



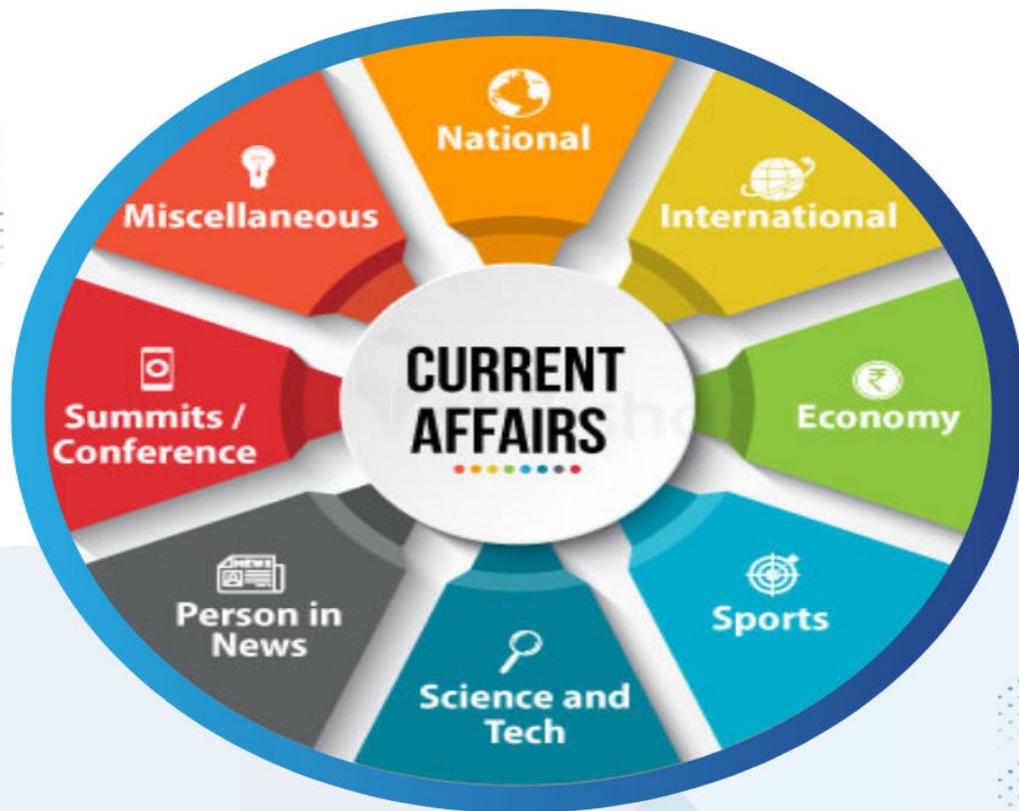
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VIDHVATH IAS KAS ACADEMY
&
STUDY CENTRE

DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

DATE: 15/10/2025 (WEDNESDAY)



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1. Cockscomb (Mawal) Cultivation in Kashmir: Cultural, Economic and Agricultural Significance

1. Introduction

Cockscomb flowers, locally known as *Mawal*, are being harvested in the Srinagar region of Jammu & Kashmir. This traditional crop holds both **culinary and cultural significance** in Kashmiri society. Mawal, derived from the *Celosia argentea* plant, is primarily used as a **natural food colorant and spice**, imparting a vibrant red hue to Kashmiri dishes such as *Rogan Josh* and *Yakhni*.

2. Cultural and Economic Importance

- Mawal is deeply interwoven into **Kashmiri culinary heritage**, especially in the *Wazwan* (multi-course traditional meal).
- Farmers cultivate it both for **domestic use and local market demand**, with growing potential for **export as a natural dye** and organic culinary ingredient.
- The flower's petals are dried and powdered, generating income for **small and marginal farmers** in the region.
- Cultivation supports **rural livelihood diversification**, particularly for women and self-help groups involved in post-harvest processing.



3. Agricultural and Environmental Aspects

- Grown mainly during **late summer to early autumn**, Mawal requires **well-drained soil** and **moderate climatic conditions**, ideally suited to Kashmir's temperate environment.
- It contributes to **agro-biodiversity** and **sustainable cropping patterns**, helping farmers move away from monocropping systems.
- The plant also improves **pollinator activity** and maintains **soil health** due to its short growth cycle and organic farming adaptability.

4. Constitutional and Legal Provisions Related to Agriculture and Traditional Crops

- **Article 48A** of the Constitution directs the State to protect and improve the environment and safeguard natural resources, indirectly encouraging sustainable traditional crops like Mawal.
- **Article 51A(g)** obligates citizens to protect and preserve the natural environment.
- **Protection of Plant Varieties and Farmers' Rights (PPVFR) Act, 2001** safeguards traditional crop varieties and farmers' rights, including indigenous ones like Mawal.
- Under the **National Mission on Sustainable Agriculture (NMSA)** and **Paramparagat Krishi Vikas Yojana (PKVY)**, traditional crops with low ecological footprint receive government support.

5. Broader Significance and Challenges

- Mawal cultivation reflects **India's rich ethnobotanical diversity** and **local knowledge systems**.
- However, farmers face challenges such as **lack of market linkages**, **absence of processing units**, and **limited awareness** of the crop's commercial potential.
- Promotion through **Geographical Indication (GI) tagging**, **agro-tourism**, and **organic branding** can enhance its value chain and export scope.



6. Conclusion

The revival of Mawal cultivation symbolizes a **synthesis of tradition, sustainability, and economic empowerment** in Kashmir. It aligns with India's goals of **agro-diversity conservation, local livelihoods, and eco-friendly agriculture**. Supporting such crops is essential to strengthen **rural resilience, cultural heritage, and sustainable food systems**.

7. UPSC Relevance

- **GS Paper I:** Indian culture and heritage – traditional practices and livelihoods.
- **GS Paper II:** Government policies and initiatives for rural development and sustainable agriculture.
- **GS Paper III:** Biodiversity, environment, and sustainable agricultural practices.
- **GS Paper IV (Ethics):** Values of sustainability, traditional wisdom, and environmental stewardship.
- **Prelims Focus:** Location-based question (Srinagar), traditional crops, and PPVFR Act provisions.

Key Terms:

- **Mawal (Cockscomb/Celosia argentea):** A traditional Kashmiri flower used as a natural coloring and culinary ingredient.
- **Agro-biodiversity:** Variety and variability of plants used in agriculture for food and livelihood.
- **Sustainable agriculture:** Farming that meets current food needs without compromising future generations' capacity to do so.

2. Delhi Air Quality Deteriorates: GRAP Stage-I Enforced in NCR

1. Background and Current Situation

Delhi's air quality has once again deteriorated to the **'poor' category** (AQI 211) after more than three months, prompting the **Commission for Air Quality Management (CAQM)** to enforce **Stage-I of the Graded Response Action Plan (GRAP)** across the National Capital Region (NCR). The AQI rose from 189 ('moderate') to 211 ('poor') as per the **Central Pollution Control Board (CPCB)** data.

2. What is GRAP (Graded Response Action Plan)?

- **Definition:** GRAP is a **set of emergency measures** designed to curb air pollution depending on the **severity of air quality** in the Delhi-NCR region.
- **Origin:** Implemented in 2017 following the directions of the **Supreme Court** in *M.C. Mehta vs Union of India* (2016), under the supervision of the **Environment Pollution (Prevention and Control) Authority (EPCA)**, now replaced by CAQM.
- **Legal Backing:** Enforced under the **Air (Prevention and Control of Pollution) Act, 1981**, and guided by **Article 48A** (State's duty to protect environment) and **Article 51A(g)** (citizens' duty to safeguard natural environment).



3. Stage-I Measures of GRAP ('Poor' AQI: 201–300)

- **Mandatory mechanised road sweeping and water sprinkling** to reduce dust.
- **Strict dust control** at construction sites with barriers and waste management.
- **Regular lifting of solid waste and ban on open burning of garbage.**



- **Encouragement of public transport** and reduction of vehicular congestion.
- **Monitoring of industrial emissions and compliance with prescribed standards.**

4. Factors Contributing to Deteriorating Air Quality

- **Meteorological:** Drop in temperature, calm wind conditions, and temperature inversion leading to pollutant accumulation.
- **Anthropogenic:** Vehicular emissions, **construction dust, industrial pollution, and stubble burning** in Punjab and Haryana.
- **Seasonal Spike:** Every year during **post-monsoon and winter months**, air pollution worsens due to **biomass burning and low dispersion rates.**

5. Institutional Mechanisms and Policy Framework

- **Commission for Air Quality Management (CAQM):** Established under the **CAQM Act, 2021**, as a statutory body to coordinate efforts across NCR states.
- **National Clean Air Programme (NCAP), 2019:** Targets a **20–30% reduction in PM2.5 and PM10 levels** by 2024.
- **CPCB and State Pollution Control Boards (SPCBs):** Oversee AQI monitoring and enforcement actions.
- **Judicial Oversight:** The Supreme Court and National Green Tribunal (NGT) have been key in ensuring accountability and enforcement of anti-pollution measures.

