Today's Prelims Topics

Ayurveda Aahara

Context
The **Food Safety and Standards Authority of India (FSSAI)**, in collaboration with the Ministry of Ayush, has issued an official list of **Ayurvedic food products classified under the "Ayurveda Aahara"** category.

About Ayurveda Aahara
● **Meaning**: Ayurveda Aahara refers to food products prepared according to the holistic dietary principles of Ayurveda — an ancient health and wellness system.
● **Core principles**: These foods focus on balance, seasonal appropriateness, and the use of natural ingredients and herbs with therapeutic properties.
● **Regulatory background**: The initiative follows the **Food Safety and Standards (Ayurveda Aahara) Regulations, 2022**, which officially recognise foods based on traditional Ayurvedic recipes, ingredients, and processes.
● **Authenticity**: The newly issued list is based on authoritative Ayurvedic texts mentioned in **Schedule A** and issued under **Note (1) of Schedule B** of the regulations.
● **Purpose**: Designed to help **Food Business Operators (FBOs)** by offering a clear, credible reference for manufacturing Ayurveda Aahara products.
● **Impact**: Enhances regulatory clarity, boosts confidence among consumers and businesses, and promotes Ayurveda-based nutrition for improved public health.
● **Significance**: Integrates India's ancient food wisdom into the mainstream food sector with authenticity and standardisation.
Source: TheHindu

Bond Switching

Context

The Indian government has saved ₹560 crore in interest costs in the current **FY 2026**, by switching short-term bonds to longer-term securities—extending its debt maturities and reducing immediate repayment and interest pressure.

About Bond Switching

- **Definition**: Bond switching is when the government (through the RBI) exchanges existing bonds for new ones with different maturities, coupon rates, or both.
- **Purpose**: Mainly used to **extend debt maturity**, **manage redemption pressure**, and **reduce interest costs**.
- **Mechanism**:
  - The government offers to swap short-term bonds nearing maturity for longer-term securities.
  - Investors (like banks, mutual funds, insurers) exchange their holdings voluntarily.
- **Benefits to Government**:
  - Spreads out repayment obligations over a longer period.
  - Reduces the immediate cash outflow and can lower average borrowing costs.
  - Smoothens the debt maturity profile, avoiding large repayment spikes.
- **Benefits to Investors**:
  - Provides flexibility to align portfolios with investment goals.
  - Can help lock in favorable yields for a longer term.
- **Risks/Considerations**:
  - Market demand for the switch depends on yield curve conditions.
  - If interest rates rise, investors might be reluctant to accept longer maturities.
- **Example**: In FY 2026 (so far), bond switching saved the Indian government **₹560 crore** in interest costs compared to ₹54 crore in the same period last year.

Source: EconomicTimes , IndiaTimes

Pradhan Mantri Matru Vandana Yojana

Context
The **Ministry of Women and Child Development** has extended the **special registration drive for the Pradhan Mantri Matru Vandana Yojana (PMMVY)** until **15 August 2025.**

About Pradhan Mantri Matru Vandana Yojana (PMMVY)
- **Type & Launch**: Centrally Sponsored **Direct Benefit Transfer (DBT)** scheme launched in **2017**.
- **Objectives**:
  - Provide **partial wage loss compensation** through cash incentives so women can rest before and after childbirth (first child).
  - Promote **health-seeking behaviour** among Pregnant Women & Lactating Mothers (PW&LM).
- **Coverage**:
  - For women from **socially and economically disadvantaged sections**.
  - Applicable for **first two living children**, with the **second child benefit allowed only if it is a girl**.
- **Monetary Benefits**:
  - **₹5,000** provided from early pregnancy till childbirth.
  - Additional **₹1,000** under **Janani Suraksha Yojana** after institutional delivery.
- **Installment Structure**:
  - **₹1,000** – At pregnancy registration.
  - **₹2,000** – On completing 6 months of pregnancy + at least one antenatal check-up.
  - **₹2,000** – After birth registration + first cycle of immunization (BCG, OPV, DPT, Hepatitis-B).
- **Special Provision**:
  - Miscarriage or stillbirth cases are treated as **fresh cases** for benefit eligibility.

Source: PIB

Pollution control boards (PCBs)

Context
- The Supreme Court has affirmed that **Pollution Control Boards (PCBs)** have the authority, under the **Water Act** and **Air Act**, to levy environmental compensation on polluting entities.
- A bench of **Justices P.S. Narasimha and Manoj Misra** clarified that PCBs may seek **restitutionary or compensatory damages** either through fixed monetary penalties or bank guarantees, serving as preventive measures to avert potential environmental damage.

