DAILY CURRENT AFFAIRS 25-03-2026

Mapping Perspective

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Mains Perspective

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Subarnekha River

Syllabus:Indian Drainage System.

Context:

- The Ministry of Environment, Forest and Climate Change directed state agencies to curb **illegal sand mining and smuggling** from the Subarnarekha River in Odisha.

Background

- Illegal sand mining has intensified due to **construction demand**, leading to **riverine ecological degradation**.

- The Subarnarekha basin is ecologically sensitive, passing through **mineral-rich and tribal regions**.
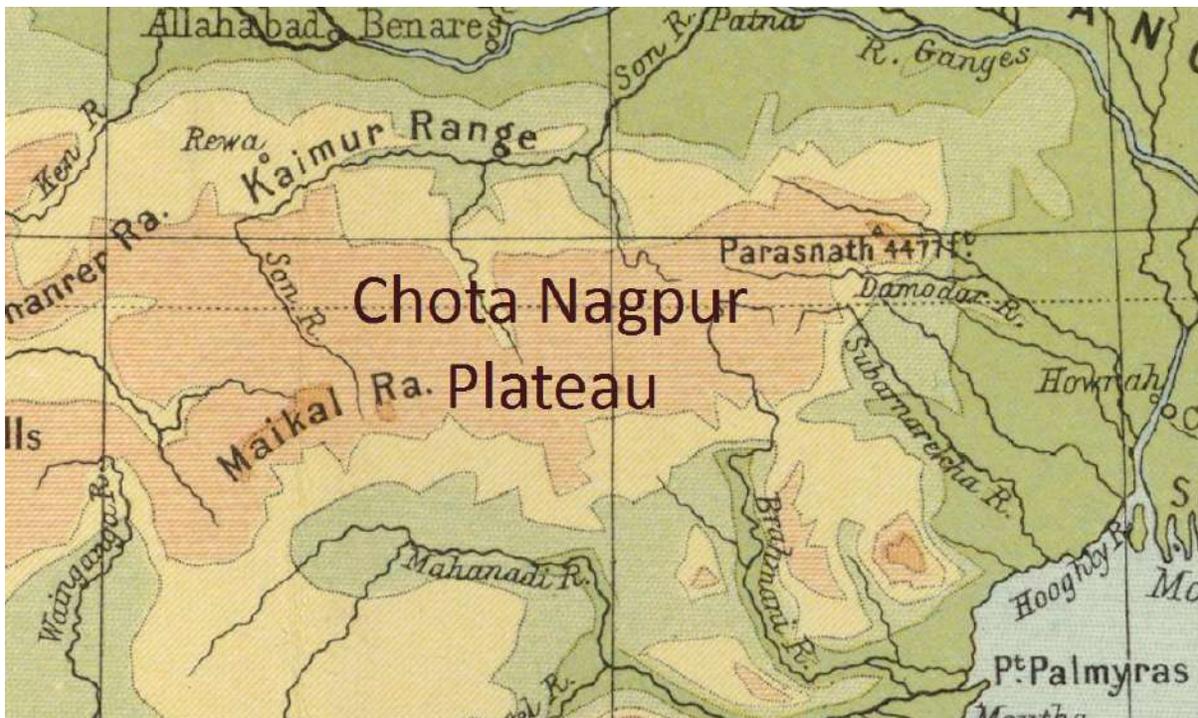
Key Features/Provisions/Data

- **Origin**: Near Nagri village, Ranchi (Jharkhand) at ~600 m elevation.

- **Length**: ~395 km; drains into the **Bay of Bengal**.

- **Course**: Flows east across **Chotanagpur Plateau**, exits via **Hundru Falls**.

- **Tributaries**: Right bank – Kanchi, Karkari, Kharkai.

- **Basin States**: Jharkhand (major), Odisha, West Bengal (minor).

- **Boundaries**:

- o   North/West – Chotanagpur Plateau
- o   South – Baitarani basin ridges
- o   East – Kasai (Kangsabati) basin
- ➢ **Hydrology**: Dominated by **South-West Monsoon (June–Oct)**.
- ➢ **Projects**: Getalsud Reservoir, Chandil Dam, Galudih Barrage, Icha Dam.

Significance/Implications

- ➢ **Economic**: Supports irrigation, industry, and mining regions.
- ➢ **Ecological**: Maintains sediment balance and aquatic biodiversity.
- ➢ **Livelihood**: Source of sand, fisheries, and agriculture for local communities.

Challenges/Issues

- ➢ **Illegal sand mining** → riverbed deepening, bank erosion, habitat loss.
- ➢ **Pollution** from mining and industrial discharge.
- ➢ **Inter-state coordination issues** across basin states.
- ➢ **Flow alteration** due to dams and barrages.

