

Current Affairs - 08 January 2026

WHY SILVER SOARED 160% IN 2025

- Unlike gold, which is mainly valued as a store of wealth, silver benefits from diverse sources of demand.
- Its unique physical properties make it essential for industrial uses such as batteries, solar panels, and electronics—sectors critical to future technologies.
- Alongside this, silver also has strong demand in jewellery and coins.
- This **wide mix of industrial, investment, and ornamental** uses makes silver's buyer base broader and its price dynamics more powerful than gold's.

Supply Constraints and Geopolitics Fuel Silver's Rally

- **Byproduct Supply and Demand Mismatch** - Silver is largely produced as a byproduct of mining other metals. Its supply has failed to keep pace with rising industrial demand, tightening the market over several years.
- **US Adds Silver to Critical Minerals List** - In November 2025, the United States added silver to its critical minerals list, updated by the US Geological Survey. This influences government financing and potential tariff reviews under Section 232.
- **Tariff Fears Drive Stockpiling** - Even before the listing, fears of tariffs led to heavy stockpiling. Data from CME Group showed US silver inventories surged to 531 million ounces in September, far above normal levels.
- **China's Export Curbs Add Pressure** - New rare metals export restrictions by China, effective for two years, have heightened concerns, as silver is included in the controls.
- **Industry Alarm Over Supply Risks** - The restrictions have worried manufacturers reliant on silver. Elon Musk, CEO of Tesla, warned that silver is essential for many industrial processes, underscoring supply-chain anxieties.

Fear of Missing Out Fuels Silver's Price Spiral

- **Physical Shortages Trigger Price Spikes** - Heavy US stockpiling created supply mismatches in global hubs like London, where benchmark prices are set. Shortages of physical silver by October pushed prices sharply higher.



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

Current Affairs - 08 January 2026

- **Retail Momentum Joins the Rally** - The Bank for International Settlements noted that trend-chasing retail investors sought to ride gold's momentum in 2025, pulling silver into speculative buying as well.
- **India's ETF Inflows Amplify Demand** - Indian investments surged, with Association of Mutual Funds in India reporting ₹5,342 crore inflows into silver ETFs in September—far exceeding gold ETF inflows—intensifying demand for physical silver.
- **Self-Reinforcing Price Cycle** - Creation of new ETF units required buying physical silver, tightening supply further. Rising prices fueled FOMO buying, which in turn pushed prices even higher.
- **Cooling Inflows, Persistent Tightness** - ETF inflows eased in October and November, but supply constraints kept markets tight, sustaining silver's elevated price levels.

NAGAURI ASHWAGANDHA



NAGAURI ASHWAGANDHA

- It is mainly grown in the **Nagaur district of Rajasthan**.
- Nagaur's **dry climate** and **sandy soil** are ideally suited for Ashwagandha cultivation.
- It has **longer, thicker roots** rich in medicinal compounds, particularly alkaloids.
- Its berries are known for **their dark, bright red colour**, which is considered a clear indicator of superior quality.
- It has brittle and starchy roots. The 'Nagori Ashwagandha' is the **supreme among all Ashwagandha varieties** in arid region.

Key Facts about Ashwagandha

- Ashwagandha (*Withania somnifera*) is an important ancient plant
- **Other names:** Indian ginseng or Indian winter cherry
- **Required Climatic Condition for Ashwagandha:**
 - It grows in **dry and sub-tropical regions**.
 - **Soil:** It grows well in **sandy loam or light red soil** having **pH 7.5 to 8.0** with good drainage.



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

Current Affairs - 08 January 2026

- **Climate:** It is grown as **late rainy season (kharif) crop**.
- **Rain:** The semi-tropical areas receiving **500 to 750 mm** rainfall are suitable for its cultivation as rainfed crop.
- **Temperature:** It can tolerate a temperature range of **20 to 38 degree Celsius**.
- **Major Ashwagandha Producing states:** Madhya Pradesh, Rajasthan, Punjab, Haryana, Uttar Pradesh, Gujarat, Maharashtra and Madhya Pradesh are the of the country.
- **Benefits of Ashwagandha:**
 - It has been in use as a **medicinal plant** for thousands of years, especially in traditional **Ayurvedic medicine**.
 - It is often **called an adaptogen**, meaning it helps the body adapt to stressors and restore balance.
 - Its other **benefits are reducing inflammation**, increasing energy, alleviating anxiety, ease pain, and improving sleep.
 - Different parts of the ashwagandha plant, **such as the root, leaves, and berries**, may have different concentrations of bioactive compounds.