6. Broader Environmental and Health Implications

- Prolonged exposure to **poor air quality** leads to **respiratory and cardiovascular diseases**, especially in vulnerable groups like children and the elderly.
- Air pollution reduces **urban productivity**, increases **healthcare costs**, and contributes to **climate change** due to the presence of short-lived climate pollutants like black carbon.
- Tackling Delhi's air crisis requires a **multi-sectoral approach**, including **green urban planning, clean energy transition, and public awareness.**

7. Conclusion

Delhi's shift to 'poor' air quality underscores the **recurring nature of the NCR pollution crisis** and the need for **long-term, structural solutions** beyond short-term emergency responses like GRAP.

Strengthening **inter-state coordination, enforcing accountability, and investing in clean infrastructure** are vital to achieving sustainable air quality improvements.

8. UPSC Relevance

- **GS Paper I:** Urbanization and associated environmental issues.
- **GS Paper II:** Government policies and institutional mechanisms for environmental management.
- **GS Paper III:** Conservation, environmental pollution, and disaster management.
- **Prelims Focus:** AQI categories, GRAP stages, CAQM functions, NCAP objectives, and constitutional provisions for environmental protection.
- **GS Paper IV (Ethics):** Environmental ethics, intergenerational equity, and public responsibility.



Key Terms:

- **AQI (Air Quality Index):** A numerical scale (0–500) indicating air pollution levels—higher AQI means higher pollution.
- **GRAP:** A graded, time-bound response framework to control air pollution in Delhi-NCR based on AQI categories.
- **CAQM:** Statutory body coordinating pollution control efforts across Delhi-NCR states.

3. Odisha to Halt Subsidised Foodgrains for Beneficiaries Without Verified e-KYC

1. Background and Policy Decision

- The **Odisha government** has announced that from next month, **subsidised rice distribution** under the **National Food Security Act (NFSA), 2013** and the **State Food Security Act (SFSA)** will be **stopped for beneficiaries who have not completed e-KYC verification**. This move aims to ensure that **genuine beneficiaries** continue to receive entitlements while preventing duplication and leakages in the **Public Distribution System (PDS)**. Around **15.66 lakh beneficiaries** remain unverified, while **95% of beneficiaries have completed** their e-KYC verification.

2. What is e-KYC (Electronic Know Your Customer)?

- **Definition:** e-KYC is an electronic process of verifying the **identity and eligibility** of beneficiaries through linkage with **Aadhaar or other official documents**, ensuring that welfare benefits reach the intended recipients.
- It is a **mandatory digital authentication process** under government welfare schemes to eliminate **ghost and duplicate beneficiaries**.
- e-KYC verification ensures **transparency, accountability, and efficiency** in the distribution of food grains and subsidies.



3. Constitutional and Legal Framework

- **Article 21 (Right to Life):** Includes the **Right to Food** as part of the right to live with dignity, as upheld in *PUCL vs. Union of India (2001)*.
- **Article 47 (Directive Principle):** Directs the State to raise nutrition levels and standard of living.
- **National Food Security Act (NFSA), 2013:** Provides legal entitlement to **subsidised foodgrains** (5 kg per person per month) to about **75% of rural** and **50% of urban populations** through the Targeted Public Distribution System (TPDS).
- **Aadhaar Act, 2016:** Enables Aadhaar-based authentication for welfare delivery, ensuring leak-proof benefit transfer.
- **Supreme Court in Justice K.S. Puttaswamy (Aadhaar) Case, 2018:** Upheld the **use of Aadhaar for welfare schemes** but stressed on **data privacy and voluntary consent**.

4. Governance and Administrative Challenges



- While the e-KYC process enhances system integrity, it has **excluded several genuine beneficiaries**, particularly those with **technical or connectivity issues**, elderly populations, and marginalized groups.
- **Right to Food campaigners** argue that the government must **proactively identify and assist unverified beneficiaries**, rather than shifting the burden entirely on them.
- The government has allowed **case-by-case review** of exceptions, where beneficiaries can submit **written representations** citing specific circumstances for non-verification.
- Digital illiteracy, biometric errors, and lack of awareness remain significant barriers in implementing e-KYC effectively.

5. Broader Implications and Policy Significance

- The decision reflects the **growing digitalization of welfare governance**, emphasizing **data-driven beneficiary management**.
- However, it also highlights the **tension between technological efficiency and social inclusion**.
- Ensuring **last-mile delivery** without exclusion is central to achieving the **Sustainable Development Goal (SDG) 2 – Zero Hunger**.
- There is a need for **offline verification alternatives** and **grievance redressal mechanisms** to ensure that no genuine beneficiary is denied food security due to administrative or technical lapses.

6. Conclusion

Odisha's enforcement of e-KYC for food subsidy distribution underscores the government's effort to build a **clean, accountable welfare system**. However, **balancing efficiency with empathy** remains crucial. A robust policy should ensure that **technological reforms** in welfare delivery **do not compromise human rights**, especially the **right to food** of vulnerable citizens.

7. UPSC Relevance

- **GS Paper II:** Governance, welfare schemes for vulnerable sections, and issues in implementation.
- **GS Paper III:** Inclusive growth and direct benefit transfer (DBT) mechanisms.
- **GS Paper IV (Ethics):** Balancing administrative efficiency with compassion and public service ethics.
- **Prelims Focus:** NFSA 2013 provisions, Aadhaar linkage in welfare schemes, e-KYC process, and key constitutional articles related to welfare.

Key Terms:

- **NFSA (2013):** A legal framework guaranteeing subsidised foodgrains to eligible households.
- **e-KYC:** Electronic verification of beneficiaries using Aadhaar or digital data to ensure targeted delivery.
- **Right to Food:** Judicially recognized component of the right to life under Article 21.
- **Exclusion Error:** Situation where eligible beneficiaries are left out due to technical or administrative reasons.



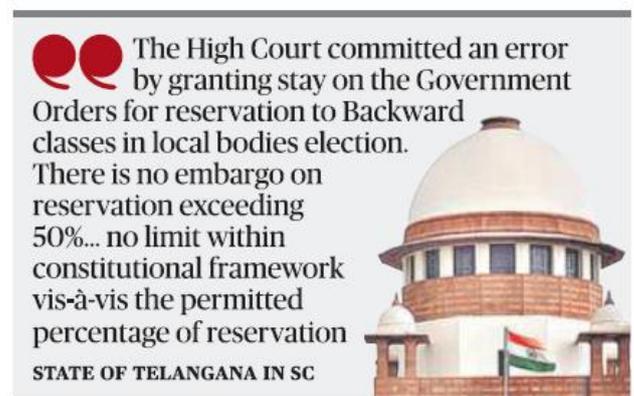
4. Telangana's 42% OBC Quota in Local Bodies: A Constitutional and Legal Debate

1. Background and Current Development

- The **Telangana government** has approached the **Supreme Court of India** challenging the **High Court's stay** on its decision to enhance **Other Backward Classes (OBC) reservation to 42%** in **urban and rural local bodies**. This increase was enacted through the **Telangana Backward Classes (Reservation of Seats in Rural and Urban Local Bodies) Bill, 2025**, which was **unanimously passed** by both Houses of the State Legislature. The move comes ahead of local body elections scheduled for **October 23 and 27**. The enhanced OBC quota, combined with **15% for Scheduled Castes (SCs)** and **10% for Scheduled Tribes (STs)**, raises the **total reservation to 67%**, crossing the **50% ceiling** prescribed by the Supreme Court.

2. Constitutional and Legal Framework on Reservation

- **Articles 15(4) and 16(4)**: Empower the State to make special provisions for the advancement of socially and educationally backward classes or for SCs and STs in public employment and education.
- **Article 243D and 243T**: Provide for reservation of seats in **Panchayats and Municipalities** for SCs, STs, and **Backward Classes** in proportion to their population.
- **Article 46 (Directive Principle)**: Directs the State to promote the educational and economic interests of weaker sections, including OBCs.
- **Supreme Court Judgments**:
 - *Indra Sawhney v. Union of India (1992)* (Mandal Commission case) — capped total reservation at **50%**, calling it a “reasonable limit” unless exceptional circumstances exist.
 - *K. Krishna Murthy v. Union of India (2010)* — upheld reservation for OBCs in **local bodies**, but required **empirical data** to justify it.
 - *Jaishri Laxmanrao Patil v. State of Maharashtra (2021)* — reaffirmed the **50% ceiling** and struck down the **Maratha reservation law**.