Way Forward

- ➢ Enforce **Sustainable Sand Mining Management Guidelines (2016)**.
- ➢ Use **remote sensing & GIS monitoring** for illegal extraction.
- ➢ Strengthen **inter-state river basin governance**.
- ➢ Promote **community participation** and alternative materials (M-sand).

Constitutional/Institutional Linkages

- ➢ **Article 48A**: Protection of environment.
- ➢ **Article 51A(g)**: Fundamental duty for environmental conservation.
- ➢ **Environment Protection Act, 1986**.
- ➢ **National Green Tribunal (NGT)** interventions in mining cases.

Prelims Facts

- ➢ **Name Meaning**: "Subarnarekha" = *Streak of Gold* (gold particles historically found).
- ➢ **Important Waterfall**: Hundru Falls (Jharkhand).
- ➢ **River Type**: East-flowing peninsular river.
- ➢ **Major Tributary**: Kharkai (joins near Jamshedpur).

Guru Angad Dev

Syllabus: GS-1: Indian Culture and History.

Context:

➢ Union Home Minister paid tributes to **Guru Angad Dev** on his *Jyoti-Jyot Diwas* (death anniversary).

➢ Highlights his role in consolidation and institutionalisation of early Sikhism.

Background/Context

➢ **Guru Angad Dev (1504–1552)**: Second Sikh Guru (1539–1552), successor of Guru Nanak Dev.

➢ Born as *Lahna* in Matte-di-Sarai (present-day Punjab).

➢ Period marked by transition from spiritual movement to organized religious community.

Key Contributions

➢ **Linguistic & Educational Reforms**

   o Standardised **Gurmukhi script**, making Punjabi accessible.

   o Established schools at **Khadur Sahib** to promote literacy.

➢ **Religious Institutionalisation**

   o Strengthened **Langar system** (community kitchen) → equality & social cohesion.

   o Expanded **Sangat system** (local religious congregations).

➢ **Cultural & Social Reforms**

   o Promoted physical fitness (wrestling arenas) and disciplined living.

   o Composed **62 hymns** included in *Guru Granth Sahib*.

Significance

➢ **Democratisation of Knowledge**: Gurmukhi enabled mass participation in religious discourse.

➢ **Social Equality**: Langar weakened caste hierarchies.

➢ **Institution Building**: Sangats laid foundation for organized Sikh community.

➢ **Cultural Identity**: Consolidated Punjabi linguistic and Sikh identity.

Challenges / Issues

➢ Resistance from entrenched caste structures.

- ➢ Limited literacy and socio-economic constraints in medieval Punjab.

- ➢ Need for continuity of reforms amid political instability.

Way Forward

- ➢ Promote teachings of equality, service (*Seva*), and discipline in contemporary society.

- ➢ Preserve Sikh heritage through education and cultural programs.

- ➢ Integrate values into social harmony and national integration efforts.

Prelims Facts

- ➢ **Gurmukhi Script**: Derived from Landa scripts; used for Punjabi language.

- ➢ **Jyoti-Jyot Diwas**: Term used for the passing of Sikh Gurus.

- ➢ **Khadur Sahib**: Key centre of Guru Angad's activities (Punjab).

- ➢ **Guru Granth Sahib**: Holy scripture of Sikhism containing Guru Angad's hymns.

Conclusion

- ➢ Guru Angad Dev played a **transformational role** in institutionalising Sikhism through language, education, and social reforms, ensuring its continuity and inclusiveness.

Smog eating photocatalytic coating

Syllabus: GS-3: Environmental Pollution.

Context:

- ➢ The Delhi Government, in collaboration with IIT Madras, is testing **photocatalytic coatings on roads** to reduce urban air pollution.

Background

- ➢ India faces severe air pollution, especially in urban centers like Delhi.

- ➢ Conventional mitigation measures (e.g., GRAP, vehicle restrictions) have limited long-term impact.

- ➢ Innovative, passive technologies like photocatalysis are being explored.

Key Features

- ➢ **Definition:** Photocatalytic coatings use light-activated catalysts to degrade pollutants.

- ➢ **Main Compound:** Titanium Dioxide (TiO_2)
  - o Low-cost, chemically stable, compatible with construction materials.
- ➢ **Working Mechanism:**
  - o Sunlight activates TiO_2 → generates reactive radicals.
  - o Breaks down **NO_2, SOx, VOCs** into less harmful substances.
- ➢ **Targets:**
  - o Nitrogen dioxide (NO_2)
  - o Volatile Organic Compounds (VOCs)
- ➢ **Types of Smog:**
  - o **Sulfurous Smog:** Coal-based, sulfur oxides dominant.
  - o **Photochemical Smog:** Urban, vehicle emissions (NOx + hydrocarbons).

