

# WBCS GAZETTE



**APTI PLUS**

Academy for Civil Services Pvt. Ltd.  
CREATING CIVIL SERVANTS FOR THE NATION

**MARCH**

**2026**



## A Monthly Digest for GK & State News

### TOPICS COVERED

- Bengal Related News
- Appointments
- Awards in News
- Sports
- Important Days
- Books & Authors
- West Bengal Related Static GK
- Static GK
- Current Affairs GK
- Learning through Infographics



## CONTENT

<b>Bengal Related News</b>	<b>4</b>
<b>Appointments</b>	<b>13</b>
<b>Awards in News</b>	<b>14</b>
<b>Sports</b>	<b>15</b>
<b>Important Days</b>	<b>17</b>
<b>Books &amp; Authors</b>	<b>19</b>
<b>West Bengal Related Static GK</b>	<b>20</b>
<b>Static GK</b>	<b>22</b>
<b>Current Affairs GK</b>	<b>23</b>
<b>Learning through Infographics</b>	<b>26</b>

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# APTI PLUS

## Maintaining Legacy Of Success in WBCS 2023

Gr. A & B

35+

Selections in WBCS 2023  
Group A & B

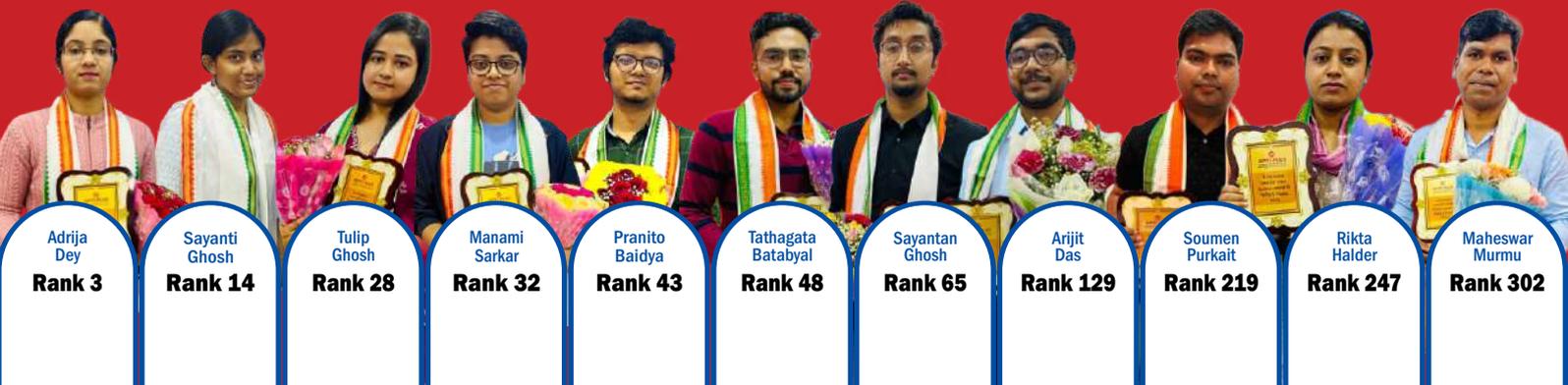
SREEJA  
NAMASHARMA



Rank 1

TATHAGATA DAS Rank 9	PARTHA PRATIM MAITI Rank 10	AKASH KUMAR GHOSH Rank 11	ARKAJIT GANGULY Rank 16	PRADIPTA BAG Rank 17	CHANDREYEE HAIT Rank 22	SOUJANYA PURKAIT Rank 27
TULIP GHOSH Rank 28	PRATIK GHOSH Rank 33	CHANDAN BANERJEE Rank 36	PRABIR HALDER Rank 40	TISTA DHARA Rank 45	TATHAGATA BATABYAL Rank 48	SHYAMSUNDAR HAZRA Rank 50
AYAN SAHA Rank 57	TUHIN MAJUMDAR Rank 61	SAYANTAN GHOSH Rank 65	ANNAPURBA DATTA Rank 76	SK MD SADIQUE ANWAR Rank 90	OBAIDUR RAHAMAN Rank 109	ARIJIT DAS Rank 129
SHISHIR MONDAL Rank 197	SUBHAJIT MAJI Rank 211	SOU MEN PURKAIT Rank 219	YUDHISTIR NAMAN DAS Rank 232	SUDIPTA GUHA Rank 242	RIKTA HALDER Rank 247	MAHESWAR MURMU Rank 302

& many more...



Adrija Dey  
Rank 3

Sayanti Ghosh  
Rank 14

Tulip Ghosh  
Rank 28

Manami Sarkar  
Rank 32

Pranito Baidya  
Rank 43

Tathagata Batabyal  
Rank 48

Sayantana Ghosh  
Rank 65

Arijit Das  
Rank 129

Soumen Purkait  
Rank 219

Rikta Halder  
Rank 247

Maheswar Murmu  
Rank 302

**SYLLABUS: CURRENT EVENTS OF NATIONAL AND INTERNATIONAL IMPORTANCE: TO BE READ FROM THE IAS GAZETTE: COVERS – POLITY, GOVERNMENT SCHEMES, SCIENCE AND TECHNOLOGY, ECONOMY, SECURITY, INTERNATIONAL RELATIONS, SECURITY, GEOGRAPHY, SOCIETY, ENVIRONMENT AND ECOLOGY**

## BENGAL RELATED NEWS

### West Bengal Rail Investment: ₹92,000 Cr Projects & Focus

#### Context

- Union Railway Minister Ashwini Vaishnaw inaugurated key rail projects in **West Bengal** and announced that railway works worth **₹92,000 crore** are under implementation in the state.

#### Key Highlights

##### **Infrastructure Boost:**

- **Record budget allocation:** ₹14,205 crore for West Bengal railways in 2026, over **3 times** the 2009–2014 average.
- **Ongoing projects:** ₹92,000 crore worth of railway projects in the state.
- **New trains:** Over a dozen initiated recently, including the **first Vande Bharat Sleeper train** in West Bengal.
- **Strategic projects:**
  - First **Bullet Train announced from Siliguri.**
  - **East-West freight corridor** connecting West Bengal with Gujarat.
  - Underground corridor in the **Chicken-Neck region** of North Bengal for strategic transport.

#### Siuri Road Over Bridge (ROB):

- Built at **Rs 42 crore** near Siuri Railway Station, replacing Level Crossing 22B/T.
- Benefits: Reduces waiting time, enhances **safety**, smoothen daily travel, ensures

uninterrupted emergency vehicle movement, reduces congestion.

#### Kumarpur Road Over Bridge (ROB):

- Built at **Rs 55 crore**, replacing Level Crossing 1Spl/E between Barachak & Hirapur Yard Line.
- Key link on **GT Road corridor** connecting Asansol, Paschim Bardhaman district and Jharkhand.
- Benefits: Facilitates trade and traffic, improves **commuting**, enhances safety, reduces congestion.

#### Asansol–Bokaro Train Service:

- **Route:** Asansol ↔ Bokaro Steel City via Paschim Bardhaman & Purulia districts.
- Benefits: Enhances **intra- and inter-state connectivity**, supports industrial workers, daily commuters and regional economic activity.
- Regular service: starting 10th February 2026.

#### Strategic Focus Areas

- **New railway lines.**
- **Track doubling.**
- **Electrification.**
- **Station modernisation.**
- Enhanced connectivity in **North Bengal & adjoining regions.**

#### Policy Vision

- Aligned with Centre's "**Purvodaya**" Vision for **Eastern India's infrastructure-led growth.**

#### **Purvodaya Vision**

- Purvodaya ("Rise of the East") is a comprehensive development vision launched by Prime Minister Narendra Modi to transform Eastern India, specifically Bihar, Jharkhand, West Bengal, Odisha and Andhra Pradesh..into a major economic growth engine for Viksit Bharat (Developed India). It focuses on enhancing infrastructure, industrial corridors, human capital and logistics to boost regional prosperity and national development.

## Minimum Support Price (MSP) for Raw Jute

### Context

- The Cabinet Committee on Economic Affairs (CCEA) has approved an increase in the Minimum Support Price (MSP) for raw jute for 2026-27, benefiting farmers in West Bengal and Assam.

### MSP Increase:

- MSP of raw jute (TD-3 grade) raised by ₹275 per quintal, now ₹5,925 per quintal for 2026-27.
- Aimed to **boost production, improve quality and increase farmers' income.**

### Government Rationale:

- Ensures a **return of 61.8%** over the all-India weighted average cost of production.
- Aligns with the principle of fixing MSP at **1.5 times the cost of production** (Union Budget 2018-19).
- Since 2014-15, MSP increased from ₹2,400 to ₹5,925 (**2.5 times rise**).

### Financial Support:

- MSP paid to jute farmers (2014-15 to 2025-26): ₹1,342 crore.
- MSP paid (2004-05 to 2013-14): ₹441 crore.
- **Jute Corporation of India (JCI)** continues as the nodal agency for price support operations.
- Losses incurred by JCI fully reimbursed by Union Government.

### Impact:

- **West Bengal and Assam farmers** benefit directly.
- Supports "**golden fibre**" jute sector, reduces **distress sales** and strengthens **farmers' livelihood.**

### West Bengal Jute Industry

- The **jute industry** is one of the most **labour-intensive industries in West Bengal** and plays a crucial role in rural livelihoods and industrial employment.

