



KAVISH IAS

— Converting Possibilities into Reality —

KAVISH INFORMIX

DAILY CURRENT AFFAIRS

🎯 PRECISE | 🧠 RELEVANT | ⌚ EXAM FOCUSED

STAY AHEAD. STAY INFORMED. STAY READY.

TODAY'S DATE



04 SEPTEMBER 2026

---FRIDAY----



Kolkata Topper

VAISHNA BISWAS

AIR - 367 | CSE 2025

★ OUR PROVEN LEGACY ★

OUR UPSC TOPPERS 2023



IPS LAXMAN PRATAP
RANK - 597

FORMER ASST. COMMANDANT IN BSF
CITY COLLEGE KOLKATA

OUR UPSC TOPPERS 2024



IRS SARLA JAKHER
AIR 593

CITY COLLEGE KOLKATA



IRS TANMAY
AIR 346

IIT KHARAGPUR



YOUR
DREAMS.

OUR
MISSION.

TOGETHER,
WE ACHIEVE
THE EXTRA
ORDINARY.

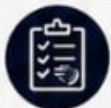


Converting Possibilities into Reality

PRELIMS MAINS | INTERVIEW



DAILY CURATED
NEWS



EXAM ORIENTED
ANALYSIS



SMART NOTES &
INFOGRAPHICS



BOOST YOUR
PREPARATION

“INFORMED TODAY, EMPOWERED TOMORROW.”

📞 8789245158 | 9875489158 📍 36A, Shakespeare Sarani, Kol -17

DAILY CURRENT AFFAIRS-

1. Air Quality Panel Taps ISRO to Improve Tracking of Punjab, Haryana Farm Fires
2. India and Belgium Ramp Up Bilateral Defence Cooperation
3. Glacial Lakes and GLOF Preparedness
4. Exports and GDP Growth

1. Air Quality Panel Taps ISRO to Improve Tracking of Punjab, Haryana Farm Fires

Source: The Hindu

Context:

The Commission for Air Quality Management (CAQM) is working with Punjab and Haryana and consulting the Indian Space Research Organisation (ISRO) to improve the detection and measurement of stubble-burning incidents. The initiative aims to address the contribution of farm fires to winter air pollution in Delhi-NCR.

Why in News?

- CAQM is seeking ISRO's assistance to strengthen satellite-based monitoring of farm fires.
- The focus is on improving "ground truthing" so that satellite observations can be validated with actual field conditions.
- The initiative is important ahead of the October–November period, when stubble burning contributes significantly to Delhi-NCR's air pollution.
- Previous estimates of declining farm fires may have been overstated because some farmers reportedly shifted burning to evening hours to avoid satellite detection.

Key Highlights:

- Agencies involved: CAQM, ISRO, Punjab and Haryana governments.
- Main issue: Monitoring and accurate estimation of agricultural residue burning.
- Major region: Punjab and Haryana.
- Main concern: Winter air pollution in Delhi-NCR.
- ISRO observations indicate that peak fire activity shifted from around 1:30 p.m. in 2020 to about 5 p.m. in 2024.
- CAQM wants to move beyond simply counting detected fires towards more accurate estimation of their scale and pollution impact.

Why Stubble Burning Occurs?

- Paddy harvesting leaves large quantities of crop residue.

- Farmers have a short window to clear fields before sowing wheat.
- Burning provides a quick and inexpensive method of residue disposal.
- The practice becomes particularly significant after the monsoon season when paddy harvesting begins.