Significance/Implications

- ➢ **Urban Air Quality Improvement:** Reduces toxic gases at source.
- ➢ **Cost-effective & Scalable:** Can be applied on roads, buildings.
- ➢ **Climate Co-benefits:** Supports emission reduction goals.
- ➢ Aligns with **National Clean Air Programme (NCAP)** targets.

Challenges/Issues

- ➢ **Effectiveness Variability:** Depends on sunlight, pollution levels.
- ➢ **Durability Concerns:** Wear and tear of coatings on roads.
- ➢ **Limited Evidence:** Large-scale impact yet to be proven.
- ➢ **Secondary By-products:** Possible formation of nitrates.

Way Forward

- ➢ Conduct **pilot studies and impact assessments** across cities.
- ➢ Integrate with broader policies like **BS-VI norms, EV adoption**.
- ➢ Encourage **public-private partnerships** for scaling.
- ➢ Develop **standards and guidelines** for application.

Prelims Facts

- ➢ **Photocatalysis:** Acceleration of chemical reactions using light and catalyst.
- ➢ **TiO_2:** Widely used in paints, sunscreens, and environmental cleanup.

- ➤ **NCAP:** Launched in 2019 to reduce PM2.5 and PM10 by 20–30%.
- ➤ **Key Pollutants:** NO_2, SO_2, O_3, PM2.5, VOCs.

Conclusion

- ➤ Photocatalytic coatings represent a **promising supplementary solution**, but require **scientific validation and policy integration** for meaningful impact.

Cabinet Committee on Security

Syllabus: GS-2: Indian Polity – Cabinet Committees.

Context:

- ➤ Recently, the **Prime Minister of India** chaired a meeting of the **Cabinet Committee on Security (CCS)**.
- ➤ The meeting reviewed:
    - o Global developments, especially the **West Asia conflict**
    - o India's preparedness and mitigation measures across sectors

Background

- ➤ CCS is the **highest decision-making body on national security** in India.
- ➤ Origin traces back to **1947**, soon after independence:
    - o Formed under **PM Jawaharlal Nehru**
    - o Members included **Sardar Patel (Home Minister)** and **Baldev Singh (Defence Minister)**
- ➤ **Post-1999 Kargil War**:
    - o CCS was restructured into its present formal, institutionalized form
    - o Strengthened as a **high-powered security decision-making body**

Key Points

Nature & Role

- ➤ Apex body for:
    - o **Defence policy and expenditure**
    - o **Internal and external security**
    - o Strategic decision-making on national security

Composition

- ➢ **Chairperson**: Prime Minister
- ➢ **Members**:
    - o Home Minister
    - o Defence Minister
    - o Finance Minister
    - o External Affairs Minister
- ➢ **Support Structure**:
    - o **National Security Advisor (NSA)** – key coordinator
    - o **Cabinet Secretariat** – maintains records and proceedings

Functional Domain

- ➢ Deals with:
    - o Defence and military matters
    - o Foreign policy and strategic affairs
    - o Intelligence coordination
    - o Nuclear and space policy
    - o Major appointments in national security institutions

Significance

- ➢ **Centralized Strategic Decision-Making**:
    - o Enables quick, coordinated responses to crises
- ➢ **National Security Architecture**:
    - o Integrates defence, diplomacy, and intelligence
- ➢ **Crisis Management**:
    - o Plays a critical role during wars, conflicts, and emergencies
- ➢ **Policy Coherence**:
    - o Aligns economic, military, and foreign policy decisions

Challenges

- ➢ **Limited Transparency**:
    - o Decisions are highly confidential, reducing public accountability

- **Over-centralization**:
  - o Heavy reliance on a small group may limit broader consultation
- **Coordination Issues**:
  - o Inter-agency coordination (defence, intelligence, diplomacy) can be complex
- **Evolving Threats**:
  - o Cybersecurity, hybrid warfare, and AI-driven threats require adaptation

Way Forward

- **Strengthen Institutional Mechanisms**:
  - o Improve coordination between CCS, NSC, and defence agencies
- **Capacity Building**:
  - o Enhance expertise in emerging domains (cyber, space, AI)
- **Periodic Review Mechanisms**:
  - o Institutionalize regular strategic assessments
- **Balanced Transparency**:
  - o Increase accountability without compromising national security
- **Integrated National Security Strategy**:
  - o Formal articulation of a comprehensive security doctrine

