improve **dairy farm productivity** through better **breeding, feed management, and technology adoption** to lower unit costs.
- **Align with Global Standards:** Strengthen **food safety mechanisms**, get **EU RMP approval**, and comply with **international residue and contaminant norms**.
- **Foster Export-Oriented R&D:** Encourage research focused on **marketable dairy innovations**, packaging technology, and **product shelf-life enhancement**.
- **Negotiate Market Access:** Enter into **bilateral and multilateral trade agreements** with key dairy importers and **reduce non-tariff barriers** through diplomacy.

- **Private Sector Participation & Incentives:** Encourage **private investments** in dairy processing and incentivize **startups** and **MSMEs** focused on dairy exports.

Source: [Economic Times: What Bharat, the world's top milk producer, must do as Trump tariffs open a window]

Educated Yet Unemployed: A National Paradox

Context

India's educational system fell short about the shape-shifting marketplace — namely, the employability of our graduates as a workforce.

Why India's Education System Fell Short in Employability

- **Mismatch between Education and Market Needs:** Degrees lack practical, job-oriented skills.
  - Breadth and depth are not integrated — technical knowledge is shallow and lacks adaptability in a dynamic economy.
- **Low Graduate Employability:** Employability rate stagnates at ~42–44%.
  - Knowledge-intensive employment remains abysmally low (~11.72%).
- **Lip Service to Reforms:** NEP 2020 proposed flexible curricula, vocational training, and multiple exit-entry points, but implementation has been poor or tokenistic.
  - Absence of structured methodology for executing reforms has left policies ineffective.
- **Outdated Regulatory Institutions:** The **University Grants Commission (UGC)** remains a tool of control with no credible evidence of improved learning outcomes or employability due to its regulations.
- **Lack of Industry Linkages:** The NEP drafting committee had no representation from the industry, reflecting disconnect from employment realities.
  - Course content is often outdated and lacks industry relevance.
- **Superficial Start-up Ecosystem:** Indian start-ups often focus on low-tech sectors (e.g., food delivery), lacking core technological or scientific innovation.
  - Poor investment in indigenous research hampers innovation-led job creation.

What Needs to Be Done (Way Forward)

- **Strengthen Industry-Academia Linkages:** Create structured partnerships between universities and businesses to co-develop courses and internships.
  - Involve industry experts in curriculum design and university governance.
- **Shift Focus from Degrees to Skills:** Embed *outcome-based learning* with real-time skill benchmarks.
  - Integrate vocational training, digital skills, and soft skills from middle school onwards.
- **Reform Regulatory Frameworks:** Restructure or dissolve outdated bodies like the UGC.
  - Create independent **accreditation** and **assessment agencies** focused on employability outcomes.
- **Invest in Research & Innovation Ecosystems:** Fund indigenous research in core tech (AI, semiconductors, biotech).
  - Promote deep-tech and science-led start-ups instead of app-based convenience models.
- **Improve Teacher Training and Accountability:** Regular skill upgradation for faculty.
  - Link funding to measurable academic and employability outcomes.
- **Ensure Transparency and Evaluation of Public Projects:** Audit big-ticket projects like New Millennium Indian Technology Leadership Initiative (NMITLI), IMPacting Research INnovation and Technology (IMPRINT), etc. for impact.
  - Publicly share results on innovations, patents, start-ups, and job creation.
- **Reframe Education as Lifelong Learning:** Promote continuous learning ecosystems through open universities, Massive Open Online Courses (MOOCs), and digital upskilling platforms like SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds).

NMITLI: New Millennium Indian Technology Leadership Initiative

- **Launched by**: Council of Scientific & Industrial Research (CSIR) in 2000
- **Objective**: To position India as a global leader in select technology domains by fostering high-risk, high-reward research through public-private partnerships.

IMPRINT: IMPacting Research INnovation and Technology

- **Launched by**: Ministry of Human Resource Development (now Ministry of Education) in 2015
- **Objective**: To address major engineering and technology challenges in India by translating research into viable technologies

Source: The Hindu: In India, education without employment