PCBs' Statutory Authority to Levy Compensation
- Supreme Court **expanded the powers** of Pollution Control Boards (PCBs).
- PCBs can impose and collect **restitutionary and compensatory damages** to restore polluted air and water bodies.
- May demand **fixed monetary sums** or **bank guarantees** as **preventive (ex-ante) measures** under:
    - **Section 33A, Water Act, 1974**
    - **Section 31A, Air Act, 1981**

Scope and Limits
- Compensation **not for every statutory violation**.
- Applicable only when:
    - Environmental damage has **occurred**, or
    - Damage is **imminent**.
- Must first frame **subordinate legislation** (rules/regulations) under both Acts.
- Rules must follow **natural justice** and fair process before imposing compensation.

Jurisprudence Supporting the Ruling
- Based on **Vellore Citizens Welfare Forum (1996)** and **Indian Council for Enviro-Legal Action (1996)**.
- These cases established environmental restitution as a **constitutional and statutory duty**, distinct from punitive measures.

Principles Laid Down by the Court
1. **Remedial vs Punitive**:
    - Restitutionary compensation = **preventive/remedial**
    - Fines/imprisonment = **punitive**, require judicial procedure.
2. **Non-punitive nature**: Monetary compensation for environmental damage is **not punitive** if imposed under regulatory powers.
3. **Polluter Pays Principle** applies when:
    - Environmental thresholds breached, causing damage.
    - Damage occurs even without threshold breaches.
    - Significant environmental risks identified, irrespective of breaches.
4. **Preventive duty**: PCBs must act proactively (ex-ante) even without proven damage.

Broad Mandate and Responsibilities
- PCBs have wide powers under Water & Air Acts to:
    - Shut down industries.
    - Stop essential services.
    - Issue remedial directions.
- Linked to **State's constitutional duty** under **Article 51A** to protect environment.
- Emphasised importance of air and water protection amid the **climate crisis**.

Strengthening Remedial Jurisprudence

- Expansion of the right to a clean environment requires **strong remedial powers**.
- Injunctions or compensation alone are inadequate.
- Restitutionary measures to restore ecosystems must be a **core part of environmental enforcement**.

Source: TheHindu
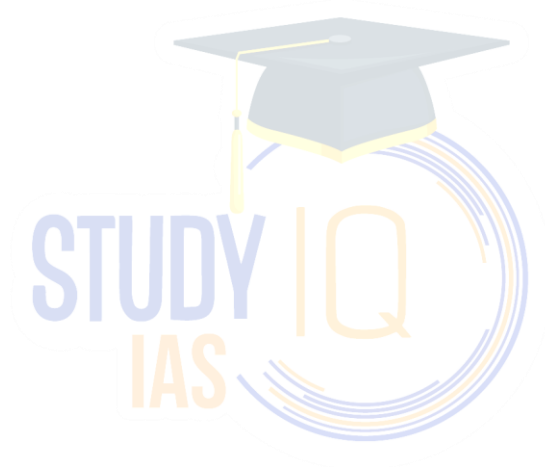
Flash Floods

Context
Flash floods in **Uttarkashi's Dharali town**, triggered by torrential rain, killed at least four people, left around 60–70 missing, and caused heavy destruction to homes and hotels.

What are Flash Floods?
Flash Floods are sudden, intense floods that occur within a short period — usually **within six hours** of heavy or extreme rainfall, dam break, glacier lake outburst, or rapid snowmelt.
Key Features:
- **Rapid onset:** Little to no warning time.
- **Short duration:** Water levels rise and recede quickly.
- **High intensity:** Strong currents capable of sweeping away people, vehicles, and infrastructure.
- **Localized impact:** Often affects small areas but with severe damage.