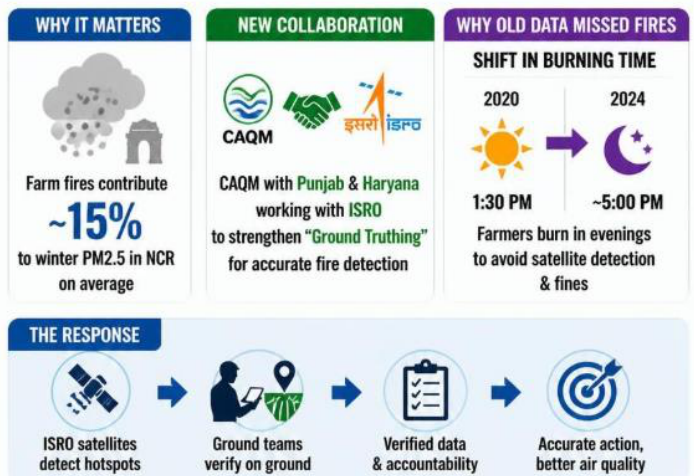
Role of Satellite Monitoring:

- Satellite imagery enables large-scale and relatively rapid identification of agricultural fires.
- Polar-orbiting satellites generally observe the region during particular periods of the day.
- Farmers shifting burning to evening hours can therefore reduce the probability of detection.
- Satellite observations also have limitations in estimating the quantity of straw burnt, moisture content and combustion efficiency.

CAQM-ISRO PUSH

BETTER DETECTION OF STUBBLE FIRES

TO FIGHT WINTER POLLUTION IN NCR



Ground Truthing:

- Ground truthing involves comparing satellite observations with actual conditions observed on the ground.
- It can help determine whether detected hotspots correspond to genuine farm fires.
- It can also improve estimates of the amount of crop residue burnt and the resulting emissions.
- A standardised protocol can make satellite-derived fire data more reliable for policymaking and enforcement.

Impact on Delhi-NCR Air Pollution:

- Farm fires contribute around 15% of particulate pollution over an entire winter.
- Their contribution can rise to nearly 44% during particular weeks.
- Pollution from Punjab and Haryana can affect Delhi-NCR when favourable wind conditions transport pollutants towards the region.

- The problem is therefore regional rather than confined to the states where burning occurs.

Challenges in Monitoring:

- Evening burning can escape satellite observation.
- Satellite sensors may not accurately capture straw quantity and moisture.
- Different combustion conditions produce different levels of emissions.
- Simple fire counts do not necessarily indicate the magnitude of pollution generated.
- Reliable data is essential for targeted enforcement and policy intervention.

Way Forward:

- Develop standardised satellite-based ground-truthing protocols.
- Combine satellite observations with field-level verification.
- Improve the temporal frequency of fire detection.
- Use emission estimates rather than relying only on the number of fire incidents.
- Strengthen access to affordable alternatives for crop-residue management.
- Coordinate CAQM, ISRO, State governments and local administrations for integrated monitoring.

UPSC Prelims Practice Question:

Q1. With reference to agricultural residue burning and satellite-based monitoring, consider the following statements:

1. Ground truthing involves validating satellite observations against actual conditions on the ground.
2. Satellite-based monitoring can be affected when farm fires occur outside the usual satellite observation period.
3. Satellite fire counts alone can precisely determine the quantity of straw burnt and combustion efficiency.
4. Farm fires can contribute significantly to particulate pollution in Delhi-NCR during certain weeks.

Which of the statements given above are correct?

- (a) 1 and 2 only
(b) 1, 2 and 4 only

(c) 2, 3 and 4 only

(d) 1, 2, 3 and 4

Answer: (b) 1, 2 and 4 only

UPSC Mains Practice Question:

Q. Stubble burning is not merely a local agricultural issue but a regional air-quality challenge. Discuss how satellite technology, ground truthing and crop-residue management can together address the problem. (15 marks, 250 words)

2. India and Belgium Ramp Up Bilateral Defence Cooperation

Source: The Hindu

Context:

India and Belgium have strengthened bilateral defence and security cooperation through three government-level agreements. The two countries also discussed global conflicts, terrorism, maritime security, trade and investment.

Why in News?