### Status and Employment

- West Bengal has about **60-73 operational jute mills**, as per the **Indian Jute Manufacturers Association** and the **National Jute Board**. Around **40 lakh farming families** across India are engaged in jute cultivation,

with **West Bengal leading in acreage**. The industry currently employs **2.5-3 lakh direct workers** in the state. About **20 years ago**, employment stood at nearly **4 lakh workers**, indicating a steady decline due to mechanisation and informalisation.

### Production and Trade

- Average **jute cultivation area** is about **7.99 lakh hectares**. **Raw jute and mesta production** is around **10.99 million bales** annually. Composite jute mills produce nearly **1.06 million tonnes of jute goods per year**. Exports stand at about **1.38 lakh tonnes**, valued at **₹2,168 crore**, while **domestic consumption** is close to **9.94 lakh tonnes**.

### Structural Issues

- The number of mills has remained largely stable, but **employment has fallen sharply**. Many mills still operate with **outdated British-era machinery**, resulting in **low productivity and hazardous working conditions**. Workplaces are often **poorly ventilated, unsafe and accident-prone**, with inadequate safety gear.

### Social Security Concerns

- Employers frequently fail to deposit **ESI contributions**, denying workers access to medical care. **Provident Fund deductions** are often not remitted on time, especially in private PF trusts, leading to uncertainty in retirement savings. **Pension and gratuity payments** are delayed or denied through administrative hurdles and arbitrary practices.

### Labour Practices

- The shift from **cut duty to straight duty** has increased work stress and reduced employment opportunities. This change disproportionately affects **women and part-time workers**.

### Tripartite Agreement Issues

- The **Tripartite Wage Agreement of January 3, 2024** promised permanency based on years of service. The **June 4, 2025 meeting** introduced a **70 percent attendance شرط**, which may

exclude long-serving workers due to health and work conditions.

### Contemporary Significance

- The **July 9, 2025 general strike** has emerged as a key moment for demanding enforcement

## Bridge at Farakka

### Context:

- West Bengal is set to benefit from a **new four-lane bridge at Farakka** over the Ganga, aimed at improving connectivity, reducing congestion and boosting regional economic and social development.

### Bridge Overview:

- **Length:** 5.468 km, one of India's longest bridges over the Ganga. **Cost:** ₹622.04 crore.
- **Completion:** 96% complete; nearing operational status.
- **Purpose:** Ease chronic congestion on the ageing Farakka Barrage (built in 1960s).

### Connectivity and Economic Impact:

- Connects **North Bengal (Malda, Murshidabad) to South Bengal**; facilitates **inter-state transport with Jharkhand**.

of labour rights, opposing exploitative practices and resisting dilution of existing labour laws.

- Smooth transport of **goods, agricultural produce** and industrial materials.
- Boosts market access for **Malda and Murshidabad mangoes and litchis**.
- Supports **tourism:** Kulik Bird Sanctuary, Gour Malda, Adina Mosque, Darjeeling, Kurseong, Kalimpong and Sikkim.
- Enhances **regional trade efficiency**, reducing delays and improving profitability for logistics and business operations.

### Social Impact:

- Saves **commuting time** for students, teachers and workers.
- Ensures timely access to **education, healthcare and emergency services**.
- Reduces stress from daily traffic congestion, improving **quality of life**.

## West Bengal signs Agreement with German

### Context:

- The West Bengal government has signed a **tripartite MoU with German agency GIZ and the State Mission for Clean Ganga (SMCG)** to prepare **basin-based masterplans** for the **Ichhamati and Jalangi rivers**, the first of 39 sub-basins in the state targeted for restoration and sustainable management.

### Objective:

- Develop **river basin masterplans** for Ichhamati and Jalangi to restore ecological health, improve water flow, manage pollution, control erosion, recharge groundwater, supply irrigation water and mitigate floods.
- Budget: **₹200 crore** under the 2025–26 state budget ("Nodi Bandhan" project).
- Implementation expected **within one year** after masterplan approval.

### Importance of Rivers:

- **Transboundary rivers:** Ichhamati (flows 200 km along India-Bangladesh border), Jalangi (tributary of Ganga, merges with Bhagirathi-Hooghly).
- Provide **water for irrigation, fishing, biodiversity and local livelihoods**.
- Supply **sediments to the Sundarbans delta**, essential for ecosystem sustainability.

### Current Challenges:

- **Ichhamati:** Severe siltation, stagnation, bank erosion, water hyacinth, pollution from domestic and industrial sources, risk of becoming a dead channel.
- **Jalangi:** Heavy siltation, reduced flow, municipal and industrial pollution, toxic metals (nickel, iron), bank erosion, channel receding due to Padma shift, encroachments.

- Both rivers face **declining water quality, ecological degradation and threats to local livelihoods.**

#### Implementation Challenges:

- Experts highlight **technical and ecological difficulties** in restoring flow.
- Activists demand **consultation with local communities and independent experts** before finalizing masterplans.
- Success depends on **effective on-ground execution**, not just planning.

#### Significance:

- Promotes **sustainable river management, ecological restoration and transboundary water cooperation.**
- Enhances **agricultural irrigation, fisheries and local livelihoods**, while protecting biodiversity and sediment flow to Sundarbans.
- Aligns with West Bengal's **Nodi Bandhan initiative** and broader Ganga upper delta conservation efforts with **ADB support.**

#### **"Nodi Bandhan" Scheme**

Introduced in **2025-26 budget** West Bengal's **"Nodi Bandhan" Scheme** and **Ghatal Masterplan** aim to prevent floods, develop riverine areas and boost livelihoods. Nodi Bandhan, named by **Mamata Banerjee**, will interconnect rivers and wetlands, enhancing **pisciculture, irrigation and small-scale agriculture**. To curb **Ganga-Padma erosion** in Murshidabad and Malda, **₹200 crore** has been allocated for a two-year plan using **hydrological models and nature-based solutions.**

#### Ichamati River

The Ichamati River flows through the Indian state of West Bengal and is a **distributary of the Mathabhanga River**, which itself branches off from the Padma River..a principal distributary of the Ganges River. Near Majhdia in Nadia district, the Mathabhanga splits into two channels: the Churni River and the Ichamati River. In several stretches, parts of the Mathabhanga are also locally referred to as the Ichamati.

#### Jalangi River

The **Jalangi River** is a **233-km long, largely moribund river** and an important **branch of the Ganges River** flowing through the **Murshidabad and Nadia districts of West Bengal**. It acts both as a **distributary of the Padma River** and a **tributary of the Bhagirathi River**, thereby **strengthening the lower Hooghly channel**. The river **originates near Char Madhubona** in northern Nadia, flows past **Ghurni (Krishnanagar)**—famous for **Krishnanagar clay dolls**—and meets the **Bhagirathi at Swarupganj**, opposite **Nabadwip**, close to **Mayapur**. Owing to **historical shifts in river courses, local subsidence and reduced flow**, large stretches of the Jalangi have become **dead or untraceable**, with present flow sustained mainly during the **monsoon season**, while **bank erosion** remains a significant issue despite **state-led anti-erosion measures.**

## **'Pink Booths'**

#### Context

- In March 2026, **Kolkata Police**, under directives of the **Government of West Bengal**, launched all-women **'Pink Booths'** and women-led night patrol units to enhance safety of women in Kolkata, particularly during late hours.

#### Key Features

- Pink Booths have been set up at major intersections such as Shyambazar Five Point, Kankurgachhi, Gariahat and Behala Chowrasta.
- These booths function from **5 PM to 11 PM** and are staffed by 3–5 women police personnel (including an ASI). They are equipped with first aid kits, CCTV surveillance, telephone connectivity and information regarding police stations and nearby hospitals.

- Additionally, five women-led patrol vehicles named 'Shining Mobile' operate from 8 PM to 2 AM to monitor key city roads. The initiative supplements existing women-focused units like Winners and Shakti.

### Significance for Governance

- The initiative reflects a model of **gender-sensitive and community policing** aimed at improving reporting comfort and night-time safety of working women. It aligns with constitutional principles under **Articles 14, 15(3) and 21** relating to equality, protective discrimination and right to life.

## West Bengal Interim Budget 2026-27

### Why in News?

- The West Bengal government presented its **Interim Budget 2026-27**, proposing an expenditure of ₹4.06 lakh crore, with a strong emphasis on **social welfare, women empowerment, youth support and inclusive growth**.

### Budget at a Glance (Key Numbers)

Component	Amount (₹ Crore)	Component	Amount (₹ Crore)
Total Budget Size	4,06,000	Total Capital Receipts	1,08,288
Total Estimated Expenditure	3,96,000	Revenue Expenditure	3,09,551
Growth over RE 2025-26	14.2 %	Capital Expenditure	86,533
Total Revenue Receipts	2,87,791		

### Sector-wise Expenditure (Major Heads)

#### Functional Classification

- **General Services:** ₹94,389 crore
- **Social Services:** ₹1,80,862 crore
- **Economic Services:** ₹73,773 crore

**Exam Point:** Social services account for ~46 % of total expenditure → **welfare-oriented budget**

### Major Sectoral Allocations

Sector	Allocation (₹ Crore)
Education, Sports, Art & Culture	51,530.62
Social Welfare & Nutrition	51,815.03
Water Supply, Sanitation, Housing & Urban Development	45,544.00
Health & Family Welfare	23,119.21
Agriculture & Allied Activities	24,312.97
Rural Development	15,919.76
Transport	14,388.23
Welfare of SC/ST/OBC	6,915.37
Irrigation & Flood Control	5,858.95
Energy	5,372.50
Industry & Minerals	2,842.96
Science, Technology & Environment	155.94

### Key Welfare & Policy Announcements

#### 1. Social Welfare Focus

- ~₹1.80 lakh crore earmarked for social welfare schemes.
- Reinforces **inclusive development & social security** model.