Study on Flash Floods in India
- **Purpose & Scope**
    - Addresses the lack of granular data on flash flood vulnerability in India.
    - Maps flash flood susceptibility across Indian sub-continental river basins using hydrological and geomorphological data.
    - Identifies **Himalayas, Western Coast, and Central India** as major hotspots.
- **Regional Drivers of Flash Floods**
    - **Himalayas**: Steep terrain and elevation drive high risk.
    - **Western Coast & Central India**: High "flashiness" (rapid runoff) increases flood susceptibility.
    - Within the **Ganga Basin**, southern Himalayan sub-basins are more prone than central stretches.
- **Causes & Risk Factors**
    - 75% of flash floods result from **extreme rainfall + saturated soil** combination.
    - Only 25% are caused solely by extreme rainfall.
    - Saturated soil prevents water absorption, causing rapid runoff.
    - Only 23% of extreme rainfall events trigger floods within six hours — prolonged rain is a bigger factor.
- **Climate Change Impact**
    - Warmer atmosphere holds ~7% more moisture per 1°C rise → heavier rainfall events.
- **Increase in extreme rainfall (1981–2020)**:
    - Pre-monsoon: Doubled
    - Monsoon: +56%
    - Post-monsoon: +40%
    - Winter: +12.5%
    - Over 75% of flash floods (1980–2018) occurred during the monsoon.
    - Flash flood incidents have risen sharply since 1995, especially in **Brahmaputra, Ganga, and Krishna basins**.
- **Shifting Flood Patterns**
    - 51% of previously non-prone sub-basins now show increased rainfall.
    - 66.5% of non-prone areas now have higher streamflow ("wet hours").
    - Some existing flood-prone zones show reduced wet hours, indicating changing vulnerability zones.
- **Adaptation & Mitigation Strategies**
    - Region-specific plans considering topography, soil, and hydrology — not just rainfall intensity.

○ Improve early warning systems & disaster preparedness.
○ Invest in climate-resilient infrastructure.
○ Update land-use planning & adopt integrated flood management.
○ Identify **emerging hotspots** to adapt before risks escalate.

Source: TheHindu

Editorial Summary

How should money laundering be tackled?

Context

A report in the Rajya Sabha says that since 2015, the Enforcement Directorate (ED) has taken up **5,892 cases** under the **Prevention of Money Laundering Act (PMLA), 2002**, but only **15 cases have led to conviction** so far.

What Does it Implies?

This shows two main problems:
- **Very few convictions** despite many investigations.
- **Rising number of money laundering cases**, meaning the law is not stopping such crimes effectively.

What is a Laundromat?

A **laundromat** is a system that **cleans dirty money** — turning money earned through crime into legal-looking money.
- The term came from actual laundromats used by US crime groups as a front for illegal money.
- Laundromats can be **banks, finance companies, or shell firms** used to hide money, avoid taxes, or move it abroad.
- They help in **laundering crime money**, **hiding asset ownership**, and **breaking currency laws**.

How is Money Laundered?

- According to **Section 3 of PMLA**, money laundering means converting money earned through crime to make it **look legal**.
- It happens in **three stages**:
  - **Placement**: Inserting the dirty money into the financial system. For example, breaking big amounts into smaller chunks (called *smurfing*) to avoid suspicion.
  - **Layering**: Moving the money through multiple accounts or investments to hide its source.
  - **Integration**: Using the cleaned money to buy **property, businesses, or assets**.

The Supreme Court in *P. Chidambaram vs ED (2019)* said that hiding illegal money hurts India's financial system, national security, and can cause inflation.

What is PMLA?

- In line with the **UN Political Declaration and Global Programme of Action** (adopted by the UN General Assembly in **February 1990)**, **Prevention of Money Laundering Act (2002)** was made to:
  - **Prevent laundering of money**, and
  - **Confiscate illegal property**.
- **Key Features:**
  - **Burden of proof** lies on the **accused**, not the government.
  - **ECIR (Enforcement Case Information Report)** is enough to begin investigation. FIR is **not needed**.
  - A **scheduled offence** (like corruption, fraud, drug trade) is needed to define an act as money laundering.

Problems in Implementation

- **Rising Cases, Fewer Convictions:** Cases are increasing, but very few end in punishment.
  - This questions how well the law is being applied.

- **Possible Misuse of Law:** The law has sometimes been used for **political targeting**.
  - **E.g.,** In *Vijay Madanlal Chaudhary vs Union of India (2022)*, the court said **property can be attached** even if there's **no registered criminal case**. This has led to **abuse of power** in some cases.

Way Forward

- **Better Implementation:** Investigating agencies must follow **FATF (Financial Action Task Force)** guidelines.
  - Investigations should be **fair, careful, and evidence-based**, not politically driven.
- **Stop Misuse, Improve Convictions:** Law must be used to target **real crimes**, not opposition leaders.
  - This will help improve the **conviction rate** and restore public trust.
- **International Support:** India has signed **Double Taxation Avoidance Agreements (DTAAs)** with 85 countries.
  - These help in sharing **financial and tax information**, making it harder to hide black money abroad.