- India and Belgium signed three agreements to deepen defence and security cooperation.
- India announced the appointment of a Defence Attaché at its Embassy in Brussels.
- Prime Ministers Narendra Modi and Bart De Wever discussed the conflicts in Ukraine and West Asia.
- Both sides emphasized dialogue, diplomacy and the need to eliminate terrorism.
- India and Belgium aim to double bilateral trade within five years.

Key Agreements:

1. Letter of Intent on Defence Cooperation

- Provides a framework for strengthening bilateral defence cooperation.

2. Defence Industry MoU

- Signed between the Belgian Security and Defence Industry and the Society of Indian Defence Manufacturers.
- Seeks to expand cooperation between defence industries of both countries.

3. Security Cooperation MoU

- Signed between the Central Bureau of Investigation (CBI) and Belgium Federal Police.
- Focuses on cooperation against transnational organised crime, cybercrime and related threats.

Defence Cooperation:

- Belgium is seeking greater cooperation with India's defence industry.
- Belgian sources indicated that several private defence agreements could facilitate production of Belgian military items in India.
- The appointment of a Defence Attaché is expected to strengthen institutional defence engagement.
- Greater defence-industrial cooperation can support technology, manufacturing and supply-chain partnerships.

Maritime Security:

- India and Belgium emphasized the safety and security of maritime routes.
- Both sides supported safe and unimpeded maritime shipping.
- Maritime cooperation is significant because disruptions to shipping routes can affect global trade and supply chains.

Understanding Defence Cooperation Agreements (DCAs)

- Defence Cooperation Agreements are formal bilateral or multilateral pacts designed to enhance military-to-military ties, streamline technology transfer, and ensure regional security. For India, these are no longer just about buying weapons; they focus on **co-development, co-production, and strategic interoperability**.

1. The India-U.S. "Foundational Agreements"

The U.S. signs four specific "enabling" agreements with close partners to facilitate high-end military cooperation. India has signed all four, using India-specific versions to protect its **strategic autonomy**

Agreement	Year	Core Function
GSOMIA / ISA	2002 / 2019	Allows sharing of classified military intelligence between governments and private sector firms.
LEMOA	2016	Provides mutual logistical support (refueling, supplies) using each other's bases.
COMCASA	2018	Enables secure, encrypted communication between the two militaries during joint operations.
BECA	2020	Facilitates sharing of geospatial intelligence and satellite data for precision missile targeting.

2. Recent Landmarks (2025-26)

India's defence diplomacy has recently moved toward long-term roadmaps and high-tech industrial collaboration:

- 10-Year India-U.S. Defence Framework (2025–2035):** Signed in October 2025 at the ADMM-Plus, this replaces the 2015 agreement. It focuses on **iCET (Initiative on Critical and Emerging Technology)**, joint production of jet engines, and integrated deterrence in the Indo-Pacific.
- India-Belgium Defence Pacts (2026):** Signed in September 2026, these include a **Letter of Intent** for undersea systems, underwater robotics, and protection of critical subsea data cables.
- India-France Hammer Deal (2025):** An agreement to jointly manufacture the **HAMMER** precision weapon system in India, shifting the relationship toward "Make in India, Make for the World."
- India-UK Missile Deal:** A £350 million agreement for **Lightweight Multirole Missiles (LMM)**, emphasizing supply chain integration.

Significance for India:

- Diversifies India's defence partnerships in Europe.
- Strengthens defence-industrial cooperation and domestic manufacturing.
- Enhances cooperation against cybercrime and transnational organised crime.
- Supports India's broader engagement with the European Union and European partners.
- Strengthens maritime security and protection of global trade routes.
- Creates opportunities for expanding trade, investment and technology partnerships.

UPSC Prelims Practice Question:

Q1. With reference to recent India-Belgium relations, consider the following statements:

1. India and Belgium signed a Letter of Intent on Defence Cooperation.
2. The CBI and Belgium Federal Police signed an MoU concerning transnational organised crime and cybercrime.
3. India announced the appointment of a Defence Attaché at its Embassy in Brussels.
4. India and Belgium announced an objective of doubling bilateral trade within five years.