3. Telangana Government's Stand

- The State argues that the **50% ceiling is not an absolute constitutional bar** but a **judicially evolved principle** intended as a general guideline.
- It contends that “**will of the people**” and **socio-economic realities** justify the increase, as OBCs form a **substantial proportion of the population** in Telangana.
- The government cites **exceptional circumstances** warranting deviation from the ceiling, as allowed under *Indra Sawhney (1992)*.
- It maintains that **local self-government representation** is constitutionally distinct from **public employment or education quotas**, and therefore, the 50% limit may not rigidly apply.

4. Judicial and Policy Controversy



- The High Court stayed the government orders, observing that the **reservation exceeded the judicially prescribed ceiling** and that **empirical data** justifying the 42% OBC reservation was insufficient.
- Critics argue that breaching the 50% cap could lead to **reverse discrimination** and **violate the equality principle under Article 14**.
- Supporters claim it ensures **proportional political representation** for marginalized communities, aligning with **grassroots democracy and inclusivity**.
- The Supreme Court's verdict will likely redefine the **scope of reservation in local governance**, especially post the **2021 Maratha quota judgment**.

5. Broader Constitutional and Social Implications

- The issue brings into focus the **balance between equality and social justice** — two core tenets of the Constitution.
- It tests the **federal dimension of reservation policy**, as States assert their power to address local socio-political dynamics.
- The case could influence **future debates on revising the 50% cap**, given the **diversity and backwardness levels** varying across States.
- It also highlights the **complex intersection of law, politics, and social equity** in India's affirmative action framework.

6. Conclusion

The Telangana government's decision to raise OBC quota to 42% represents a significant assertion of **state autonomy and social justice objectives**. However, it simultaneously challenges the **judicially established equilibrium between affirmative action and equality**. The Supreme Court's forthcoming decision will not only determine the validity of Telangana's move but could also set a **precedent for re-evaluating the 50% ceiling** in the context of evolving **social realities and democratic representation**.

7. UPSC Relevance

- **GS Paper II:** Issues relating to the development and management of social sector services, constitutional provisions for reservation, and judicial review.
- **GS Paper I:** Social empowerment and representation of marginalized communities.
- **GS Paper IV (Ethics):** Balancing equity, fairness, and justice in policy decisions.
- **Prelims Focus:** Articles 15(4), 16(4), 243D, 243T; key judgments – *Indra Sawhney (1992)*, *Krishna Murthy (2010)*, *Jaishri Patil (2021)*.

Key Terms:

- **OBC (Other Backward Classes):** Socially and educationally backward groups recognized for affirmative action under Articles 15(4) and 16(4).
- **Reservation Ceiling:** A judicially imposed 50% cap on total reservations, intended to preserve equality of opportunity.
- **Empirical Data Requirement:** Mandated by the Supreme Court to justify the extent of reservation for backward classes.



5. India's Sugar Export Shortfall in 2024–25: Causes, Policy Gaps, and Future Outlook

1. Background and Context

- In January 2024, the Government of India permitted sugar exports of 1 million tonnes for the 2024–25 season (October–September). However, actual exports fell well short of this quota, as sugar mills prioritized domestic sales over exports due to price differentials. India, the world's second-largest sugar producer after Brazil, saw this decline despite robust production, signaling deeper issues in pricing, policy timing, and global competitiveness.

2. Key Reasons Behind the Export Shortfall

- **Price Imbalance:** Initially, global white sugar prices exceeded \$500/tonne (₹44,360), but by mid-year, they fell to \$450–475/tonne (₹36,600 after freight). Meanwhile, domestic ex-mill prices remained higher at ₹39,000–39,600/tonne, making local sales more profitable.
- **Export Quota Timing:** The late announcement and lack of consistent export policy discouraged millers from forward contracts in global markets.
- **Freight and Logistical Costs:** Rising transport costs further narrowed export margins, discouraging shipments.
- **Ethanol Diversion:** Mills increasingly diverted cane juice and B-heavy molasses for ethanol production, reducing sugar availability for exports.



3. Economic and Industrial Impact

- **Listed Sugar Companies:** Firms like EID Parry, Bajaj Hindusthan, Balrampur Chini, DCM Shriram, and Triveni Engineering underperformed in 2024–25 compared to 2023–24, when exports were banned, and domestic prices were stable.
- **Earnings Drivers:** Future profitability depends on ethanol pricing, cane recovery rates, and domestic price stability, as per Crisil Ratings.
- **Ethanol Policy Linkage:** An increase in ethanol procurement prices could improve margins and help mills balance between sugar and ethanol output under India's ethanol blending program (target: 20% by 2025).

4. Production Outlook for 2025–26

- According to the Indian Sugar Mills Association (ISMA), sugar production in 2025–26 is projected to reach 34.9 million tonnes, an 18% increase from the previous year.
- Crisil Ratings estimates a 15% rise, citing above-average monsoon and higher cane yields in major producing states like Maharashtra and Karnataka.
- The expected output surge could ease domestic supplies, enhance ethanol diversion, and revive export potential if supported by timely policy action.

5. Industry Demands and Policy Implications

- **Timely Export Policy:** Millers demand the government announce export policy by December, allowing them to plan contracts, reduce inventory costs, and leverage global market windows.



- **Export Potential:** With adequate domestic buffer stocks, India can **safely export up to 2 million tonnes** without market disruption.
- **Strategic Export Markets:** India exports white sugar primarily to **Somalia, Afghanistan, Sri Lanka, UAE, Libya, and Tanzania**, where it is valued for **competitive pricing and reliability**.
- **Policy Integration:** A **predictable export mechanism**, synchronized with the **ethanol blending policy and domestic stock management**, is crucial for industry stability.

6. Constitutional and Legal Provisions Related to Agricultural Trade and Policy

- **Article 301:** Guarantees **freedom of trade, commerce, and intercourse** across India.
- **Article 38 and 39(b):** Direct the State to ensure the distribution of material resources to serve the **common good**, including farmers' economic interests.
- **Essential Commodities Act, 1955:** Allows the government to **regulate sugar stock limits, exports, and prices** to ensure market stability.
- **Sugarcane (Control) Order, 1966:** Empowers the central government to **fix fair and remunerative prices (FRP)** for cane procurement, linking farmer welfare with market equilibrium.

7. Conclusion

- India's sugar export shortfall in 2024–25 highlights the challenges of balancing **domestic price stability, global competitiveness, and policy predictability**. With expected higher output in 2025–26, a **timely and transparent export framework** will be essential to convert surplus production into an **economic advantage**. Coordinated action between the **Centre, State governments, and industry** can help India emerge as a **reliable, value-driven global sugar supplier** while supporting **farm income and ethanol-linked sustainability goals**.

8. UPSC Relevance

- **GS Paper II:** Government policies impacting agriculture and trade; regulatory role of institutions.
- **GS Paper III:** Issues of agricultural pricing, food processing, ethanol blending policy, and export management.
- **GS Paper IV (Ethics):** Ethical governance in balancing farmer welfare with market efficiency.
- **Prelims Focus:** ISMA, FRP, Essential Commodities Act, Ethanol Blending Program (EBP-20), and global sugar trade dynamics.

Key Terms:

- **Ex-mill Price:** Price at which sugar is sold directly from the mill, excluding transport and taxes.
- **Ethanol Blending Program (EBP):** Initiative to mix ethanol with petrol to reduce import dependence and utilize excess sugarcane.
- **Quota System:** Government-imposed export limit to ensure domestic availability and price control.
- **Fair and Remunerative Price (FRP):** Minimum price fixed by the Centre that sugar mills must pay to farmers for sugarcane.



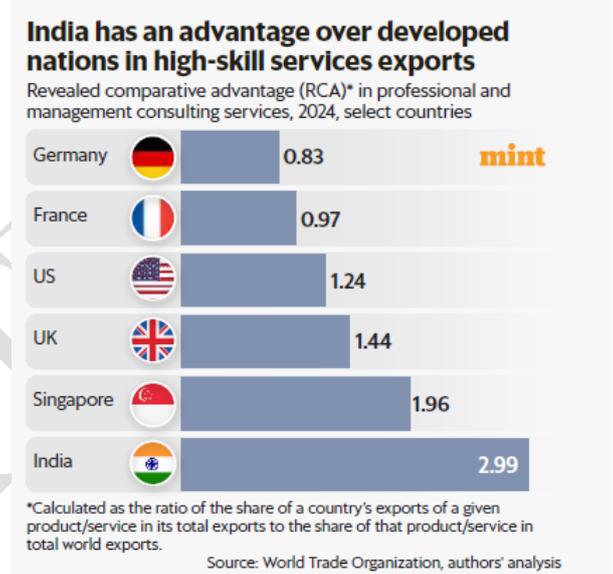
6. Can Indian Firms Rival the Big Four? — Building Global-Scale Professional Service Giants

1. Background and Context

- The Government of India is exploring ways to **develop homegrown, multi-disciplinary professional service firms** that can compete with the **Big Four — EY, KPMG, Deloitte, and PwC** — in sectors like **consulting, audit, advisory, compliance, and ESG services**. Despite India's status as a **global back-office and knowledge powerhouse**, domestic firms remain **small, fragmented, and regulated**, lacking the scale, global reach, and integrated service delivery models that define international giants. The aim is to reduce dependency on foreign networks and create **Indian champions in professional services** capable of competing globally.