WTO IFD Pact

Syllabus: GS-3: Indian Economy – WTO Agreements

Context:

- The **14th Ministerial Conference (MC14)** of WTO (to be held in Cameroon) will discuss:
  - o Incorporation of **Investment Facilitation for Development (IFD) Agreement** into the **Marrakesh Agreement (1995)**.
- **128 out of 166 WTO members** support IFD.
- **India and South Africa opposing**, raising concerns of:
  - o Political isolation
  - o Future of multilateral trade governance

Background

- ➢ WTO traditionally follows **consensus-based multilateral agreements**.
- ➢ Growing shift towards **plurilateral agreements** (binding only on willing members).
- ➢ WTO facing **institutional crisis**:
  - o Paralysis of **dispute settlement mechanism**
  - o Rise of **unilateral trade measures** (e.g., US tariffs under Trump)
- ➢ IFD seen as an attempt to **revitalise WTO rule-making**

Key Points

1. Objective & Scope

- ➢ Focus on **facilitating FDI**, not liberalising it.
- ➢ Aims to:
  - o Improve **investment climate**
  - o Enhance **transparency & predictability**
  - o Reduce **bureaucratic hurdles (red tape)**
  - o Promote **sustainable development**, especially in **developing & LDCs**

2. Key Features

- ➢ **Procedural Reforms**:
  - o Streamlining approvals
  - o Faster clearances
  - o Inter-agency coordination
- ➢ **Special & Differential Treatment (SDT)**:
  - o Implementation based on capacity of developing countries
- ➢ **Exclusions**:
  - o Market access
  - o Investment protection
  - o ISDS (Investor-State Dispute Settlement)
  - o Government procurement & subsidies

3. Nature of Agreement

- ➢ **Plurilateral Agreement**
  - o Binding only on participating members

- o Open for others to join later

4. Global Support

- ➢ Membership increased:

  - o **70 countries (2017) → 128 countries (2026)**

- ➢ Backed by WTO leadership (e.g., Director-General Ngozi Okonjo-Iweala)

Significance

- ➢ **Improves investment ecosystem** globally

- ➢ Helps **developing countries attract FDI**

- ➢ Reduces **transaction costs & delays**

- ➢ Promotes **sustainable and inclusive development**

- ➢ May **revive WTO's credibility** amid institutional crisis

- ➢ Reflects shift from:

  - o **Rigid multilateralism → Flexible plurilateralism**

Challenges

1. India's Concerns

- ➢ **Threat to Multilateralism**:

  - o Undermines consensus-based decision-making

- ➢ **Two-tier WTO system**:

  - o Risk of elite rule-making club

- ➢ **Negotiation Imbalance**:

  - o Diverts focus from:

    - ▪ Agricultural subsidies

    - ▪ Public stockholding for food security

2. Strategic Concerns (China Factor)

- ➢ **~98 IFD members linked to Belt and Road Initiative (BRI)**

- ➢ Risk of:

  - o Expanding China's **geo-economic influence**

  - o Impact on India's neighbourhood

3. External Challenges

- ➢ Increasing **global consensus in favour of IFD**
- ➢ Pressure from **developing nations needing FDI** (e.g., African bloc)

4. Internal Challenges

- ➢ Balancing:
  - o **FDI attraction vs strategic autonomy**
- ➢ Risk of:
  - o **Diplomatic isolation**
  - o Reduced bargaining power in WTO

Way Forward

1. Calibrated Engagement

- ➢ Avoid outright opposition
- ➢ Participate in shaping rules to protect interests

2. Safeguard Multilateralism

- ➢ Push for:
  - o Stronger **consensus principles**
  - o Protection of **developing countries' concerns**

3. Strategic Bargaining

- ➢ Use IFD negotiations to secure:
  - o **Permanent solution on public stockholding**
  - o Flexibility in **agricultural subsidies**
- ➢ Reference:
  - o **Peace Clause (Bali, 2013)**

4. Coalition Building

- ➢ Strengthen alliances with:
  - o **Global South**
  - o Like-minded countries (e.g., South Africa)

5. Domestic Reforms

- ➢ Improve:
  - o **Ease of Doing Business**

- o Regulatory transparency
- ➤ Reduce reliance on external frameworks for FDI inflows

Conclusion

- ➤ IFD Agreement marks a **turning point in global trade governance**.
- ➤ Highlights transition towards **plurilateralism** within WTO.
- ➤ India's opposition is rooted in:
  - o **Equity, sovereignty, and strategic concerns**
- ➤ A **balanced, pragmatic approach** is essential:
  - o Protect core interests
  - o Avoid diplomatic isolation
  - o Maintain influence in shaping global trade rules