BIO-BITUMEN



- Bio bitumen is manufactured **using renewable organic materials**, such as plant-based oils, agricultural waste, or biomass.
- These materials undergo a special **processing method to create a high-quality binder** that is similar to traditional bitumen.
- It is an **alternative to petroleum-based bitumen** that lowers both carbon emissions and import dependency,
- Bio-bitumen production **involves multiple steps**, depending on the source material used. The key processes include:
 - **Biomass Collection & Processing:** Raw materials such as plant-based oils, lignin, or algae are collected and pre-processed.



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

Current Affairs - 08 January 2026

- **Pyrolysis & Bio-Oil Extraction:** Thermal decomposition of **biomass** at **controlled temperatures produces bio-oil**, which serves as a precursor for bio bitumen.
- **Refining & Modification:** Bio-oil undergoes refining and polymer modification to enhance its viscosity, thermal stability, and adhesive properties.
- **Blending & Finalization:** In some cases, bio bitumen is blended with conventional bitumen to improve performance characteristics while maintaining sustainability benefits.
- **Significance of Bio-bitumen:** Its production results in significantly **lower carbon emissions**, making it ideal for eco-friendly projects.

NATIONAL QUALITY ASSURANCE STANDARDS



- It is a comprehensive quality framework established by the **Ministry of Health and Family Welfare (MoHFW)**.
- It is aimed at ensuring and enhancing the **quality of healthcare services** provided at public health facilities.
- It was initially focusing on **District Hospitals** to ensure safe, patient-centric, and quality-assured services.
- NQAS are currently available for **District Hospitals**, Sub-District Hospitals, Community Health Centres, **Ayushman Arogya Mandir-PHCs**, **AAM-UPHCs**, and **AAM-Sub Health Centres**.
- **Purpose:** These standards are primarily meant for **providers to assess their own quality** for improvement through pre-defined standards and to bring up their facilities for certification.
- These are broadly arranged under **8 "Areas of Concern"** namely;
 - Service Provision, Patient Rights, Inputs, Support Services, Clinical Care, Infection Control, Quality Management and Outcome.



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

Current Affairs - 08 January 2026

WHAT IS THE SPORTS AUTHORITY OF INDIA (SAI)?



- It is the **apex national sports body** of India, established by the **Ministry of Youth Affairs and Sports**, Government of India.
- It was **set up in 1984** to carry forward the legacy of the **IX Asian Games held in New Delhi in 1982** under the Department of Sports.
- It is a **registered society fully funded by the Government of India**.
- It has been entrusted with the twin **objectives of promoting sports and achieving sporting excellence at the national and international level**.
- It's primary efforts include widespread **talent scouting and training of selected individuals** by providing vital inputs like coaching, infrastructure, equipment support, sports kits, competitive exposure, etc.
- It has played a significant role in shaping India's sports development by providing **training to elite athletes** and at the same time **operating a number of schemes** for the identification and development of young talent.
- The **schemes** are being **implemented through various regional centres** and training centres of SAI spread throughout the country.
- In addition to that, a number of **academic programmes in physical education and sports** are also offered by SAI.
- SAI is also entrusted with the responsibility of **maintaining and utilizing**, on behalf of the Ministry of Youth Affairs & Sports, the **following stadiums in Delhi**, which were **constructed/renovated for the IXth Asian Games**.
 - **Jawaharlal Nehru Sports Stadium**
 - **Indira Gandhi Sports Complex**
 - **Major Dhyan Chand National Stadium**
 - **Syama Prasad Mookherjee Swimming Pool Complex**
 - **Karni Singh Shooting Ranges**.



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

Current Affairs - 08 January 2026

'NATGRID', THE SEARCH ENGINE OF DIGITAL AUTHORITARIANISM

- The 2008 Mumbai attacks, or 26/11, marked a **pivotal transformation** in India's security governance.
- The televised siege and subsequent political debate centred on **intelligence failure**, particularly the inability to consolidate fragmented information about the movements and identity of the attackers.
- This event created an urgent climate for reform and opened political space for technological expansion within the national security apparatus.
- The most ambitious of these expansions was the National Intelligence Grid (NATGRID), envisioned as a centralized data infrastructure capable of supporting counter-terrorism operations.
- Over time, however, NATGRID has evolved into a **broader surveillance architecture** with legal, constitutional, and societal implications.

Origin, Expansion and Transformation of NATGRID

- **Origins: A Technological Fix for Security Gaps**
 - In the aftermath of the attacks, policymakers advanced a compelling counterfactual: had data trail fragments been aggregated and analysed in time, the attack might have been prevented.
 - NATGRID emerged as the institutional embodiment of this belief. Designed to allow multiple security agencies to query a wide range of governmental databases, it promised technological interoperability across organizational silos.
 - The project was approved through executive action rather than parliamentary legislation, raising concerns about the **absence of statutory safeguards**, privacy protections, and democratic oversight.
 - Although initially plagued by delays that fuelled scepticism, NATGRID would gradually mature into a functional system rather than a symbolic response.