Source: The Hindu

India's Digital Welfare: Efficient but Less Democratic?

Context
- India has made huge progress in using digital tools for welfare.
  - But this push for efficiency may be **reducing citizen participation and weakening accountability**.
  - Welfare delivery is becoming more technical and data-driven, but less democratic.

How Technology is Changing the Welfare State
- The digital system follows a logic that is:
  - **One-way** (top-down delivery)
  - **Streamlined and measurable** (easy to monitor)
  - **Less tolerant of errors or complexity**

Key Challenges
- **Technocratic Turn in Welfare Governance:** Over **1 billion Aadhaar enrollments** and **1206 schemes on DBT** reflect India's digital-first welfare model.
  - The focus has shifted from **"who needs help"** to **"how to deliver help efficiently"** — this shift has made welfare less about **rights** and more about **data and algorithms**.
- **Democracy Deficit:** Schemes like **e-SHRAM** and **PM-KISAN** are examples of this.
  - These programs deliver benefits efficiently but ignore people's lived experiences or local needs.
  - Citizens are no longer treated as **rights-bearing individuals** but as **data entries** or **beneficiaries**, who have no say in how the system works as critiqued in **Justice Chandrachud's Aadhaar dissent**.
- **Welfare Spending and Transparency are Declining:** Despite all the talk of a "welfare state," India's **social spending has gone down** — from an average of 21% (2014–2024) to 17% in 2024–25.
  - Important welfare areas like **minorities, labour, nutrition, and employment** have been hit hard. Spending in these areas fell from 11% (before COVID-19) to just 3% now.
  - At the same time, the **Right to Information (RTI)** system is in trouble. As of June 2024, there were over **4 lakh pending cases** and **8 vacant positions** in information commissions.
  - This shows a lack of transparency and weakening citizen oversight.
- **Rise of 'Algorithmic Insulation':** The **Centralised Public Grievance Redress and Monitoring System (CPGRAMS)** tracks complaints well and resolves many cases. But it may be doing so without clear responsibility.
  - While issues are being recorded and closed, it is unclear **who is actually responsible** for fixing them.
  - This creates a situation where technology increases visibility but hides accountability

What Can Be Done?
- **Make Digital Systems More Democratic:** Build systems that don't collapse under stress — embed human discretion, context-sensitivity, and local feedback loops.
  - This is called **democratic antifragility** — a system that improves under stress by learning and adapting.
- **Empower Local Governments:** States and villages must have more freedom to design programs that work for their people. Programs like **Kudumbashree in Kerala** are good examples.
- **Bring Back Citizen Voice:** Empower **Gram Sabhas**, **frontline workers**, and **local feedback** to play a bigger role. Citizens must be able to question decisions and demand better services.
- **Protect Rights in Digital Systems:** There must be clear rules for:

- ○ **Offline support** when digital systems fail
- ○ **Bias checks**
- ○ **Appeal and explanation rights** — so people can challenge wrong decisions
- ○ The **UN Special Rapporteur on Poverty** has also recommended regular audits involving communities to ensure fairness.

Conclusion: Focus on the Citizen

- ● Digital tools can help deliver welfare faster and cleaner. But if we forget the **human side of governance**, the system may become efficient but unfair.
- ● A truly **developed (Viksit) India** must not treat people as just data points. Citizens must be partners in governance — not just passive beneficiaries.
- ● Let's build a system that is **smart, fair, and democratic** — one that listens to people, not just machines.

Source: The Hindu

Mass Produce of Fraudulent Scientific Research

Context
- A new study published in *Proceedings of the National Academy of Sciences (PNAS)* on **August 4** warns that **scientific fraud is no longer rare or isolated**.
    - It has now become **systematic, organised, and rapidly growing**, threatening the **trust and quality** of research around the world.

Who Are the Fraud Actors?
- The fraud is not just from a few bad individuals. It's an **ecosystem** of:
    - **Paper mills** – companies that write and sell fake research papers
    - **Brokers** – middlemen who help clients get published
    - **Editors and reviewers** – who knowingly accept fake work
    - **Journals** – especially low-quality or hijacked ones, that publish anything for a fee
- Example: **ARDA (Academic Research and Development Association)** in India
    - It grew from 14 to **86+ journals** offering guaranteed publication.
    - Often shifts to new journals when old ones get caught or deindexed.
    - Even sells **authorship** – e.g., a paper on **hazelnut roasting** published in a **journal on HIV/AIDS**.