2. The Structural Weakness of Indian Firms

- According to the **Institute of Chartered Accountants of India (ICAI)**, of around **95,000 accounting firms**, nearly **70,000 are sole proprietorships** or small setups. Only **400 firms have more than 10 partners**, showcasing India's highly fragmented market.
- Regulatory restrictions** prevent formation of **multi-disciplinary partnerships (MDPs)**, unlike the integrated structures of global firms that offer legal, tax, and advisory services under one umbrella.
- Advertising and branding restrictions** under the Chartered Accountants Act limit visibility and client acquisition, preventing domestic firms from scaling globally.
- Multiple regulators** (ICAI, ICSI, Bar Council, SEBI, RBI) operate in silos, discouraging cross-functional collaboration across professions like law, finance, and auditing.



3. Dominance of the Big Four and Global Comparison

- The **Big Four's combined global revenues** grew from **\$94 billion in 2009 to \$212 billion in 2024**, capturing nearly **90% of the \$240 billion global consulting and auditing market**.
- Their strength lies in **global networks, standardized methodologies, brand credibility, and technology platforms**, enabling seamless international service delivery.
- In India, the local arms of these firms have **collective revenues exceeding \$5.4 billion (FY25)**, auditing over **two-thirds of Nifty 500 companies**, and maintaining strong client loyalty due to perceived quality and trust.
- Domestic players, in contrast, remain **regional and compliance-focused**, unable to provide the **strategic, cross-border, or ESG-driven advisory services** demanded by multinational clients.

4. India's Untapped Potential in High-Skill Services

- India's **professional, scientific, and technical services** sector has **tripled its Gross Value Added (GVA)** in the last decade — from **₹30,461 crore (FY14) to ₹83,524 crore (FY24)** — contributing significantly to the services-led growth model.



- The country's **comparative advantage (RCA 2.99)** in professional and management consulting surpasses major economies like the US (1.24), UK (1.44), and Singapore (1.96), according to the **World Trade Organization (WTO)**.
- India hosts over **1,800 Global Capability Centres (GCCs)** for foreign multinationals, expected to grow to **2,400 by 2030**, turning the country into a **\$110 billion high-skill services hub**.
- However, much of this value is **captured by foreign parent networks**, not Indian-owned firms — reflecting an opportunity gap in transforming **human capital into global market leadership**.

5. Policy, Legal, and Institutional Reforms Needed

- **Allow Multidisciplinary Partnerships (MDPs):** Amend ICAI and related professional acts to allow integrated firms combining accounting, legal, and consulting expertise.
- **Ease Branding and Advertisement Rules:** Enable Indian firms to **build brand equity and global visibility** while ensuring ethical standards.
- **Create a Unified Professional Regulator:** Establish an **umbrella framework or coordination mechanism** among ICAI, ICSI, and other bodies for seamless service integration.
- **Leverage Technology and ESG Expertise:** Incentivize firms to invest in **AI-driven audit tools, sustainability consulting, and risk analytics**, key future growth areas.
- **Government Support through Procurement and Incentives:** Encourage **public sector projects and exports** to prefer Indian firms under a **“National Professional Services Development Policy.”**

6. Constitutional and Legal Provisions Related to Professional Services and Trade

- **Article 19(1)(g):** Guarantees the **freedom to practice any profession or carry on trade**, subject to reasonable restrictions in the public interest.
- **Article 301:** Ensures **freedom of trade and commerce** throughout the territory of India.
- **Article 38 & 39(b):** Direct the State to promote equitable distribution of resources and opportunities — including intellectual and service capital.
- **Companies Act, 2013 (Sections 139–148):** Regulates **auditors and accounting firms**, indirectly influencing market structure.
- **The Chartered Accountants Act, 1949:** Governs professional conduct and practice limitations for accounting firms — currently seen as a key regulatory bottleneck.

7. Conclusion

- India's ambition to create **globally competitive professional service firms** is both **timely and strategic**. With a vast talent pool, strong digital infrastructure, and a growing domestic market, the country has the potential to **replicate its IT success story** in the consulting and auditing domain. However, achieving this requires **deep regulatory reform, scale-building through partnerships**, and a **global mindset** that blends professional integrity with innovation. If nurtured properly, Indian firms could evolve from being **execution partners** of global players to **independent global leaders** in consulting, advisory, and ESG services.

8. UPSC Relevance

- **GS Paper II:** Government policies impacting economic reforms, ease of doing business, and regulatory frameworks.



- **GS Paper III:** Service sector growth, knowledge economy, and globalization of Indian firms.
- **GS Paper IV (Ethics):** Professional integrity, governance ethics, and the role of regulation in maintaining ethical standards.
- **Prelims Focus:** ICAI, Big Four, Multidisciplinary Partnership (MDP), WTO's Revealed Comparative Advantage, and Global Capability Centres (GCCs).

Key Terms:

- **Big Four:** The four largest global firms providing audit, consulting, and advisory services — EY, Deloitte, KPMG, and PwC.
- **Multidisciplinary Partnership (MDP):** A structure allowing professionals from different disciplines (e.g., law, audit, consulting) to collaborate within one firm.
- **Revealed Comparative Advantage (RCA):** An index measuring a country's relative advantage in exporting specific services compared to the world average.
- **Global Capability Centres (GCCs):** Offshore units of multinational corporations performing strategic, analytical, and support functions.

7. Government May Raise MGNREGA Allocation Amid Flood-Induced Rural Distress

1. Background and Current Situation

- The Government of India is reassessing the **budgetary allocation for MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act)** in view of the **severe floods affecting Bihar, Uttar Pradesh, Himachal Pradesh, and Punjab**. The scheme's budget has been **₹86,000 crore for two consecutive fiscal years (FY25 and FY26)**, but rising distress and loss of agricultural work due to flooding have triggered a spike in rural job demand. Officials are evaluating **expenditure trends and ground-level data** to determine whether additional funds are required to sustain rural employment and prevent economic distress.

2. Rising Demand and Expenditure Trends

- MGNREGA is India's **largest social safety net**, providing **100 days of guaranteed wage employment** to adult members of rural households willing to do unskilled manual work.
- During FY24, **actual expenditure rose to ₹1.06 trillion**, surpassing the budgeted ₹60,000 crore, prompting the government to seek a **supplementary grant of ₹14,524 crore** to meet payment obligations.
- Data from the **Ministry of Rural Development** shows consistent high demand: 20.12 million households sought work in April 2025, rising to **28.38 million in May**, and 27.56 million in June before tapering during monsoon months.
- Flood-related agricultural disruptions in FY26 are expected to **revive demand once again**, as rural labourers seek fallback employment under the scheme.



3. Economic and Fiscal Implications



- MGNREGA acts as an **automatic stabilizer** during rural crises, absorbing surplus labour when **farm operations or non-farm activities slow down**.
- However, persistent demand increases **fiscal pressure** on the government, especially amid competing welfare priorities.
- The Centre typically **reviews welfare scheme allocations mid-year (September–October)** to approve supplementary budgets if needed.
- India's **GDP growth of 7.8% in Q1 FY26** reflects macroeconomic resilience, but localized disasters such as floods could **widen rural-urban disparities** unless job schemes are adequately funded.

4. Constitutional and Legal Framework

- **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005:**
 - Provides a **legal right to work** for every rural household adult willing to do unskilled manual labour.
 - Mandates **payment of wages within 15 days** and emphasizes **transparency through social audits**.
- **Article 41 (Directive Principle of State Policy):** Directs the State to ensure **right to work, education, and public assistance** in cases of unemployment and distress.
- **Article 38 & 39:** Obligate the State to **reduce inequalities** and ensure livelihood security for all citizens.
- The Act also aligns with **Sustainable Development Goal (SDG) 1 (No Poverty)** and **SDG 8 (Decent Work and Economic Growth)**.