#### 2. Lakshmi Bhandar Scheme

- Monthly assistance **increased by ₹500**.
- Effective from **February 2026**.

- Targets women empowerment & household income support.

### 3. Dearness Allowance (DA)

- 4 % DA hike for State Government employees.
- Objective: inflation cushioning.

### 4. Youth Support – Banglar Yuva Sathi

- New unemployment assistance scheme.
- ₹1,500 per month.
- Eligibility: 21–40 years.
- Duration: Till employment or max 5 years.

### 5. Gig & Frontline Workers

- Proposal to include gig workers under social security.
- Enhanced benefits for Anganwadi & ASHA workers.

### Revenue & Fiscal Indicators

- Own Tax Revenue Growth: ~6.20 %
- Major contributors:
  - State GST
  - Excise Duties
- Indicates focus on revenue mobilisation without major tax overhaul.

## Battery Energy Storage System (BESS) in Kolkata Metro

### Context

- Kolkata Metro Railway has commissioned a 4 MW / 6.4 MWh Battery Energy Storage System (BESS) on the underground Blue Line at Central Metro Station. The system was inaugurated on 26 February 2026. It marks a major step towards power resilience, passenger safety and sustainable urban transport.

### Battery Energy Storage Systems (BESS)

Battery Energy Storage Systems (BESS) are electrochemical energy storage systems predominantly based on lithium-ion batteries (LFP and NMC) that store electricity, largely from renewable sources such as solar and wind, to balance supply–demand gaps and enhance grid stability; they deliver sub-second response for frequency regulation, provide voltage support, enable peak shaving by storing excess power for later use, offer black-start capability and backup power, thereby reducing dependence on fossil-fuel peaking plants and supporting net-zero emission targets, with applications ranging from utility-scale grid stabilization and renewable energy integration to behind-the-meter industrial and commercial use, while current trends indicate rapid capacity growth (notably in India), superior response speed compared to conventional generators and cost–lifecycle trade-offs due to battery ageing, alongside active participation by players such as Siemens Energy, Exide Industries Ltd., Waaree Energies Ltd., Amara Raja Energy & Mobility Ltd. And Tata Power.

### Battery Energy Storage System (BESS) in Kolkata Metro

#### Background.

- Urban metro systems are highly dependent on uninterrupted power supply for train movement, ventilation, signalling and passenger safety.

- Grid failures in underground corridors pose risks such as train stranding and suffocation.
- To address this challenge, Kolkata Metro has deployed a large-scale BESS, the first of its kind for an underground metro in India.

#### Key Features of the BESS.

- **Capacity:** 4 MW power with 6.4 MWh energy storage.
- **Technology Used:**
  - Lithium Iron Phosphate (LFP) batteries.
  - Advanced power electronics and inverters.
  - Advanced Chemistry Cell (ACC) batteries.
- **Infrastructure:**
  - 88 battery racks.
  - Built-in fire suppression system.
  - Compact design with approximately 14-year lifespan.
- **Industry Partner:** Delta Electronics India.

#### Operational Capabilities

- Supplies auxiliary power during grid failure.
- Enables safe hauling of trains at speeds up to 55 km/hr from mid-tunnel to the nearest station.

## Budget 2026 – What’s in it for West Bengal?

### Context.

- In the **Union Budget 2026–27**, presented by Nirmala Sitharaman, the Centre announced major infrastructure projects with significant implications for West Bengal. The focus is on freight connectivity, high-speed rail, waterways and capital expenditure-led growth ahead of the 2026 Assembly elections in the state.

### 1. New Dedicated Freight Corridor (DFC)

#### Key Announcement.

- A new **Dedicated Freight Corridor** connecting **Dankuni (West Bengal) to Surat (Gujarat)**.
- It will link eastern and western industrial hubs.

#### Existing DFC Network.

- **Eastern DFC:** Ludhiana to Dankuni.
  - **Western DFC:** Dadri to Jawaharlal Nehru Port.
- The new corridor will bridge the Eastern and Western DFCs, creating a continuous freight backbone across northern and central India.

#### Significance for West Bengal.

- Boost to Dankuni as a logistics hub.
- Faster cargo movement between Bengal and western India.
- Reduction in logistics costs.
- Decongestion of passenger railway lines.
- Support to manufacturing and exports.

- Powers tunnel ventilation, lighting and environment control systems.
- Ensures passenger safety by preventing suffocation in underground sections.

#### Significance

- First underground metro line in India to adopt a high-capacity BESS.
- Enhances operational reliability and passenger safety.
- Improves overall energy efficiency.
- Reduces dependence on diesel generators.
- Lowers carbon footprint and improves power factor.
- Helps manage peak power demand, thereby reducing energy bills.

### 2. High-Speed Rail Connectivity

Seven new high-speed rail corridors have been announced.

#### Corridor Relevant to West Bengal.

- **Varanasi–Siliguri High-Speed Rail Corridor.**

This will improve connectivity between eastern Uttar Pradesh, Bihar and North Bengal.

#### Importance for West Bengal

- Boost to tourism in North Bengal.
- Enhanced connectivity to Siliguri, the “Gateway to the Northeast.”
- Integration with airport and railway upgrades in Bagdogra and New Jalpaiguri.

### 3. Infrastructure Push

- Capital expenditure increased to **₹12.2 lakh crore** for FY 2026–27.
- One of the highest infrastructure allocations ever.

#### Relevance.

- Supports railway expansion, road networks and logistics parks.
- Encourages private investment.
- Strengthens infrastructure-led growth model.

### 4. National Logistics Policy Alignment

- Aim to reduce logistics costs from 14–16% of GDP to single digits.
- New DFC directly supports this objective.
- Improves India's competitiveness in global supply chains.

### 5. National Waterways Expansion

## NGT on Sundarbans Coastal Erosion

### Context

- The Sundarbans, part of the **Gangetic alluvial delta**, is facing acute coastal erosion.
- Causes include climate change, sea-level rise, increased cyclonic activity, upstream dams and reduced sediment flow.
- Ghoramara Island is among the worst affected areas.

### Key Observations by NGT

- Nearly **40 per cent of Ghoramara Island may disappear by 2042** due to advancing sea erosion.
- The Sundarbans lost **over 250 sq km of land between 1969 and 2019**.
- Ghoramara Island shrank from **8.59 sq km (1969) to 3.83 sq km (2019)**.
- Existing embankment works are **ad-hoc** and insufficient.
- No comprehensive long-term ecological protection plan is in place.

### Constitution of Joint Committee

- Formed by the National Green Tribunal.
- The committee is required to:
  - Prepare a **comprehensive conservation and erosion-mitigation plan**.
  - Focus on **mangrove protection and regeneration**.
  - Estimate **tentative expenditure**, funding sources and timelines.
  - Identify **responsible implementing agencies**.

### Timeline

- Report to be submitted within **three months**.
- Matter listed for further hearing on **28 May 2026**.

### Significance

- Reinforces the role of NGT in **environmental governance**.

- 20 new national waterways to be operationalised in five years.
- Promotes cost-effective and environmentally sustainable transport.
- Potential relevance for riverine transport in eastern India.

- Highlights climate vulnerability of **low-lying deltaic regions**.
- Emphasises **ecosystem-based solutions**, especially mangroves, over short-term engineering measures.
- Critical for protecting livelihoods of coastal communities in West Bengal.

### Sundarbans

#### Location & Extent | Status

- Ganga–Brahmaputra–Meghna delta | World's **largest mangrove forest**
- Hooghly (WB) → Baleswar (Bangladesh) | **UNESCO World Heritage Sites (4)**
- Total: **10,277 km<sup>2</sup>** | India part: **Endangered (IUCN, 2020)**
- India: **4,260 km<sup>2</sup>** | Tiger Reserve + Biosphere Reserve
- WB districts: **South & North 24 Parganas** |

#### Rivers & Geography | Physiography

- Hooghly, Padma, Brahmaputra, Meghna | Deltaic, tidal ecosystem
- Bay of Bengal coast | Height: **0.9–2.1 m**
- Creeks, channels, mudflats |  $\sim\frac{1}{3}$  land submerges daily
- Freshwater → saline gradient | Salt & freshwater mixing zone

#### Ecoregions | Vegetation

- Mangroves (IM1406) | **Sundari (Heritiera fomes)** – dominant
- Freshwater swamp forests (IM0162) | Gewa, Goran, Keora
- Inland → coastal transition | Pneumatophores present
- Highly fragmented inland forests | 26/50 global mangrove species

#### Flora | Fauna

- Sundari, Gewa, Keora, Goran | **Bengal Tiger** (only mangrove tiger)

- Indicator: Keora (new mudflats) | Chital, crocodile, fishing cat
- Halophytic plants | Dolphins, migratory birds
- Salinity-dependent distribution | ~450+ species total

#### Ecological Role | Economy

- Cyclone & tsunami shield | Fishing, honey, timber
- Protects Kolkata-Khulna coast | ~4 million dependents
- Prevents erosion & salinity | Deep-water rice, aquaculture

#### Climate Change | Natural Hazards

- Sea-level rise, salinity | Cyclone Sidr (2007)
- Sundari highly sensitive | Cyclone Aila (2009)
- Coast retreat ~200 m/year | Flooding & land loss

- Climate migration observed |

#### Human-made Threats | Administration

- Rampal coal power project | WB under South & North 24 Parganas
- Shrimp farming | Proposed **Sundarban district**
- Farakka → reduced freshwater | Forest divisions & sanctuaries
- Oil spill (2014) | Joint India-Bangladesh ecosystem

#### Protected Areas | Culture

- Sundarbans National Park (India) | Bonbibi, Dakshin Rai
- Sajnakhali WLS (WB) | *Manasamangal*
- Sundarbans East/West/South (BD) | *The Hungry Tide* – Amitav Ghosh

#### **National Green Tribunal (NGT)**

The **National Green Tribunal (NGT)** is a **statutory body** established under the **National Green Tribunal Act** for **speedy disposal of environmental cases** (within **6 months**). Headquartered in **New Delhi** with benches at **Bhopal, Pune, Kolkata and Chennai**, it deals with civil matters under key laws like the **Water Act (1974)**, **Air Act (1981)**, **Forest (Conservation) Act (1980)**, **Environment Protection Act (1986)** and **Biological Diversity Act (2002)**. It is guided by principles of **Natural Justice**, **Sustainable Development**, **Precautionary Principle** and **Polluter Pays Principle**. The Tribunal consists of a **Chairperson (retired Supreme Court judge)**, **Judicial Members** and **Expert Members**. Its orders are appealable to the **Supreme Court within 90 days**. Major interventions include banning old diesel vehicles in Delhi and protecting eco-sensitive zones like the Sundarbans.