How Fraud is Spotted
- **Small groups of editors** are handling **many of the problematic papers**
- Some journals had **clusters of fake research**, often using **copied images** or **template-like structures**
- Fields like **RNA biology and cancer research** were especially affected

Disturbing Trends
- The number of fake papers is **doubling every 1.5 years**
- Fraudulent publishing is **growing 10 times faster** than honest science
- Deindexing by databases like **Scopus or Web of Science** is **too slow** to keep up
    - Only ~100 journals are deindexed yearly, while **thousands** publish fake work
- Most fake papers **are never retracted** — only 25% may ever be pulled out
- And only 10% may be published in journals that are eventually deindexed

Why This is Happening
- **Current reward system in science:** Researchers are judged by **how many papers they publish**, **how many times they are cited**, or **what journals they publish in**
    - This pushes many to **"game the system"** by buying fake papers or cutting corners
    - For **young scientists**, cheating is becoming a **"new normal"** because the system rewards output, not honesty.

What's at Risk
- Honest scientists can't compete with mass-produced fake research
- Funding, promotions, and academic success go to **those who cheat**
- Public trust in science may collapse
- Health, environment, and technology decisions based on fake science may have **real-world harm**

What Needs to Be Done
The study calls for **urgent collective action**:
- Stronger and **independent systems** to detect and punish misconduct
- Better **resourcing for journal quality checks**

- Rethink of **incentives** — promote quality over quantity
- Build systems that cannot be easily manipulated by fraud rings

Source: [The Hindu](#)

India's Geopolitical Challenge

Context

India is at a crucial point in global geopolitics. Power balances are shifting, but India is not gaining as much influence as it should. It needs to act more boldly on the global stage.

What Challenges India Is Facing In Geopolitical Landscape?

● **Silence On Acting Against Terrorism:** Operation Sindoor was India's response to a terror attack in Pahalgam (April 2025), carried out by Pakistani terrorists.
   ○ Despite clear evidence, many of India's partners stayed silent on Pakistan's role.
● **U.S.-India Friction:** On the same day India-U.S. launched a major satellite (NISAR), US imposed **25% tariffs** on Indian goods.
   ○ Trump **threatened more tariffs** if India kept buying oil from Russia — even though the U.S. itself still trades with Russia.
   ○ Also discouraged U.S. companies from investing in India, pushing an "America First" agenda.
● **EU's Uneven Treatment:** The EU sanctioned an Indian refinery using Russian oil but **allows its own members** to keep buying from Russia.
   ○ It continues to impose **trade barriers** on India while negotiating a new trade deal (India-EU Broad-based Trade and Investment Agreement (BTIA)).
   ○ India is hoping its trade deal with the UK might pressure the EU to be more fair.
● **China's Growing Influence:**
   ○ China is making moves in India's neighborhood:
      ■ Proposed new alliances (like China-Pakistan-Bangladesh).
      ■ Helped Bangladesh revive an old airbase near India's Siliguri corridor.
      ■ Supported Pakistan during Operation Sindoor.
      ■ Built influence in the Maldives.
   ○ Trying to **control key supplies to India** like:
      ■ Fertilizers
      ■ Medicines (APIs)
      ■ Rare earths
      ■ Technical experts
   ○ Building a **huge dam on the Brahmaputra** river near India's border.
● **Passive Foreign Policy Image:** India has stayed **neutral or silent** on major global crises (e.g., Gaza, Ukraine, Iran-Israel).
   ○ While neutrality offers flexibility, it also **limits influence** and support from global powers in return.

Way Forward

● Push back against unfair treatment as done in exposing the double standards of the U.S. and EU.
● Speak up more on global conflicts as called for a **ceasefire in Gaza**, signaling a more active foreign policy.
● To stop further damage in U.S.-India ties, India must **finalize a trade deal with the U.S.** soon.
● India may not restart the **RIC (Russia-India-China)** alliance, but it should:
   ○ Strengthen **BRICS** (India hosts the 2026 summit).
   ○ Reconnect with the **SCO** (Shanghai Cooperation Organisation).
   ○ Engage more with **East Asia**, especially after missing out on the **RCEP**.

Regional Comprehensive Economic Partnership (RCEP)
● It is a free trade agreement between the 10 member states of the Association of Southeast Asian Nations (ASEAN) and its FTA partners.
● These partners include Australia, China, Japan, Korea, and New Zealand.

Source: The Hindu