5. Key Challenges and Policy Issues

- **Budget Underestimation:** Despite being demand-driven, annual allocations often fall short of actual expenditure, resulting in **delayed wage payments** and arrears.
- **Climate Shocks and Employment Patterns:** Frequent floods and droughts are **increasing the cyclicity of job demand**, indicating the need for **disaster-linked employment planning** under MGNREGA.
- **Administrative Delays:** States often face **fund flow bottlenecks**, impacting timely execution of projects.
- **Need for Convergence:** Greater integration of MGNREGA with **climate-resilient infrastructure projects** (like water harvesting and flood control) can provide both **employment and long-term resilience**.

6. Broader Socio-Economic Significance

- MGNREGA continues to be a **critical tool for inclusive rural development**, mitigating the effects of crop failure, migration, and climate-induced disruptions.
- In the wake of widespread flooding, the scheme serves as an **economic lifeline** by providing income security to rural families.
- Experts advocate for **indexing the MGNREGA budget to inflation and climatic factors**, ensuring that resource allocation remains responsive to evolving rural realities.



7. Conclusion

- MGNREGA remains the **bedrock of India's rural welfare architecture**, especially in times of climatic distress. With floods disrupting agricultural livelihoods in several states, increasing the scheme's budget will be crucial for sustaining **rural income, food security, and social stability**. Strengthening its funding mechanism, ensuring timely payments, and aligning projects with **climate adaptation goals** can enhance both the **economic and environmental resilience** of rural India.

8. UPSC Relevance

- **GS Paper II:** Government policies and interventions for development in various sectors; issues in welfare schemes and implementation.
- **GS Paper III:** Employment generation, disaster management, and sustainable rural development.
- **GS Paper IV (Ethics):** Welfare governance, public accountability, and empathy in policy execution.
- **Prelims Focus:** MGNREGA features, Articles 41 & 38, fiscal review process, and recent trends in scheme allocation.

Key Terms:

- **MGNREGA:** A rights-based rural employment scheme guaranteeing 100 days of work annually to rural households.
- **Supplementary Grant:** Additional funds sought mid-year when actual spending exceeds budgetary allocation.
- **Demand-Driven Scheme:** A welfare program where expenditure depends on the actual number of participants, not fixed allocations.
- **Climate-Resilient Works:** MGNREGA projects (like afforestation, flood embankments, and water conservation) aimed at mitigating environmental risks.

8. India–EU Free Trade Agreement (FTA) Likely by December: Strategic and Economic Significance

1. Background and Context

- India and the **European Union (EU)** are on the verge of concluding a **Free Trade Agreement (FTA)** by **December 2025**, following “significant convergence” in the **14th round of negotiations** held in Brussels on **10 October 2025**. The proposed FTA will enhance market access for Indian exporters to the EU's **\$19.99-trillion economy**, one of the world's largest economic blocs. This will mark India's **third major trade pact** in Europe, after agreements with the **European Free Trade Association (EFTA)** and the **United Kingdom (UK)**, strengthening India's integration with advanced economies.

2. Progress and Key Features of the Negotiations

- The FTA aims to **eliminate or reduce tariffs and non-tariff barriers** on a wide range of goods and services, providing **duty-free access** to Indian exporters in critical sectors.
- Sensitive issues — including **automobiles, spirits, intellectual property rights (IPR), and digital trade** — have seen significant progress, with only a few technical points under discussion.





- **Commerce Secretary Rajesh Agrawal** led the recent discussions with the **EU Directorate-General for Trade and Economic Security**, committing to **continuous engagement** through both virtual and in-person meetings.
- The FTA also aims to address **regulatory harmonization, sustainability standards, and labour and environmental norms**, areas where the EU has strict compliance frameworks.

3. Economic Significance for India

- The FTA will provide Indian goods **duty-free access to Europe's \$25-trillion combined economy** (EU + UK + EFTA), substantially boosting exports in **pharmaceuticals, textiles, engineering goods, IT, and agricultural products**.
- Enhanced access to **European capital, technology, and green energy investment** will strengthen India's manufacturing under **Make in India** and **Atmanirbhar Bharat** initiatives.
- The deal is expected to **reduce India's trade deficit**, which currently stands tilted towards the EU, and promote **supply chain diversification** post-COVID and geopolitical disruptions.
- The EU is India's **third-largest trading partner**, accounting for nearly **10.8% of total trade**, while India is the **10th-largest partner** for the EU.

4. Constitutional, Legal, and Policy Framework

- **Article 253 of the Indian Constitution:** Empowers Parliament to make laws for implementing international treaties and trade agreements.
- **Article 51(c):** Directs the State to foster respect for international law and treaty obligations.
- **Foreign Trade (Development and Regulation) Act, 1992:** Provides the statutory basis for formulating and implementing India's trade policies, including FTAs.
- **WTO Principles:** The FTA will operate within the WTO's **Most-Favoured Nation (MFN)** and **Regional Trade Agreement (RTA)** frameworks, allowing preferential access without violating multilateral commitments.
- **Bilateral Investment Treaty (BIT)** provisions may also accompany the FTA to protect cross-border investments and intellectual property rights.

5. Strategic and Diplomatic Importance

- The India–EU FTA is a **cornerstone of India's trade diversification strategy**, aimed at reducing overdependence on China and the United States.
- It aligns with the EU's **Global Gateway Initiative** and India's **Indo-Pacific outreach**, both emphasizing sustainable connectivity and resilient supply chains.
- The agreement strengthens India's position as a **trusted global partner** in a shifting geopolitical landscape shaped by US–China trade tensions and EU's energy transition goals.
- It could also open avenues for **collaboration in green technology, digital governance, renewable energy, and climate finance**, key pillars of both regions' economic policy.

6. Challenges and Remaining Issues

- **Non-Tariff Barriers (NTBs):** Differences over **sanitary and phytosanitary standards (SPS)** and **technical barriers to trade (TBT)** need resolution.



- **Automobile and Spirits Tariffs:** The EU demands lower tariffs, while India seeks protection for its **infant industries and farmers**.
- **Data Localization and Digital Trade:** Divergent views on data privacy and cross-border data flows persist.
- **Sustainability Clauses:** EU's insistence on **labour rights and environmental commitments** could require India to adapt certain domestic regulations.

7. Conclusion

- The **India–EU FTA**, once finalized, will mark a milestone in India's trade diplomacy and economic strategy, cementing its role as a key partner in the global value chain. It will not only **boost exports and attract investment** but also reinforce India's credentials as a **reliable and sustainable trade partner**. However, balancing **market access with domestic sensitivities** will be critical for ensuring that the agreement benefits Indian producers, workers, and consumers equitably.

8. UPSC Relevance

- **GS Paper II:** India's foreign policy, bilateral and multilateral trade relations, and international institutions.
- **GS Paper III:** Liberalization, effects of globalization, and Indian economy's integration with world trade.
- **GS Paper IV (Ethics):** Ethical trade, fair globalization, and sustainability standards in international relations.
- **Prelims Focus:** EU structure, India–EU trade statistics, key constitutional articles (51, 253), and WTO's RTA provisions.

Key Terms:

- **Free Trade Agreement (FTA):** A treaty between two or more nations to reduce or eliminate trade barriers and facilitate the flow of goods and services.
- **Non-Tariff Barriers (NTBs):** Regulatory and procedural requirements (like quality standards and licensing) that restrict trade beyond tariffs.
- **Regional Trade Agreement (RTA):** A preferential trade arrangement among countries in a specific region under WTO rules.
- **Global Gateway Initiative:** EU's strategic plan to boost global infrastructure partnerships as an alternative to China's Belt and Road Initiative.

9. India May Ban Toxic Food Packaging: FSSAI's Move Toward Safer Food and Public Health

1. Background and Context

- The **Food Safety and Standards Authority of India (FSSAI)** is preparing to amend the **Food Safety and Standards (Packaging) Regulations, 2018** to **prohibit the use of toxic chemicals** such as **Poly- and Perfluoroalkyl Substances (PFAS)** and **Bisphenol A (BPA)** in food-contact materials. This move follows mounting scientific evidence linking these substances to **severe health risks**, including hormonal disorders, cancer, and cardiovascular diseases. The proposed regulation aims to align India's food safety standards with **global best practices**, particularly those of the **United**



States and the European Union, which have already begun phasing out such chemicals from food packaging.