## Earthquake in Kolkata

### Context

- On **27 February** at around **1:22 PM**, strong tremors were felt in **Kolkata** and adjoining districts due to a **5.4 magnitude earthquake**.

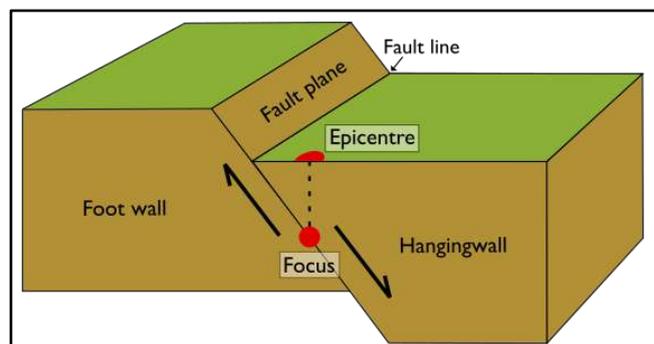
### Further Details

- **Epicentre:** Nayabazar, ~100 km from Kolkata
- **Depth (Focus):** 10 km (shallow earthquake)
- **Reported by:** **India Meteorological Department (IMD)**
- **Impact:** Brief tremors, panic & evacuation; no immediate casualties or major damage.

**Epicentre:** The point on the **Earth's surface directly above the hypocentre (focus)** where an earthquake originates underground.

### Key Concepts

- **Focus (Hypocentre):** Actual point of rupture inside Earth.
- **Epicentre:** Surface projection of the focus.



- **Focal Depth:** Usually 2–20 km (continental); can exceed 600 km in subduction zones.

### Determination of Epicentre

- Instrument used: **Seismometer**
- First waves recorded:
  - **P-waves** (Primary – fastest)
  - **S-waves** (Secondary – slower)
- **Time difference (P–S interval)** → gives distance from epicentre
- Minimum **3 seismometers** required → **Trilateration**
- Distance measured = **Epicentral Distance ( $\Delta$ )**

P-waves	S-waves
<ul style="list-style-type: none"> <li>• First to arrive at surface- Primary waves</li> <li>• Vibrate parallel to the direction of propagation of wave</li> <li>• Less destructive</li> <li>• These can travel through all mediums- Solid, liquid, gas.</li> <li>• These are compressional waves.</li> </ul>	<ul style="list-style-type: none"> <li>• Arrive at surface with some time lag- Secondary waves</li> <li>• Vibrate perpendicular to the direction of propagation of wave</li> <li>• More destructive</li> <li>• These can travel only through solids.</li> <li>• Causes displacement of rocks and collapse of structure</li> </ul>

### Important Points

- Maximum damage  $\neq$  always exact epicentre (rupture may extend far).
- **Fault rupture starts at focus** and spreads along fault line.
- Larger rupture area → Higher **magnitude**
- In large quakes, **surface rupture common**

## Banglar Yuva Sathi Scheme 2026

### Context

- The **West Bengal Government** has announced the **Banglar Yuva Sathi Scheme 2026** to address **youth unemployment** and provide **interim financial support** to educated but unemployed youth. The scheme was unveiled by **Mamata Banerjee** during the **Interim Budget**.

### Objective

- The scheme aims to act as a **transitional safety net** for **educated unemployed youth** during the period between **completion of education and employment**. It is intended to **reduce financial stress** and is **not a permanent income support scheme**.

### Key Features

- Eligible beneficiaries will receive a **monthly allowance of ₹1,500**. The scheme will be

implemented from **April 1, 2026**. It was initially planned for August 2026 but has been advanced for early rollout.

### Eligibility Criteria

- Applicants must be **permanent residents of West Bengal**. The **age limit is 21 to 40 years**. Minimum educational qualification is **Class 10 pass**. The applicant must be **unemployed at the time of application**.

### Exclusions and Exceptions

- Beneficiaries receiving **other state income-support welfare schemes** are excluded. However, students receiving **Aikyasree, Medhasree, Sikhasree and Swami Vivekananda Merit-cum-Scholarship** remain eligible.

## Changes in WBCS Promotion Norms

### Context

- The **West Bengal Cabinet** has approved **major changes in WBCS promotion norms** to address **career stagnation** and improve the availability of **experienced officers at senior levels**.

### Key Decision

- Under the revised system, officers of the **West Bengal Civil Service** will undergo **two years of probation**, followed by **three years of mandatory service as Block Development Officer**. After completing **five years of service**, officers will become **eligible for direct promotion to Sub-Divisional Officer**.

### Rationale

- The reform aims to **streamline career progression**, ensure **parity among state services** and increase the number of **experienced officers at higher administrative levels**. The decision was based on a review of promotion data from **46 state departments**.

### Creation of Additional Posts

- The Cabinet approved the creation of **20 percent additional posts** at different pay levels

in **nine state-constituted services**. In-principle approval has also been granted to extend this reform to **all other state services** in phases.

### Administrative Significance

- This is the **first comprehensive revision of cadre schedules** across all state-constituted services. The move is expected to **reduce stagnation**, improve **governance efficiency** and resolve **long-pending promotion-related issues**.

## APPOINTMENTS

Person	Position	News
Nidhi Chhibber	CEO (Additional Charge), NITI Aayog	Took additional charge as CEO after BVR Subrahmanyam completed his three-year tenure on February 24, 2026.
BVR Subrahmanyam	Outgoing CEO, NITI Aayog	Completed his three-year term as CEO, marking a leadership transition in 2026.
Mia Mottley	Prime Minister of Barbados	Secured a historic third consecutive term as her party swept all 30 seats in Parliament.
Divakar Jayant	Director General of Naval Armament (DGONA)	Assumed charge as DGONA at Naval Headquarters under the Ministry of Defence on February 2, 2026.
M Anitha	Director, Department of Defence	Appointment as Director approved by the Appointments Committee of the Cabinet under the Central Staffing Scheme, effective on assumption of charge.

## AWARDS IN NEWS

### Zero Prize

- The **Zero Prize** is India's first **results-based environmental award** with a **₹5 crore corpus**, granting **₹1 crore each** for **independently verified reduction in air, water and land pollution**, where only **measurable on-ground outcomes** qualify (not theoretical proposals), with monitoring aligned to **Central Pollution Control Board (CPCB)** standards; the initiative is convened by the **School of Policy and Governance** and supports national missions such as **NCAP, Clean Ganga Mission and Swachh Bharat Mission 2.0**.

### Boong

- The Manipuri-language film **Boong** made history by winning the **Best Children's and Family Film** category at the **BAFTA Awards 2026**, becoming the first Indian film ever to receive this honour; directed by **Lakshmipriya Devi** and backed by producers including **Farhan Akhtar** and **Ritesh Sidhwani**, the film was recognized for its emotional storytelling, cultural depth and portrayal of childhood innocence, after having gained international acclaim at festivals such as **Toronto International Film Festival 2024** and the **Warsaw International Film Festival 2024**.

## One Battle after Another

- At the **79th BAFTA Awards 2026**, the film **One Battle After Another** dominated by winning **six awards**, including **Best Film** and **Best Director** for **Paul Thomas Anderson**, while other films like **Sinners** and **Hamnet** also won multiple honours and India celebrated with **Boong** winning **Best Children's & Family Film**, marking a historic achievement for Indian cinema on the global stage.

## Dadasaheb Phalke Award

- The **Dadasaheb Phalke Award**, instituted in 1969 to honor the father of Indian cinema, recognizes **lifetime achievement** in Indian films and is considered the country's highest cinema honor, awarding recipients with the **Swarna Kamal (Golden Lotus) medallion**, a **shawl** and **₹10 lakh**; over the decades, legendary artists from across languages and regions—including **Mohanlal (2025)**, **Mithun Chakraborty (2024)**, **Rekha (2023)**, **Rajinikanth (2021, 2019)**, **Amitabh Bachchan (2018)** and **Satyajit Ray (1984)**—have been celebrated for their enduring contributions to

Indian cinema, highlighting the diversity and unity of the nation's film heritage.