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

Current Affairs - 08 January 2026

- **Expansion and Transformation**

- Recent developments indicate that NATGRID has undergone both operational scaling and conceptual broadening.
- Data request volumes number in the tens of thousands each month, flowing not only from central intelligence units but also from state-level police agencies.
- What began as a counter-terror resource has migrated into **routine policing** functions, expanding the scope of permissible queries and investigators with access.
- More significant still is its integration with the National Population Register (NPR), a comprehensive demographic database containing detailed information on households and lineages.
- The NPR's political resonance, given its proximity to citizenship debates, intensifies concerns about population-wide profiling.
- Through this integration, NATGRID appears to transition from monitoring specific security threats to **mapping** entire **populations** and their relational linkages.
- Alongside integration, NATGRID now employs advanced analytical tools.
- Platforms capable of entity resolution link fragmented digital identities across databases, while facial recognition systems trawl identity and telecommunications records.
- In combination with machine learning models capable of predictive inference, NATGRID shifts from reactive investigation toward anticipatory surveillance.

Conclusion

- Strengthening national security ultimately requires robust institutions, transparent intelligence practices, and independent oversight.
 - Without these foundations, surveillance risks normalization, fostering an architecture of suspicion at the expense of **democratic accountability**.
-



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition



CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

Current Affairs - 08 January 2026

SURYASTRA ROCKET SYSTEM



Suryastra Rocket System

- It is India's first **indigenous universal multi-calibre rocket launcher system**.
- **Key Features of Suryastra Rocket System:**
 - It is an advanced **long-range rocket launcher system**.
 - **Range:** It is capable of executing **precision surface-to-surface** striking targets at ranges of **150 and 300 kilometers**.
 - **Multi-target Capability:** It is designed to **engage multiple targets** simultaneously at varying ranges.
 - **Precision:** It achieves a high degree of accuracy with a **circular error probable (CEP)** of less than five metres during trials.
 - The same launcher is also capable of **firing loitering munitions up to a range of 100 km**.
 - **Technology used:** The system is based on Elbit Systems' **PULS (Precise & Universal Launching System)** launcher technology.
 - It is equipped with a modern fire control system that integrates GPS, inertial navigation, and digital ballistic computation.
 - Its **semi-automated reload** and shoot-and-scoot capabilities reduce exposure to counter-battery fire.
- **Developed by:** It is developed by **Pune-based NIBE Limited** in collaboration with **Israel's Elbit Systems**.

KEY FACTS ABOUT CHILIKA LAKE



CHILIKA LAKE

- It is a **brackish water lake and a shallow lagoon** with estuarine character spread across the districts of Puri, Khurda, and Ganjam in the state of **Odisha**.

Current Affairs - 08 January 2026

- It is Asia's largest brackish water lake.
 - Located at the mouth of the Daya River, Chilika Lake is the second-largest brackish water lagoon in the world, after the New Caledonian barrier reef in New Caledonia.
 - The waterspread area of Chilika varies between 900 to 1165 sq. km. during summers and monsoons, respectively.
 - It is connected to the Bay of Bengal by a 32 km long and 1.5 km wide channel that mostly runs parallel to the Bay, separated by a narrow spit.
 - Chilika Lake has several islands, such as:
 - Nalabana Island – Declared a Bird Sanctuary (1987)
 - Kalijai Island – Known for the Kalijai Temple
 - Other islands include Honeymoon Island, Breakfast Island, Beacon Island, Satpada Island,
 - In 1981, Chilika Lake was designated the first Indian wetland of international importance under the Ramsar Convention.
 - Biodiversity:
 - It is the largest wintering ground for migratory birds on the Indian subcontinent.
 - Birds from the Caspian Sea, Lake Baikal, Aral Sea, and other remote parts of Russia, Kirghiz steppes of Mongolia, Central and Southeast Asia, Ladakh and Himalayas come here.
 - White-bellied sea eagles, Graylag Geese, Purple Moorhen, Jacana, Herons, and Flamingos are among the many species which make the lake a bird watcher's delight.
 - It is also home to one of the world's largest breeding colonies of Flamingos.
 - Apart from the avifaunal species, the region also highlights varied wild animals such as Blackbuck, Golden Jackals, Spotted Deer, and Hyenas.
 - It is also famous for its population of Irrawaddy dolphins.
-