2. Key Provisions of the Proposed Regulation

- **Prohibition on PFAS:** The use of **PFAS** in the manufacturing of **food-contact materials** (such as wrappers, containers, and liners) will be explicitly banned.
- **Ban on BPA in Plastics and Resins:** Food packaging made from **polycarbonate and epoxy resins** (commonly used in reusable bottles and can linings) must be **free from Bisphenol A (BPA)** and its derivatives.
- **Reinforcement of General Safety Provisions:** The amendments will be incorporated under the **Food Safety and Standards (Packaging) Regulations, 2018**, which replaced the older **2011 Packaging and Labelling Regulations**.
- The move builds on earlier FSSAI actions, including the **ban on recycled plastics and newspapers for food packaging** and the **2022 nationwide ban on 19 categories of single-use plastics**.

3. Understanding the Chemicals: PFAS and BPA

- **PFAS (Poly- and Perfluoroalkyl Substances):**
 - Synthetic “**forever chemicals**” used for **grease and water resistance** in packaging like burger wrappers and microwave popcorn bags.
 - Known for their **strong carbon-fluorine bonds**, making them **non-biodegradable**, bioaccumulative, and environmentally persistent.
 - Long-term exposure is linked to **endocrine disruption, reproductive harm, immune suppression, and cancers (kidney, testicular)**.
- **BPA (Bisphenol A):**
 - A key component in **polycarbonate plastics and epoxy resins** used in **reusable bottles, can linings, and food storage containers**.
 - Associated with **hormonal imbalances, obesity, diabetes, and cardiovascular disorders** due to its estrogen-mimicking properties.



4. Constitutional and Legal Framework

- **Article 21 (Right to Life):** Interpreted by the Supreme Court to include the **right to safe food, clean environment, and health protection**.
- **Article 47 (Directive Principles of State Policy):** Obliges the State to improve **public health and nutrition**.
- **Food Safety and Standards Act, 2006:**
 - Establishes the **FSSAI** as the apex body responsible for regulating food safety and protecting consumer health.
 - Empowers the Authority to **frame standards and prohibit substances** deemed unsafe for human consumption.



- **Environment (Protection) Act, 1986:** Provides enabling powers to regulate **hazardous chemicals and pollutants**, complementing food safety laws.

5. Global and Environmental Context

- The **European Union** and **United States** have already implemented **stringent controls on PFAS and BPA**, recognizing their long-term ecological and health hazards.
- PFAS have been detected in **soil, groundwater, and food chains**, raising global concern over **bioaccumulation and cross-border contamination**.
- India's move aligns with international efforts to promote **sustainable packaging and circular economy goals** under global frameworks like the **Basel Convention**.
- The step also supports India's **commitment to the UN Sustainable Development Goals (SDGs)** — particularly **SDG 3 (Good Health and Well-being)** and **SDG 12 (Responsible Consumption and Production)**.

6. Broader Significance and Challenges

- The proposed ban will **safeguard consumer health** and **reduce chemical pollution**, supporting long-term public health outcomes.
- It may initially pose challenges for **food and beverage industries** reliant on low-cost synthetic materials, necessitating **investment in safer alternatives** such as **biodegradable and compostable packaging**.
- Implementation will require **robust monitoring, testing infrastructure, and industry compliance mechanisms** to prevent non-conforming imports and manufacturing.
- Encouraging **research and innovation in green packaging technologies** could also create new employment and export opportunities in the sustainable materials sector.

7. Conclusion

- The FSSAI's proposed ban on **PFAS and BPA** in food packaging marks a **transformative step in India's food safety and environmental policy**. It demonstrates a proactive approach toward **public health protection**, aligning domestic regulations with **global sustainability norms**. By eliminating toxic substances from daily use, India can protect consumers, reduce ecological contamination, and move closer to realizing its constitutional mandate of ensuring **safe, nutritious, and sustainable food for all**.

8. UPSC Relevance

- **GS Paper II:** Government policies for health and environmental safety; statutory bodies (FSSAI) and regulatory mechanisms.
- **GS Paper III:** Environmental pollution, sustainable development, public health, and food safety governance.
- **GS Paper IV (Ethics):** Corporate social responsibility, ethical consumerism, and environmental stewardship.
- **Prelims Focus:** FSSAI structure and functions, PFAS and BPA definitions, Food Safety and Standards Act, 2006, and single-use plastic bans.

Key Terms:



- **PFAS (Poly- and Perfluoroalkyl Substances):** Persistent synthetic chemicals used for resistance to grease and moisture, known for bioaccumulation and toxicity.
- **BPA (Bisphenol A):** Industrial chemical used in plastics and resins that can interfere with hormone functions in humans.
- **Food Contact Materials (FCMs):** Any materials or packaging that come in direct contact with food, regulated for safety under FSSAI norms.
- **FSSAI:** Statutory authority under the Food Safety and Standards Act, 2006, responsible for ensuring food safety standards in India.

10. Wholesale Inflation Dips to 0.13% in September 2025: Key Economic and Policy Implications

1. Background and Current Trend

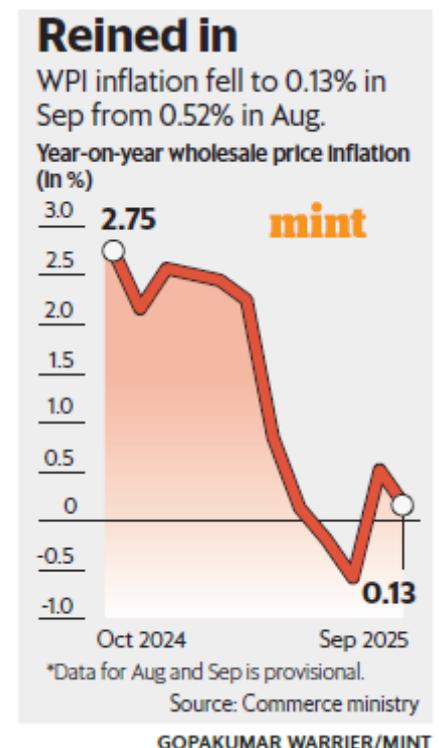
- India's **Wholesale Price Index (WPI)-based inflation** fell sharply to **0.13% in September 2025**, down from **0.52% in August**, largely due to **easing food and fuel prices**, according to data from the **Ministry of Commerce and Industry**. This moderation follows two months of negative WPI readings ($-0.58%$ in July and $-0.19%$ in June), signaling continued disinflationary trends in wholesale markets. A year earlier, WPI inflation was **1.91%**, indicating a significant cooling of input price pressures.

2. Sectoral Breakdown and Key Drivers

- **Food Inflation:** Turned negative at $-1.99%$, compared to $0.21%$ in August, driven by falling prices of **vegetables ($-24.4%$), wheat, pulses, cereals, and oilseeds**.
- **Non-Food Articles:** Growth slowed to **3.14%** from $5.56%$ in August, showing reduced commodity price pressures.
- **Fuel and Power:** Declined **2.58%** in September, marking the **sixth consecutive month** of deflation due to soft global crude oil prices and stable domestic energy supply.
- **Manufactured Products:** Rose **2.33%**, marginally lower than August's $2.55%$, reflecting stable industrial input costs.
- **Core Inflation (Excluding Food and Fuel):** Rose to a **31-month high of 1.9%**, mainly due to **record jewellery price growth ($34.1%$)**, but remained subdued overall due to weaker base metal prices.

3. Economic Interpretation and Impact

- The decline in WPI indicates **easing supply-side pressures**, which could help moderate **retail inflation (CPI)** in the coming months, improving the **RBI's inflation outlook**.
- However, **low wholesale inflation** may exert **pressure on corporate profit margins** since selling prices remain stable while fixed costs persist.





- The WPI inflation for **Q2 FY2025–26** averaged just **0.02%**, an **eight-quarter low**, potentially resulting in a **muted GDP deflator** and affecting **nominal GDP growth estimates**.
- Sectors such as **agriculture and manufacturing** may benefit from lower input costs, while **export competitiveness** could improve if price stability persists.

4. Constitutional, Legal, and Policy Framework

- **Ministry of Commerce and Industry:** Publishes the **WPI data** monthly as part of the **Office of Economic Adviser's mandate** to monitor wholesale price trends.
- **Monetary Policy Linkage:** While the **Reserve Bank of India (RBI)** primarily targets CPI for inflation management under its **Flexible Inflation Targeting Framework (2016)**, WPI serves as a critical **input indicator for producers' price trends** and supply-side inflation.
- **Article 38 and 39(b):** Direct the State to ensure equitable distribution of economic resources, linking inflation management with social justice and inclusive growth.
- **Fiscal Policy Tools:** The government uses **buffer stocks, MSP adjustments, and fuel price regulation** to manage wholesale inflation fluctuations.