## 68th Grammy Awards 2026

- The **68th Grammy Awards 2026** celebrated global musical excellence, creativity and cultural impact, spotlighting both established stars and emerging talent across diverse genres. Major wins included **Billie Eilish** for Song of the Year (*Wildflower*), **Olivia Dean** as Best New Artist, **Lady Gaga** for Best Pop Vocal Album (*Mayhem*) and **Kendrick Lamar** dominating rap categories with **GNX** and collaborations with **Pharrell Williams**, **Lefty Gunplay** and **SZA**. Other notable awards went to **Leon Thomas (R&B)**, **Turnstile (Rock/Metal)**, **The Cure (Alternative)**, **FKA twigs (Dance/Electronic)**, **Bad Bunny (Música Urbana)** and **Tyla (Global Music Performance)**. Classical, jazz, folk and visual media were also recognized, with **Andris Nelsons** conducting the Boston Symphony Orchestra and **Sinners** winning Best Compilation Soundtrack for Visual Media, while unique categories honoured narration, comedy and children's music.

## SPORTS

### Ranji Trophy 2025-26

- Jammu and Kashmir made history by winning the **Ranji Trophy 2025-26** in their maiden final appearance, defeating **Karnataka**. Led by captain **Paras Dogra**, J&K posted 584 runs in the first innings and secured a massive 291-run lead. Key performances included **Shubham Pundir's** crucial century and **Aquib Nabi Dar's** five-wicket haul. This victory made them only the **10th team in 92 years** to win the Ranji Trophy on their debut final.

### Delhi Open 2026

- At the **Delhi Open 2026**, Greece's **Stefanos Sakellaridis** won his maiden **ATP Challenger Tour singles title** by defeating Great Britain's

**Oliver Crawford** in a thrilling final (7-5, 5-6, 7-6). In the doubles event, **India's Siddhant Bantia** and **Bulgaria's Alexander Donski** clinched the trophy, continuing India's strong record in the tournament. The Delhi Open, part of the ATP Challenger Tour, provides emerging players with crucial ranking points and experience on the international tennis circuit.

### Winter Olympics 2026

- At the **Winter Olympics 2026** held in **Milan and Cortina d'Ampezzo, Italy**, **2,900 athletes** from **92 countries** competed across **116 events** in **8 sports**. **Norway** topped the medal table with **41 medals (18 golds)**, followed by

the **United States** with 33 and the **Netherlands** with 20. **Italy**, the host nation, won **30 medals** including 10 golds. Notable historic golds were claimed by **Spain, Brazil and Kazakhstan**, while countries like **India** did not secure any medals.

## Norway Gold Medal

- At the **2026 Winter Olympics** in **Milan and Cortina d'Ampezzo**, **Norway** made history by winning its **17th gold medal**, breaking the previous record of 16 set at Beijing 2022. The milestone came when **Johannes Dale-Skjevdal** delivered a flawless biathlon mass start performance, hitting **all 20 targets** and finishing in **39 minutes 17.1 seconds**. This achievement reinforced Norway's long-standing dominance in winter sports, particularly in biathlon, cross-country skiing and Nordic events, placing it at the top of the Winter Olympics all-time medal table with **405 total medals**.

## Most-Capped Player in Women's International Cricket

- On **20 February 2026**, **India captain Harmanpreet Kaur** became the **most-capped player in women's international cricket**, appearing in **356 matches** during the second T20I against Australia in Canberra. She surpassed **Suzie Bates** of New Zealand (355 matches), highlighting her longevity, fitness and consistency across formats. Since her debut in 2009, Harmanpreet has played 6 Tests, 161 ODIs and 189 T20Is, amassing over 8,400 international runs and leading India to their first **ICC Women's Cricket World Cup title in 2025**. This milestone cements her legacy as one of the greatest women cricketers globally.

## Asian Indoor Athletics Championships 2026

- At the **Asian Indoor Athletics Championships 2026** in Tianjin, China, **India's Tejaswin Shankar** won gold in the men's **heptathlon**,

setting a **new national indoor record of 5,993 points**, surpassing his previous best of 5,650 points. His performance marked India's **only gold medal** at the championship, where the country finished **sixth overall** with five medals.

- The heptathlon is a combined track and field event that consists of seven disciplines across a two-day period. Competitors earn points for their performance in each discipline and the overall winner is the athlete who scores the most points. It's considered to be the ultimate all-round-test for athletes.

## BBC Indian Sportswoman of the Year 2025

- Indian cricket star **Smriti Mandhana** was named **BBC Indian Sportswoman of the Year 2025** for her pivotal role in India's historic Women's World Cup triumph. The award, presented in New Delhi, recognized her outstanding performance, including the fastest 50-over international century by an Indian and being among the highest run-scorers in women's cricket. Young chess prodigy **Divya Deshmukh** won the Emerging Player of the Year award for her FIDE Women's World Cup victory, highlighting India's rising talent across sports.

## First bowler in the world to take 700 T20 wickets

- Afghanistan's star spinner **Rashid Khan** created history during the ICC Men's T20 World Cup 2026 match against UAE in Delhi by becoming the **first bowler in the world to take 700 T20 wickets**. Achieving this milestone in just 518 matches, he surpassed Dwayne Bravo's previous record of 631 wickets and now leads global T20 records. Rashid's tally includes 191 T20I wickets, four hat-tricks and 225 bowled dismissals—the most in T20 history—highlighting his consistency, dominance across leagues and exceptional ability to attack stumps.

## 2026 FIDE Freestyle Chess World Championship

- World number one **Magnus Carlsen** won the **2026 FIDE Freestyle Chess World Championship** in Weissenhaus by defeating **Fabiano Caruana** 2.5-1.5 in the final. The victory marked Carlsen's **21st world title across formats** and his first official FIDE-recognized title in the Freestyle (Chess960) format, where starting positions of pieces are randomized to emphasize creativity and over-the-board calculation.

## Most Number Of Wickets

- In India-Pakistan T20 World Cup clashes, **Hardik Pandya** leads with 14 wickets, followed by **Bhuvneshwar Kumar** (11), **Arshdeep Singh** (7), **Jasprit Bumrah** (7) and **Irfan Pathan** (6). These bowlers have consistently delivered breakthroughs in high-pressure matches, making India's contests against Pakistan memorable.

## Asian Rifle/Pistol Championship 2026

- At the **Asian Rifle/Pistol Championship 2026** held at **Dr Karni Singh Shooting Range, New Delhi**, India topped the medal tally with **94 medals** (51 gold, 23 silver, 20 bronze), dominating both senior and junior events. Shooters like **Amanpreet Singh** (25m Centre Fire Pistol) and **Sift Kaur Samra** (50m Rifle Prone Women - Senior) won individual medals, while India achieved multiple **podium sweeps** and team golds, reinforcing its status as a leading shooting nation in Asia.

## Asian Shooting Championships 2026

- At the **Asian Shooting Championships 2026** in **New Delhi**, Indian shooter **Manu Bhaker** won the **silver medal in the 25m pistol** event, bouncing back after finishing seventh in the 10m air pistol.
- At the **Asian Shooting Championships 2026**, **Meghana Sajjanar**, eight months pregnant, won a **bronze medal in the women's 10m air rifle** event and contributed to India's **team gold**. Her achievement is historic, highlighting exceptional **resilience, balance and mental strength** and challenges conventional notions about pregnancy and elite sports.

## IMPORTANT DAYS

Date & Occasion	Theme / Significance
1 Feb 2026 - Coast Guard Day (India)	Celebrates the role of India's Coast Guard in maritime security, rescue and safety operations. 2026 marks 50 years of continuous service to the nation.
1-7 Feb 2026 - World Interfaith Harmony Week	Promotes dialogue, mutual understanding and cooperation among different faiths.
2 Feb 2026 - World Wetlands Day	World Wetlands Day is celebrated annually on 2 February to mark the signing of the Ramsar Convention in 1971 at Ramsar in Iran. The 2026 theme, "Wetlands and Traditional Knowledge: Celebrating Cultural Heritage," focuses on the role of indigenous peoples and local communities in wetland conservation.

4 Feb 2026 – International Day of Human Fraternity	Promotes dialogue over division; encourages peace, tolerance and human fraternity.
10 Feb 2026 – World Pulses Day	Highlights importance of pulses for nutrition, food security and sustainable agriculture. The day has been officially observed since 2019, after being designated by the United Nations General Assembly in December 2018. It builds on the success of the International Year of Pulses 2016
11 Feb 2026 – International Day of Women & Girls in Science	International Day of Women and Girls in Science was declared by the United Nations to address the persistent gender gap in STEM. The theme for International Day of Women and Girls in Science 2026 is “Synergizing AI, Social Science, STEM and Finance: Building Inclusive Futures for Women and Girls.”
12 Feb 2026 – National Productivity Week	Celebrated by National Productivity Council (68th Foundation Day); focuses on enhancing productivity culture in India.
13 Feb 2026 – National Women’s Day (India)	Commemorates Sarojini Naidu; celebrates women’s achievements and empowerment.
13 Feb 2026 – World Radio Day	Stresses role of radio in digital age & AI era; ensures access to information, education and cultural programming.
18 Feb 2026 – Sri Ramakrishna Jayanti	Tribute to spiritual teachings of Sri Ramakrishna; emphasizes moral, cultural and spiritual values.
19 Feb 2026 – Shivaji Maharaj Jayanti	Marks birth anniversary of Chhatrapati Shivaji Maharaj; highlights valor, leadership and Swarajya.
19 Feb 2026 – World Day of Social Justice	Focuses on equity, human rights and social inclusion; post-Doha commitment to social justice.
20 Feb 2026 – Arunachal Pradesh Foundation Day	Arunachal Pradesh celebrates its Foundation Day (Statehood Day) annually on <b>February 20</b> , marking its establishment as the 24th state of India on February 20, 1987
20 Feb 2026 – Mizoram Foundation Day	Mizoram became a state on February 20, 1987. It was established as the 23rd state of India following the 53rd Amendment of the Indian Constitution and a peace accord with the Mizo National Front. Previously, it was a Union Territory from 1972.
21 Feb 2026 – International Mother Language Day	Theme: “Youth Voices on Multilingual Education”; promotes linguistic diversity, mother-tongue education and inclusion.
27 Feb 2025 – 95th Martyrdom Day of Chandra Shekhar Azad	Honors revolutionary leader of Hindustan Socialist Republican Association (HSRA) highlights patriotism and sacrifice for India’s freedom struggle.