Which of the statements given above are correct?

- (a) 1 and 2 only
(b) 1, 2 and 3 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4

Answer: (d) 1, 2, 3 and 4

UPSC Mains Practice Question:

Q. India's growing defence and security cooperation with European countries reflects the diversification of its strategic partnerships. Discuss the significance of India-Belgium cooperation in defence, maritime security, counter-terrorism and trade. (15 marks, 250 words)

3. Glacial Lakes and GLOF Preparedness

Source: The Hindu, Pg. 14

Context:

The Union Home Ministry directed Himalayan States and Union Territories to strengthen monitoring and preparedness for Glacial Lake Outburst Floods (GLOFs) and snow avalanches, following recent flash floods in Nepal.

Key Points

- Himalayan States and UTs have been asked to undertake continuous monitoring of vulnerable glacial lakes and avalanche-prone areas.
- Emphasis was placed on proactive risk assessment, early warning systems and risk-informed land-use planning.
- Coordination among State agencies, district administrations and scientific institutions is essential for timely evacuation and disaster response.
- Climate change is increasing risks through accelerated glacier melting and destabilisation of glacial lakes and moraine dams.

Glacial Lake Outburst Flood (GLOF)

- A GLOF occurs when water stored in a glacial lake is suddenly released, causing a rapid and destructive downstream flood.
- Glacial lakes may be formed by the melting of glaciers and can be held back by unstable moraine or ice dams.
- Sudden dam failure can be triggered by avalanches, landslides, earthquakes or rapid changes in the lake.

India's Preparedness

- The National Disaster Management Authority (NDMA) issued guidelines on GLOF management in 2020, focusing on identification, risk reduction and early warning.
- The National Glacial Lake Outburst Flood Risk Mitigation Project (NGRMP) covers vulnerable Himalayan States including Arunachal Pradesh, Himachal Pradesh, Sikkim and Uttarakhand.
- The Central Water Commission (CWC) monitors 902 glacial lakes and water bodies for changes in water-spread areas.
- C-DAC has deployed India's first GLOF Early Warning System in Sikkim.
- Himachal Pradesh has identified 67 vulnerable glacial lakes and is developing early warning systems for four critical lakes.

4.Exports and GDP Growth

Source: The Hindu, Pg. 1

Context:

India recorded 7.8% GDP growth in April–June 2026, with strong export performance and lower real imports making a significant contribution despite disruptions caused by the West Asia crisis.

Export Performance

- Goods exports reached a record \$44.24 billion in June 2026.
- Goods exports during April–June increased 15% year-on-year to \$129.32 billion.
- Net exports contributed around 3 percentage points to GDP growth, partly due to a decline in real imports.
- Export growth was supported by FTAs, diversification of export destinations and improved competitiveness.
- Exports to Singapore nearly doubled to \$6.5 billion during April–June.
- Exports to Australia and the UK increased by 25% and 11%, respectively.



Sectoral Trends

- Engineering goods and electronics recorded strong growth, reflecting India's increasing presence in higher-value exports.
- Labour-intensive, low-margin sectors such as textiles, leather, tea, fruits, vegetables, ceramics and jute faced pressure.
- Higher freight costs disproportionately affect low-margin products because exporters have limited ability to absorb increased logistics expenses.

- The West Asia crisis caused a sharp rise in freight rates in key markets.
- Tea exports could decline significantly due to the conflict and payment-related difficulties with Iran.

Factors Supporting Exports

- Depreciation of the Indian rupee improved price competitiveness of Indian exports.
- Export diversification reduced dependence on individual markets and helped offset weaker exports to the UAE.
- FTAs with countries such as Australia and the UK are providing greater market access.
- However, volatile crude oil prices, higher logistics costs and supply disruptions remain risks to future export growth.