5. Broader Macroeconomic Context

- India's **GDP growth of 7.8% in Q1 FY26**, the fastest among major economies, contrasts with cooling wholesale inflation, indicating **strong real growth but low price momentum**.
- Persistent deflation in **fuel and commodities** could be beneficial for public finances, reducing subsidy burdens and import costs.
- However, a **prolonged low WPI trend** could signal **weak demand recovery** in certain industrial sectors, necessitating continued fiscal and monetary support.
- Global headwinds, such as **volatile energy prices** and **trade disruptions**, remain key risks that could re-ignite inflationary pressures.

6. Key Terms and Definitions

- **Wholesale Price Index (WPI):** Measures changes in the average prices of goods traded in bulk at the wholesale level; represents supply-side inflation.
- **Core Inflation:** Excludes volatile food and fuel prices, indicating underlying price trends.
- **GDP Deflator:** Ratio of nominal to real GDP; reflects overall inflation in the economy.
- **Disinflation:** A slowdown in the rate of inflation, not a decline in prices.
- **Deflation:** A sustained fall in general price levels, potentially signaling weak demand.

7. Conclusion

The dip in India's WPI inflation to **0.13% in September 2025** reflects a **favorable disinflationary environment**, driven by easing food and energy prices. While this supports **macroeconomic stability** and improves consumer purchasing power, it also underscores the need to **stimulate demand** and maintain growth momentum. Policymakers must balance inflation control with **rural demand revival and industrial competitiveness**, ensuring that low wholesale inflation translates into **broad-based economic gains**.

8. UPSC Relevance



- **GS Paper III:** Indian Economy – Inflation trends, monetary and fiscal policy coordination, and price stability mechanisms.
- **GS Paper II:** Role of government policies in maintaining economic stability and inclusive growth.
- **Prelims Focus:** Difference between WPI and CPI, components of WPI, GDP deflator, and inflation targeting framework under the RBI Act, 1934 (Amendment 2016).
- **GS Paper IV (Ethics):** Economic equity, responsible governance, and policy ethics in managing inflation.

11. Biofuel Industry Seeks Ethanol Roadmap Beyond E20 Blending: Towards a Green Energy Transition

1. Background and Context

- India's biofuel sector, represented by the **Indian Sugar & Bio-Energy Manufacturers Association (ISMA)** and the **Indian Federation of Green Energy (IFGE)**, has urged the government to frame a **national ethanol mobility roadmap beyond the E20 blending target**. The call follows India's achievement of **20% ethanol blending (E20)** in petrol **five years ahead of the original 2030 target**, marking a major milestone in India's clean energy and energy security agenda. The industry now seeks a clear roadmap for **higher ethanol blends (E27–E30)** and **flex-fuel vehicle (FFV)** deployment to sustain growth and enhance India's green mobility ecosystem.

2. Ethanol Blending Programme (EBP): Achievements and Progress

- The **Ethanol Blending Programme (EBP)** aims to reduce fossil fuel dependency by blending ethanol derived from **sugarcane, grains, and agricultural waste** with petrol.
- India achieved **E20 blending** in 2025, ahead of the 2030 deadline, compared to just **1.5% blending in 2014**.
- This transition has led to **foreign exchange savings of over ₹50,000 crore**, reduction in **greenhouse gas emissions**, and **better remuneration for farmers** through assured ethanol offtake.
- The next phase requires expansion in **feedstock diversification**, including **2G ethanol (from crop residue)** and **3G biofuels (from algae and waste)** to ensure sustainable production.



3. Need for a National Ethanol Mobility Roadmap

- With the E20 milestone achieved, the biofuel industry emphasizes the need for a **long-term ethanol strategy (2025–2040)** to guide investment and policy continuity.
- The roadmap should cover:
 - **Higher blending targets (E27–E30)** aligned with global standards.
 - **Wider adoption of Flex-Fuel Vehicles (FFVs)** capable of running on multiple ethanol blends.
 - Expansion of **ethanol production capacity** and **supply chain logistics**.



- **Infrastructure for ethanol storage, distribution, and retail blending.**
- **Fiscal incentives and policy stability** to encourage private investment.
- The roadmap would also align India's biofuel strategy with the **National Bioenergy Policy** and **Net Zero by 2070 goals**.

4. Constitutional, Legal, and Policy Framework

- **National Policy on Biofuels (2018, amended 2022):** Promotes production and blending of biofuels, targeting E20 blending by 2030 (now achieved early).
- **Ethanol Blending Programme (EBP) under the Ministry of Petroleum & Natural Gas (MoPNG):** Regulates ethanol procurement and blending.
- **Article 48A:** Directs the State to protect and improve the environment, encouraging renewable energy use.
- **Article 51A(g):** Imposes a fundamental duty on citizens to protect and improve the natural environment.
- **Energy Conservation (Amendment) Act, 2022:** Supports low-carbon transition and introduces provisions for carbon trading, which can integrate with ethanol use.
- **Sustainable Development Goals (SDG 7 and SDG 13):** Promote affordable clean energy and climate action, both aligned with ethanol adoption.

5. Economic and Environmental Significance

- **Energy Security:** Ethanol blending reduces crude oil imports, lowering the import bill and strengthening India's energy independence.
- **Rural Prosperity:** Expanding ethanol capacity boosts the **sugar and grain industries**, creating rural jobs and stabilizing farm incomes.
- **Climate Benefits:** Replacing petrol with ethanol cuts **CO₂ emissions by up to 40%**, contributing to India's **Nationally Determined Contributions (NDCs)** under the Paris Agreement.
- **Industrial Diversification:** The ethanol sector supports **circular economy principles**, utilizing agricultural residues and industrial by-products as raw materials.
- **Global Leadership:** With sustained policy momentum, India can emerge as a **biofuel innovation hub**, exporting technology and sustainable energy models to developing economies.

6. Challenges Ahead

- **Feedstock availability and competition with food crops** remain concerns, requiring careful balance between food and fuel priorities.
- **Infrastructure gaps** in ethanol distribution and lack of sufficient **E20/E30-compatible vehicles** could hinder adoption.
- **Price volatility** in sugar and crude oil markets may impact production economics.
- Need for **research in 2G and 3G biofuels** to make advanced ethanol economically viable.

7. Conclusion

India's success in achieving E20 blending ahead of schedule reflects the country's commitment to



sustainable energy transition and climate responsibility. However, to maintain momentum, a **comprehensive ethanol mobility roadmap beyond E20** is vital. It should integrate technology adoption, feedstock diversification, financial incentives, and vehicle policy harmonization. This will ensure that India not only achieves **energy self-reliance** but also leads the **global biofuel revolution** as a model of green growth and rural empowerment.

8. UPSC Relevance

- **GS Paper II:** Government policies and interventions for development in energy and environment sectors.
- **GS Paper III:** Sustainable energy, climate change mitigation, and biofuel technology.
- **GS Paper IV (Ethics):** Intergenerational responsibility, sustainability, and environmental ethics.
- **Prelims Focus:** Ethanol Blending Programme (EBP), National Biofuel Policy 2018, Flex-Fuel Vehicles (FFVs), and 2G/3G biofuels.

Key Terms:

- **Ethanol Blending (E10, E20, E30):** Mixing ethanol with petrol in varying proportions; E20 means 20% ethanol and 80% petrol.
- **Flex-Fuel Vehicles (FFVs):** Vehicles that can run on multiple fuel mixtures, such as E85 (85% ethanol) or pure petrol.
- **2G Ethanol:** Produced from lignocellulosic biomass like crop residues.
- **3G Biofuels:** Generated from algae or waste materials, representing next-generation bioenergy technologies.

12. India Urges COP30 to Address Climate Finance Gaps: Call for Equitable Global Action

1. Background and Context

- At the **pre-COP30 meeting** held ahead of the **United Nations Climate Change Conference (COP30)** in **Belém, Brazil**, India called for a **decisive global focus on addressing the lack of climate finance** for developing nations. **Environment Minister Bhupender Yadav**, speaking at the **Global Stocktake (GST) breakout session**, emphasized that the **time for repeated reviews without implementation is over**, urging developed nations to fulfill their **financial and technological commitments** under the Paris Agreement. The statement reflects India's long-standing stance on **climate justice and common but differentiated responsibilities (CBDR-RC)**.

2. India's Core Demands and Position at COP30

- **Climate Finance Priority:** India urged COP30 to address the **critical shortfall in financial support** for developing countries, which impedes adaptation, mitigation, and transition to low-carbon economies.
- **Implementation over Review:** India highlighted that despite numerous stocktake exercises and pledges, **actual climate finance flows remain far below the promised \$100 billion per year**, a target originally set for 2020.





- **Equitable Burden Sharing:** India reiterated that **developed nations**, being historically responsible for the majority of greenhouse gas (GHG) emissions, must **take the lead in financing and technology transfer** to developing economies.
- **Global Stocktake (GST) Outcomes:** India stressed that the GST mechanism must lead to **actionable pathways and increased resource mobilization**, not just assessments of progress.