28 Feb 2026 – National Science Day (India)	Commemorates C. V. Raman’s discovery of Raman Effect; theme: “Women in Science: Catalysing Viksit Bharat”; encourages women in STEM.
28 Feb 2026 – Remembering Baba Amte	Marks 18 years since the passing of social reformer Baba Amte; highlights contributions to leprosy rehabilitation and social service

## BOOKS & AUTHORS

Book / Publication	Author / Publisher
Common Weal, New India	Annie Besant
Hind Swaraj	Mahatma Gandhi
India Wins Freedom	Abul Kalam Azad
Bapu: My Mother	Manubehn Gandhi
Gita Rahasya	Bal Gangadhar Tilak
Vande Mataram (letter)	Aurobindo Ghosh
Annals and Antiquities of Rajasthan	Colonel James Tod
Vital-Vidhvansak	Gopal Baba Walangkar
Unhappy India	Lala Lajpat Rai
Kesari, Maratha	Bal Gangadhar Tilak
Durgesh Nandini, Anandmath	Bankim Chandra Chatterjee
Poverty and Un-British Rule in India	Dadabhai Naoroji
The Man Who Divided India	Dr. Rafiq Zakaria
Freedom at Midnight	Larry Collins & Dominique Lapierre
India from Curzon to Nehru and After	Durga Das
Runs and Ruins	Sunil Gavaskar
Young India	Mahatma Gandhi
The Hitavada	Gopal Krishna Gokhale
Songs from Prison	Mahatma Gandhi
The Story of My Deportation	Lala Lajpat Rai
Gita Rahasya	Bal Gangadhar Tilak
A Nation in Making	Surendranath Banerjee
Samachar Darpan	J.C. Marshman
Mirat-ul-Akhbar	Raja Ram Mohan Roy
Indian Opinion	Mahatma Gandhi
Indian Unrest	Valentine Chirol
Indian Struggle	Subhash Chandra Bose
History of the Freedom Movement in India	Tara Chand
Anandmath	Bankim Chandra Chatterjee
Precepts of Jesus	Raja Ram Mohan Roy
Our Indian Musalmans	W.W. Hunter
History of the Freedom Movement in Bihar	K.K. Dutta
Tahzib-ul-Akhlaq	Sir Syed Ahmad Khan

Al-Helal	Maulana Abul Kalam Azad
An Introduction to the Dreamland	Bhagat Singh
Why I am an Atheist	Bhagat Singh
Bandi Jivan	Sachindranath Sanyal
Indian Struggle	Subhash Chandra Bose
The Philosophy of Bomb	Bhagwati Charan Vohra
The Indian Sociologist	Shyamji Krishna Verma
Annihilation of Caste	B.R. Ambedkar
Jawaharlal Nehru – A Biography	Frank Robert Moraes
Guilty Men of India's Partition	Ram Manohar Lohia
The Great Divide	H.V. Hudson

## WEST BENGAL RELATED STATIC GK

### Protected Areas in Bengal

#### Buxa National Park & Tiger Reserve

- Located in Jalpaiguri district, Buxa is West Bengal's 15th tiger reserve (est. 1983) and became a National Park in 1992. It borders Bhutan and Assam, with rivers like Sankosh and Raidak flowing through. It has key tiger corridors connecting Bhutan forests, Manas TR and Jaldapara NP. Vegetation includes evergreen, semi-evergreen, deciduous forests and grasslands. Wildlife: Bengal tiger, elephant, gaur, sambar; notable birds: Bengal florican, great hornbill. Threats: flooding and elephant poaching.

#### Gorumara National Park

- Situated in Malbazar, Jalpaiguri, in the Terai belt, Gorumara is famed for Indian rhinoceros. Declared Wildlife Sanctuary in 1949, National Park in 1992. Jaldhaka River drains the park. Vegetation: rolling forests, riverine grasslands (Duars), moist deciduous forests. Fauna: Indian rhino, gaur, elephant, sloth bear, chital, sambar, hog deer.

#### Jaldapara National Park

- Located along Torsa River, Jalpaiguri, it has the second-largest population of Indian one-horned rhinoceros after Kaziranga. Linked to Chilapata Forest (elephant corridor) and

Gorumara NP. Vegetation: savannah with tall grasses; over 30% grasslands. Fauna: Indian rhino, leopard, elephants, sambar, gaur, hog deer.

#### Neora Valley National Park

- In Kalimpong, part of the Kanchenjunga Landscape and connected to Sikkim's Pangolakha Wildlife Sanctuary. Vegetation: Himalayan broadleaf forests with rhododendron, oak, bamboo. Wildlife: red panda, Indian leopard, black bear, golden cat, Himalayan flying squirrel, thar.

#### Singalila National Park

- Located on the Singalila Ridge, Darjeeling; famous trekking route to Sandakphu (3630 m) and Phalut (3600 m). Rivers: Rammam and Srikhola. Vegetation: coniferous, broadleaf and mixed forests. Fauna: red panda, clouded leopard, takin, yellow-throated marten, pangolin, Himalayan black bear.

#### Sundarbans Biosphere Reserve, National Park & Tiger Reserve

- World's largest mangrove forest and delta at Ganges-Brahmaputra mouth. UNESCO World Heritage Site (1987), Biosphere Reserve (2001), Ramsar Site (2019). 54 islands, tidal

ecology. Vegetation: mangroves (Sundari tree). Fauna: Royal Bengal Tiger, saltwater crocodile, Ganges dolphin, olive ridley turtle.

Threats: human pressure, fishing, logging, climate change.

## Wildlife Sanctuaries of West Bengal

- **Chapramari:** contiguous with Gorumara, between Teesta & Jaldhaka.
- **Mahananda:** Darjeeling foothills, Teesta & Mahananda rivers.
- **Ballavpur:** near Bolpur, home to cheetals, blackbuck, jackals.
- **Bethuadahari:** Nadia, preserves central Gangetic zone, spotted deer, jackals, jungle cat.
- **Bibhuti Bhusan:** North 24 Parganas, >200 deer, birds, langurs.
- **Chintamani Kar Bird Sanctuary:** south of Kolkata, diverse birds & butterflies.
- **Haliday Island:** part of Sundarbans, on Matla river.
- **Jorepokhri Salamander:** Darjeeling, high-altitude amphibians.
- **Lothian Island:** South 24 Parganas, estuarine crocodiles, sea turtles, deer.
- **Pakhi Bitan:** near Teesta Barrage, bird sanctuary.
- **Raiganj:** Uttar Dinajpur, Kulik Bird Sanctuary.
- **Ramnabagan:** Bardhaman, on Damodar river.
- **Sajnakhali:** northern Sundarbans.
- **Senchal:** Darjeeling, near Singalila NP.
- **West Sundarban:** part of Sundarbans region.

## Ramsar Sites in West Bengal

- **East Kolkata Wetlands:** natural & human-made wetlands, treat sewage, support aquaculture & agriculture.
- **Sundarban Wetland:** largest Ramsar site in India, deltaic mangrove ecosystem, home to Royal Bengal Tiger and rare species like northern river terrapin, Irrawaddy dolphin, fishing cat. Threats: overpopulation, fishing, logging, tourism, climate change.

## More

- West Bengal is the **only Indian state with land in both the Himalayas and the Gangetic delta.**
- The Torsa River, known as the Amo Chu in Tibet and Bhutan, originates in the Chumbi Valley (Tibet) and passes through Bhutan before flowing through the Jalpaiguri and Cooch Behar districts of West Bengal, India.
- **Neora Valley National Park** is the least disturbed tropical rainforest in the Himalayas of West Bengal.
- **Jaldapara Wildlife Sanctuary** is noted for both rhinos and swamp deer.
- **Sikkim and Bhutan border regions of WB** host unique Himalayan flora like rhododendrons and blue poppies.
- **Coal** – Predominantly in Raniganj Coalfield, Bardhaman; bituminous coal fuels thermal power and industries.
- **China Clay** – High-quality reserves in Darjeeling hills; used in ceramics, pottery, tiles and porcelain.
- **Fire Clay** – Found alongside coal in Birbhum, Bankura, Purulia; raw material for refractory bricks and pottery.
- **Limestone** – Deposits in Purulia, Bankura, Birbhum; essential for cement, iron and steel industries.
- **Silica Sand** – Abundant in Medinipur; used in glass, ceramics, foundry molds and metallurgy.
- **Apatite & Rock Phosphate** – Purulia district; used in phosphatic fertilizer production.
- **Dolomite** – Purulia reserves; applied in float glass, iron & steel flux and soil conditioning.
- **Quartz** – Found in Purulia pegmatites; used in glass, foundry molds and electronics.
- **Feldspar** – Purulia pegmatites; key raw material for ceramics and glass manufacturing.

## STATIC GK

**United Nations Democracy Fund (UNDEF):** Created in 2005 by Kofi Annan to support democratization, relying on voluntary contributions.

**President's Bodyguard (PBG):** Raised in 1773 by Warren Hastings in Benares, oldest regiment of the Indian Army.

**Srijan Portal:** Encourages FDI in the defense sector.

**Akash Weapon System (AWS):** Indigenous SRSAM by DRDO, targets helicopters, fighter aircraft, UAVs.

**Tactical Nuclear Weapons (TNWs):** Short-range weapons: land (<500 km) and air/sea (<600 km).

**Umiam Lake:** In Meghalaya, aka "Bara Pani," created for first hydel project.

**Congo Basin:** Spans Cameroon, CAR, DRC, Congo, Equatorial Guinea, Gabon; excludes Angola.

**Siyom Bridge:** In Arunachal Pradesh, enhances strategic connectivity along Sino-India border.

**Mahila Samman Savings Certificate Scheme (MSSC):** Exclusively for women, max deposit ₹2 lakh.

**Trade Secrets:** Confidential information protected under IPR; India lacks specific law.

**Ajrak:** Ancient block-printing craft from Gujarat using natural dyes.

**Ankia Naat:** Assamese one-act play linked to Sattriya dance, depicts Krishna's life.

**High-altitude Balloons:** Used in meteorology, astronomy, espionage.

**Fields Medal:** Awarded every 4 years to mathematicians under 40.

**Largest shareholder in World Bank:** United States.

**Vande Mataram Movement (1907):** In Andhra Pradesh, led by Harisarvothama Rao & Pingali Lakshmi Narayana, ended with annulment of Bengal partition.

**Direct Listing Scheme:** Allows Indian companies to list on foreign exchanges without intermediaries.

**Toll Operate Transfer (TOT) Model:** Private entities collect tolls for set period; govt regains ownership later.

**Subak System:** Traditional Bali irrigation via canals and dykes to rice terraces.

**Hashing:** Scrambles data integrity, encryption secures data transmission.

**Sitabena & Jogimara Caves:** Ancient caves in Ramgarh hills, Chhattisgarh.

**Horizontal Gene Transfer (HGT):** Non-sexual genetic material movement between organisms.

**Fifth Mass Extinction:** Known for dinosaur extinction via asteroid impact.

**El Niño Modoki:** Warming in central tropical Pacific, cooling in eastern & western Pacific.

**GRAPES-3 experiment:** Studies solar flares' impact on Earth's climate, in Ooty, Tamil Nadu.

**Andes Mountain Range:** Stretches across Venezuela, Colombia, Ecuador, Peru, Bolivia, Chile, Argentina.

**Schengen Area:** 27 European countries with abolished internal borders.

**UNCAC:** Only legally binding international anti-corruption treaty.

**Environmental DNA (eDNA):** DNA released via feces, mucous, gametes, not UVB resistant.

**Payments Infrastructure Development Fund (PIDF):** Covers QR codes, biometric devices, PoS terminals.

**Ayak & Anyat:** Millet varieties grown by Adi community, Arunachal Pradesh.

**Milling Copra:** Used to extract oil; ball copra consumed as dry fruit.

**SIGHT Programme:** Under National Green Hydrogen Mission, boosts electrolyser & green hydrogen production.

**Pheromones:** Chemicals triggering behavior in same-species animals.

**Longest coastline (Indian states):** Gujarat.

**Calcium-41:** Shorter half-life than C-14, rare detection.

**Public Charging Stations (PCS):** De-licensed, managed by DISCOMs.

**Nodal agency for EV charging:** Bureau of Energy Efficiency (BEE).

**Connected Lending:** Loans to owners/related businesses on softer terms.

**Calibrated Tightening Policy:** RBI's policy tilt toward rate hikes, not at every meeting.

**Hazardous Wastes (India):** Includes mercury, cadmium, arsenic.

**Bengal Barrier:** Proposed green wall on West Bengal's western border.

**Hussain Sagar Lake:** Built under Ibrahim Quli Qutub Shah, links Hyderabad & Secunderabad.

**Spiral Galaxies:** Young stars form in spiral arms; elliptical galaxies have less gas & dust.

**REDD+:** UNFCCC mechanism incentivizing low-carbon sustainable development.

**First organized trade union (India):** Madras Labour Union (1918).

**Realized Niche:** Species' actual habitat limited by competition & predation.

## CURRENT AFFAIRS GK

**India hosted the India AI Impact Summit 2026** in New Delhi (16-21 Feb), the first major global AI summit in the Global South.

**India formally signed the Pax Silica Declaration** with the United States at the AI Impact Summit to deepen strategic tech cooperation.

**AI Impact Summit 2026** positioned India as a leader in inclusive AI, focusing on development and governance.

**India launched new Indian AI models** including Sarvam AI and BharatGen Param2 at the Summit.

**French President Emmanuel Macron visited India (17-19 Feb)** for AI summit and bilateral talks.

**India-France Year of Innovation 2026** was launched to deepen cooperation in tech, health and science.

**India-France elevated ties to Special Global Strategic**

**Partnership** for future cooperation.

**Cybercrime in India rose 24% in 2025**, with losses of over ₹22,000 crore, led by investment scams.

**New GDP series with base year FY23** introduced for revised national economic estimates.

**Operation Ghazablil Haq** marked armed conflict escalation along the Pakistan-Afghanistan border.

**Pakistan-Afghanistan armed conflict** remains a key security issue affecting regional stability.

**India unveiled 'Prahaar'**, its first comprehensive counter-terrorism policy for modern terror threats.

**India hosted three major naval events in Vizag** (IFR, MILAN, IONS Conclave) showcasing maritime power.

**India ranked 130th in HDI 2025**, marking progress in health, education and income but persistent inequalities.

**Renaming Kerala as Keralam:** The Union Cabinet approves changing Kerala's official name to reflect its Malayalam heritage.

**LCH Prachand** - India's indigenous light combat helicopter operates above 5,000 meters, strengthening high-altitude defense capabilities.

**Villages of Excellence Initiative** - India-Israel collaboration integrates high-tech agriculture into villages to boost farmer income and productivity.

**Meningococcal Infection** - A rapidly progressing bacterial infection causing meningitis and septicemia, with high fatality if untreated.

**Suspension of Fortified Rice Rollout** - Fortified rice distribution under welfare schemes is paused due to nutrient degradation during storage.

**BharatGen and IndiaAI initiatives** use AI for precision agriculture, multilingual governance and rural healthcare.

**Carbon Capture and Utilisation (CCU):** India allocates ₹20,000 crore to scale CCUS technologies, promoting a circular carbon economy.

**Human Papillomavirus (HPV) Vaccination:** India rolls out a nationwide free HPV vaccination program to prevent cervical cancer in adolescent girls.

**Congo Lakes (Mai Ndombe and Tumba):** Ancient peat carbon from Congo's Mai Ndombe and Tumba lakes is being released, raising climate concerns.

**Military Exercises (Dharma Guardian & Vajra Prahar):** India strengthens defence cooperation with Japan and the US through joint military exercises.

**India-France Double Taxation Avoidance Convention (DTAC) update:** The DTAC amendment aligns taxation rules with international

standards and clarifies capital gains and dividends.

**Prahaar is India's first integrated anti-terror policy** focusing on proactive, intelligence-led operations.

**Vasai Cathedral won UNESCO merit** for authentic, community-driven heritage conservation.

**INS Anjadip** enhances India's coastal anti-submarine warfare capabilities as an indigenously built vessel.

Cybercrime cases in India rose 24% in 2025, causing ₹22,495 crore losses.

**"One Plant Per Day" initiative** promotes mass environmental awareness and afforestation.

**Operation Chivalrous Knight 3** provides large-scale humanitarian relief to Gaza.

**India assumed the Chairmanship of the Indian Ocean Naval Symposium (IONS)** to enhance maritime cooperation in the Indian Ocean.

**Strait of Hormuz** - Strategic oil chokepoint linking Persian Gulf to the Indian Ocean, critical for global energy security.

**United Nations Environment Programme Finance Initiative Impact Centre:** A specialized UN centre guiding financial

institutions to align investments with sustainability and SDGs.

**PM RAHAT Scheme:** Provides cashless emergency treatment up to ₹1.5 lakh for road accident victims during the Golden Hour.

**Bio-based Chemicals and Enzymes:** Promotes renewable feedstock and enzyme-driven industrial processes to reduce petrochemical dependence.

**Urban Challenge Fund (UCF):** A ₹1 lakh crore market-linked initiative to transform urban infrastructure through competitive and reform-driven projects.

**CBDC-based Public Distribution System (PDS):** Digitally enabled ration delivery using central bank digital currency for transparency and efficiency.

**Kyasanur Forest Disease (KFD) -** Indigenous vaccine trials target a tick-borne viral disease endemic to the Western Ghats.

**United States-India Interim Trade Agreement -** Interim trade framework enhances reciprocal market access, tariff alignment and strategic supply chain cooperation.

**Increased Capital Spending for the Defence Sector:** India's defence budget rises 15.2% with 75% of capital

acquisitions earmarked for domestic industry.

**Waste-pickers enumeration under NAMASTE scheme:** Over 84% of India's waste-pickers belong to SC, ST and OBC communities, highlighting occupational inequities.

**Solid Fuel Ducted Ramjet (SFDR) Technology:** DRDO successfully demonstrates indigenous air-breathing missile propulsion for sustained supersonic flight.