3. Climate Finance Crisis and Global Context

- The UNFCCC's **\$100 billion climate finance goal**—committed by developed countries in 2009 at COP15 (Copenhagen)—has **not been fully realized**, with actual disbursements estimated at **\$83 billion in 2020**, much of it in the form of **loans rather than grants**.
- The **Adaptation Fund and Green Climate Fund (GCF)** remain **underfunded**, limiting the capacity of developing countries to respond to climate disasters.
- The **Loss and Damage Fund**, agreed upon at COP28 (Dubai), still lacks clear operational mechanisms and substantial contributions.
- India called for **predictable, new, and additional climate finance**, separate from traditional development aid, to ensure **climate equity and sustainable growth**.

4. Constitutional, Legal, and Policy Framework in India

- **Article 48A:** Directs the State to protect and improve the environment and safeguard natural resources.
- **Article 51A(g):** Imposes a duty on every citizen to protect and preserve the natural environment.
- **National Action Plan on Climate Change (NAPCC), 2008:** India's umbrella policy with **eight national missions** focusing on solar energy, water conservation, sustainable agriculture, and green growth.
- **India's Updated NDCs (2022):**
 - Reduce emission intensity of GDP by **45% by 2030 (from 2005 levels)**.
 - Achieve **50% cumulative electric power capacity from non-fossil fuel sources** by 2030.
 - Achieve **Net Zero emissions by 2070**, as announced at COP26 (Glasgow).
- India's emphasis at COP30 aligns with its **constitutional environmental commitments** and **Paris Agreement obligations**, reinforcing its identity as a **responsible but developing nation**.

5. Broader Significance and Challenges

- **Finance and Technology Gap:** Developing nations require an estimated **\$6 trillion by 2030** to meet their NDC goals, yet only a fraction is available.
- **Adaptation and Resilience:** Countries in the Global South face **increasing climate disasters**—floods, heatwaves, droughts—with insufficient adaptation funding.
- **Just Transition:** India advocates for a **“just and equitable energy transition”**, ensuring that climate action does not compromise developmental priorities or energy access.
- **Accountability of Developed Nations:** India demands **clear timelines and transparent accounting mechanisms** for climate finance pledges to avoid double counting and ensure fairness.



6. Key Concepts and Definitions

- **Global Stocktake (GST):** A process under the Paris Agreement conducted every five years to assess collective progress toward limiting global warming and achieving climate goals.
- **Climate Finance:** Financial flows from developed to developing countries to support mitigation, adaptation, and resilience-building activities.
- **Common but Differentiated Responsibilities (CBDR-RC):** A foundational principle under the UNFCCC recognizing that while all states are responsible for climate protection, their obligations differ based on capabilities and historical emissions.
- **Loss and Damage Fund:** A mechanism established to provide financial assistance to countries suffering from irreversible climate impacts.

7. Conclusion

India's call at COP30 underscores the urgent need for **credible, equitable, and adequate climate finance** to translate commitments into action. As climate impacts intensify, India has positioned itself as a **voice for the Global South**, advocating for **justice, transparency, and fairness** in global climate governance. The success of COP30 will depend on whether developed nations demonstrate genuine financial solidarity and enable developing economies to achieve **climate resilience without compromising growth**.

8. UPSC Relevance

- **GS Paper II:** India's foreign policy, international relations, and climate diplomacy.
- **GS Paper III:** Environment, climate change, conservation, and sustainable development.
- **GS Paper IV (Ethics):** Global responsibility, intergenerational equity, and environmental ethics.
- **Prelims Focus:** COP30, Global Stocktake, Paris Agreement, Green Climate Fund (GCF), and CBDR-RC principle.

13. Government Extends 16th Finance Commission's Tenure till 30 November 2025

1. Background and Context

- The Government of India has extended the tenure of the **16th Finance Commission (FC)** by **one month till 30 November 2025**, allowing additional time for finalizing its report and recommendations. The Commission, chaired by **Dr. Arvind Panagariya**, former Vice-Chairman of **NITI Aayog**, was constituted on **31 December 2023** under **Article 280 of the Constitution of India**. The extension aims to facilitate comprehensive consultation with States, Union Territories, and relevant ministries on fiscal transfers, devolution formulas, and fiscal sustainability measures.

2. Mandate of the 16th Finance Commission

- The Commission is tasked with recommending the **distribution of tax revenues** between the Centre and the States for the **period 2026–2031**.
- It also recommends:



- **Vertical devolution:** Sharing of central taxes between the Union and States.



- **Horizontal devolution:** Allocation of shares among States based on criteria like population, income distance, area, and fiscal discipline.
- **Grants-in-aid** to States under Article 275 to supplement resources for specific purposes.
- Measures to **augment resources of Panchayats and Municipalities** under **Articles 280(3)(bb) and (c)**.
- Additionally, the Commission examines the **Centre-State fiscal balance, debt sustainability**, and ways to strengthen **cooperative federalism**.

3. Constitutional and Legal Provisions

- **Article 280:** Mandates the President to constitute a Finance Commission every five years or earlier, as deemed necessary.
- **Article 281:** Requires the President to lay the Finance Commission's recommendations before Parliament, along with an explanatory memorandum on the government's action taken.
- **Article 275:** Allows grants from the Union to States for meeting special developmental needs.
- The Finance Commission operates as an **independent constitutional body**, ensuring **transparency and fairness** in the distribution of financial resources between the Centre and States.
- Its recommendations, though **advisory**, carry significant **constitutional and fiscal weight**, influencing the **Union Budget and State Finances**.

4. Key Issues Before the 16th Finance Commission

- **Revenue Sharing Formula:** Revisiting the tax devolution ratio between Centre and States, currently at **41%** as per the 15th FC.
- **Impact of GST Compensation:** Assessing fiscal imbalances post-GST implementation and recommending new compensatory mechanisms.
- **Debt and Deficit Management:** Suggesting a sustainable **fiscal consolidation roadmap** for both Union and States.
- **Demographic Shifts:** Addressing States' concerns over the use of **2011 Census data** for horizontal devolution, which may disadvantage southern States with lower population growth.
- **Local Body Funding:** Strengthening urban and rural local governance by ensuring adequate, predictable, and performance-based grants.
- **Climate Finance:** Exploring ways to integrate **climate resilience and environmental sustainability** in fiscal transfers — a new emerging focus area.

5. Importance of the Tenure Extension

- The extension till **30 November 2025** ensures adequate time for **data collection, inter-ministerial consultations, and State-level discussions**.
- It allows the Commission to incorporate **macroeconomic projections, post-pandemic fiscal realities, and recent policy developments** such as new welfare spending and infrastructure outlays.
- The additional time will help refine recommendations that are **fiscally realistic and growth-supportive**, aligning with India's long-term **Vision 2047** objectives.



6. Significance for Fiscal Federalism

- The Finance Commission plays a pivotal role in maintaining **India's fiscal balance** and **cooperative federalism**, ensuring that States have adequate resources to perform constitutionally assigned functions.
- By recommending **objective criteria for transfers**, it minimizes political discretion and strengthens **transparency in fiscal governance**.
- The 16th FC's approach is expected to focus on **performance-based incentives**, fiscal prudence, and the integration of **SDG-linked outcomes** in fiscal allocation.

7. Conclusion

- The extension of the 16th Finance Commission's tenure underlines the **complexity and evolving nature of India's fiscal landscape**. With challenges such as widening regional disparities, climate-linked fiscal pressures, and the need for sustainable public finance, the Commission's recommendations will be crucial in shaping the **Centre-State financial architecture for the next five years (2026–2031)**. Its work will reaffirm the principles of **cooperative and competitive federalism**, essential for balanced national development.

8. UPSC Relevance

- **GS Paper II:** Role of constitutional bodies; Centre-State relations; cooperative federalism.
- **GS Paper III:** Public finance, fiscal policy, and resource mobilization.
- **Prelims Focus:** Article 280, Composition and Functions of Finance Commission, Vertical and Horizontal Devolution, Grants-in-aid.
- **GS Paper IV (Ethics):** Financial transparency, accountability, and federal responsibility in governance.

Key Terms:

- **Finance Commission:** A constitutional body constituted every five years to recommend the distribution of financial resources between the Union and States.
- **Vertical Devolution:** Sharing of central tax revenues between the Union and all States collectively.
- **Horizontal Devolution:** Distribution of the States' collective share among individual States based on socio-economic indicators.
- **Grants-in-Aid:** Transfers from the Union government to States for specific or general purposes, under Article 275.
- **Cooperative Federalism:** A governance model where the Centre and States work collaboratively to achieve shared developmental objectives.