**Project Vault:** US launches a \$12 billion stockpiling program to secure critical minerals and reduce dependence on China.

**Removal of the Chief Election Commissioner (CEC):** CEC can be removed like a Supreme Court judge via parliamentary special majority for proven misbehavior or incapacity.

**Blue Line along the Lebanon-Israel frontier:** The UN-monitored Blue Line marks Israel's withdrawal from southern Lebanon to maintain regional stability.

**Turtle Trails:** Eco-tourism 'turtle trails' in Odisha, Karnataka and Kerala aim to protect Olive Ridley nesting sites and support local communities.

**Seychelles:** Strategic Indian Ocean archipelago hosting 115 islands, emphasizing marine

conservation and the blue economy.

**Addition of 2 New Wetlands to India's Ramsar List:** Patna Bird Sanctuary and Chhari Dhand are India's newest Ramsar sites, raising the total to 98.

**SBI launches 'CHAKRA' Centre of Excellence:** SBI's CHAKRA CoE strengthens financing expertise for eight critical sunrise sectors.

**Pennaiyar River:** The Pennaiyar River dispute between Tamil Nadu and Karnataka underscores the need for inter-state water management.

**Sabhasaar Initiative:** Over 1.11 lakh Gram Panchayats adopted the AI-powered SabhaSaar platform for automated Gram Sabha meeting summarisation.

**India Joins BRICS Centre for Industrial Competencies:** India joined BCIC to enhance industrial competitiveness, MSME support and digital transformation across BRICS countries.

**Anthropic AI Workplace Suite:** Anthropic launched autonomous AI agents capable of performing complex office tasks, raising concerns of disintermediation in SaaS and IT services.

**Bharat Taxi Cooperative:** India launched its first driver-owned

cooperative taxi service to promote inclusive, commission-free mobility under Sahkar se Samridhhi.

**Military Exercises:** India conducted Exercises Khanjar, Agni Pariksha and Vayu Shakti-2026 to enhance joint

operational readiness across Army, ITBP and IAF units.

**Rafah Border Crossing:** The Rafah Border between Gaza and Egypt reopened to allow humanitarian aid and limited civilian movement under international monitoring.

**Karimpuzha Sanctuary:** Karimpuzha

Sanctuary, spanning seven forest types, recorded new species, reinforcing its status as a Western Ghats biodiversity hotspot.

**Wildlife:** Kerala's Wildlife

Sanctuary, spanning seven forest types, recorded new species, reinforcing its status as a Western Ghats biodiversity hotspot.

## LEARNING THROUGH INFOGRAPHICS

**NATIONWIDE HPV VACCINATION TO PREVENT CANCER**

The Government of India is launching a nationwide HPV vaccination programme targeting 14-year-old girls to prevent cervical cancer.

**Why it Matters**

- Cervical cancer = 2nd most common cancer among Indian women.
- ~80,000 new cases & 42,000+ deaths annually.
- Largely preventable with timely vaccination.

**About HPV (Human Papillomavirus)**

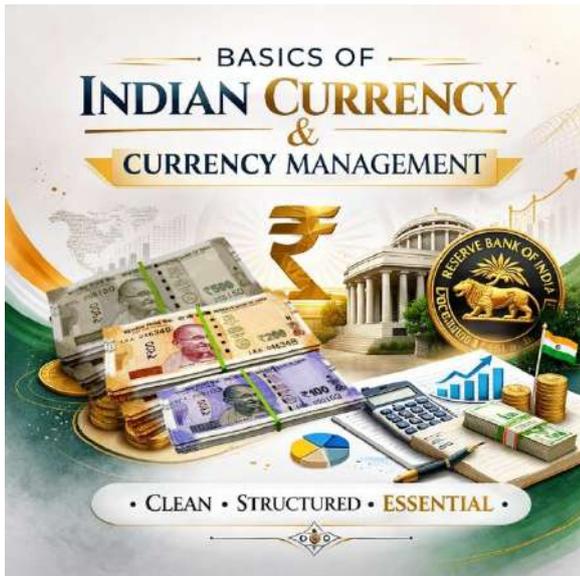
- Virus type: Small, non-enveloped DNA virus, circular, double-stranded.
- Transmission: Skin-to-skin contact, sexual routes, enters via small cuts/abrasions.
- Impact: Most infections clear naturally; persistent high-risk types cause cancers, others → warts.

**Vaccine - Gardasil-4 (Merck & Co.)**

- Type: Recombinant vaccine using virus-like particles (no live virus).
- Protection: Against HPV types 16, 18, 6, 11.
- Target group: 14-year-old girls nationwide.

**Program Goal**

- Prevent cervical cancer and save thousands of lives every year.



**What is Legal Tender?**

**Coins**

- Law: Coinage Act, 2011
- Issued by Government of India
  - Should not be defaced or underweight

**Limits per transaction**

- ₹1 and above → Valid up to ₹1000
  - 50 paise → Valid up to ₹10
- You cannot be forced to accept coins beyond this limit (but you may accept voluntarily).

**Banknotes**

- Law: Reserve Bank of India Act, 1934 (Section 26)
- Issued by RBI
  - Legal tender across India
  - Guaranteed by Central Government
  - ₹1 note is issued by Government of India

**How Currency Reaches You**

**Step-by-step flow:**

- Printing Press
- RBI Issue Office (19 offices + Kochi chest)
- Currency Chest
- Bank Branch
- Public

**Currency Chest**

- Store notes & rupee coins
- Managed by selected banks
- 2691 chests

**Small Coin Depots:**

- Store coins below ₹1
  - 2299 depots (as on Feb 28, 2025)
- Coins first go to Mint Linked Offices: Hyderabad, Kolkata, Mumbai, New Delhi.

**Demonetisation Explained**

Old notes withdrawn:

- ₹500 & ₹1000 (on 8 Nov 2016)

₹2000 note continues to be legal tender.

Past Demonetisations:

- 1946 → ₹500, ₹1000, ₹10000
- 1978 → ₹1000, ₹5000, ₹10000
- 2016 → ₹500 & ₹1000

Law governing 2016:

Specified Banknotes (Cessation of Liabilities) Act, 2017

After grace period:

- Max 10 notes allowed
- 25 allowed for research/numismatics

**Where is Money Printed?**

Banknotes (100% cotton paper)  
Printed at 4 presses:  
Nasik | Dewas | Mysuru | Salboni

Coins are minted at:  
Mumbai | Hyderabad | Kolkata  
| Noida  
Coins are issued into circulation  
through RBI (Section 38).

**Role of RBI in Currency Management**

**RBI**

- Sole authority to issue notes (Section 22)
- Note design approved by Central Govt (Section 25)
- Estimates yearly demand
- Places printing orders (indent)
- Destroys damaged notes
- Implements Clean Note Policy
- Distributes coins minted by Government

**Notes are backed by (Section 33)**

- Gold coin
- Gold bullion
- Foreign securities
- Rupee coins
- Rupee securities

**Laws Governing Indian Currency**

- Reserve Bank of India Act, 1934
  - Coinage Act, 2011
  - RBI (Note Refund) Rules, 2009
  - Amendment Rules, 2018
  - Master Directions on Exchange of Notes & Coins
- Earlier Paper Currency Acts have been repealed.

**Banknote Series & Denominations**

**Ashoka Pillar Series (1949)**

- Lion Capital watermark
- "Satyameva Jayate" added in 1970

**Mahatma Gandhi Series (1996)**

- MG Series 2005
- Added extra security features

**Mahatma Gandhi (New) Series – 2016**

- Smaller size
- Indian themes
- First note: ₹2000 (Mangalyaan theme)
- Later: ₹500, ₹200, ₹100, ₹50, ₹20, ₹10

**Current Notes:**

- ₹10, ₹20, ₹50, ₹100, ₹200, ₹500, ₹2000
- ₹1 → Government of India
- ₹2 & ₹5 → Discontinued
- Highest ever printed → ₹10000 (demonetised in 1946 & 1978)

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## India & Kimberley Process (KP)

India assumes Chairmanship of KP in 2026.

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## Kimberley Process (KP)

- Started: 2000 (by Southern African countries).
- Nature: Voluntary, not legally binding.
- Aim: Prevent trade in conflict diamonds.
- Members: 60 participants | 86 countries.
- Coverage: 99.8% of global rough diamond production.

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## India & Diamonds

- Only active mine: Majhgawan (Panna, MP) - GI-tagged
- ~90% of world diamonds processed in India
- ~75% global value turnover (Surat & Mumbai hubs)
- Major importer of rough diamonds

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## Kimberley Process Certification Scheme (KPCS)

- Launched: 2003
- Mandatory tamper-proof KP certificate for cross-border trade in rough diamonds
- Trade allowed only among certified members
- National laws enforce compliance; members share production & trade data
- India: Founding member.

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## Lab-Grown Diamonds (LGDs): India's New Edge

- 2023: >3 million LGDs | 15%+ of global output
- Produced via CVD & HPHT technologies
- Policy support:
  - Customs duty removed on carbon seeds (Fy26)
  - 100% FDI permitted
- Goal: From polishing hub → global LGD manufacturing leader

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## Core Challenges Facing the KP

- Narrow definition: Ignores state-led violence & human rights abuses.
- "Mixed origin" loophole: Weak traceability enables laundering.
- Consensus veto: One country can block reforms.
- No permanent secretariat: Weak monitoring & crisis response.
- Ineffective embargoes: e.g., Central African Republic.
- Rough-only scope: Polishing removes KP oversight.
- LGD shift: Ethical concerns reducing demand for natural diamonds.