

Current Affairs - 08 October 2026

WHAT IS THE INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)?



- It is the **global trade association of airlines** (for both freight and passenger carriers) that **regulates the aviation industry** by **developing standards, procedures, and practices**.

- It was **established** in **1945** in Havana, Cuba, as a successor to the International Air Traffic Association, which was formed in 1919.

Head Office: Montreal, Canada.

- IATA was created to **promote cooperation among airlines** and **ensure the safe, secure, and efficient transportation** of people and goods across international borders.
- Its mission is to represent, lead, and serve the global airline industry by **advocating for fair regulations, enhancing operational efficiency**, and improving passenger and cargo services worldwide.
- In practice, its activity focuses on **three main areas**:
 - **Standardization of processes and documentation** used in international air transport.
 - **Development of technical regulations for the transport of goods**, especially in sensitive areas such as dangerous goods or perishable products.
 - **Financial cooperation and settlement systems** that enable airlines to operate global transportation networks.

What's the difference between the IATA and the ICAO (International Civil Aviation Organization)?

- While the IATA and ICAO (International Civil Aviation Organization) both serve the airline industry, they are distinct and different organizations.
- The **key differences** are the following:

Current Affairs - 08 October 2026

- IATA establishes standards for its member airlines, whereas ICAO establishes standards for member states.
- IATA promotes on behalf of its airline industry members, whereas ICAO works to establish civil aviation rules and procedures (particularly as it pertains to the actual process of flight).

JOSH (JOINT SQUAD FOR HEALTH) TEAMS



- JOSH Teams have been designed to **channel the reach and energy of India's youth** into organised **community action for TB elimination**.
- It is being undertaken by the **Union Ministry of Health and Family Welfare**, in collaboration with the **Ministry of Youth Affairs and Sports** and the **Ministry of Defence**.
- It will bring together **Class-I officers, MY Bharat volunteers**, and **NCC cadets** to drive community-level engagement against TB.
- JOSH teams will be rolled out across **55 districts in 11 states** in the **first phase of the campaign**.

During the **first phase**, the initiative will focus on **engagement at the block, ward, and community levels**, taking the TB Mukht Bharat message beyond health facilities and closer to local communities.

- The teams will **disseminate information on TB symptoms, prevention, timely diagnosis**, and completion of **treatment**.
- They will also contribute to efforts to **address myths and misconceptions surrounding TB**, reduce stigma, and encourage individuals, families, and communities to participate actively in the national TB elimination movement.

Current Affairs - 08 October 2026

LOCKS, KEYS, AND LIFE'S HANDEDNESS: THE 2026 NOBEL PRIZE IN CHEMISTRY

The 2026 Nobel Prize in Chemistry has been awarded to **Henri B. Kagan** and **Kenso Soai** "for the discovery of non-linear effects and autocatalysis in asymmetric organic synthesis."

In simpler terms, their work created a way to produce more of one type of molecule and less of its mirror image in chemical reactions — solving one of chemistry's most famous puzzles.

Henri Kagan, 96, is Professor Emeritus at Université Paris-Sud, France. Kenso Soai, 76, is Professor Emeritus at Tokyo University of Science, Japan.

Understanding Chiral Molecules: The Lock and Key

- The Nobel Prize's official press release explains chiral molecules using a lock-and-key analogy.
- Imagine manufacturing a key, only to discover the process produces two keys that are mirror images of each other. They look almost identical, but only one fits the lock — the other may do nothing, or in some cases, cause damage.
- This is essentially the problem chemists face with **chiral molecules**. Many molecules exist in two mirror-image forms, called **enantiomers**.
- They share the same chemical composition, but have **different** three-dimensional arrangements.

The Mystery of Life's "One-Handed" Chemistry

- The story traces back to **Louis Pasteur** (also known for the rabies vaccine), who in the mid-19th century studied tartaric acid, found in grapes and wine.
 - Pasteur discovered tartaric acid crystals existed in two mirror-image forms.
 - But bacteria fermenting tartaric acid consumed only one enantiomer — the one found in grapes — leaving its mirror image untouched.
- This pointed to a much bigger mystery: **life itself appeared to be one-handed**.
- Further evidence: When scientists examined life's building blocks, they found:
 - Naturally occurring amino acids bend polarised light to the left.

Current Affairs - 08 October 2026

- Sugars found in DNA bend it to the right.
- In other words, life overwhelmingly uses only one of the two possible mirror-image forms. Yet when chemists tried making chiral molecules in the laboratory, they generally got an **equal mixture of both enantiomers**.
- The puzzle: what happened at the dawn of life that made biological chemistry choose a side?

Why This Matters?

- The non-linear effects that Kagan discovered have become an important tool for chemists when they design new reactions.
- Since a reaction being non-linear reveals information about how it occurs, chemists can use this to optimise reactions and obtain the purest possible enantiomers of a product.
- This is vital for every company manufacturing substances intended to interact with living beings — including **pharmaceuticals, flavours, scents, and agricultural chemicals**.
- Since only one enantiomer of a chiral drug may be therapeutically active (and the other potentially harmless or harmful, as with the lock-and-key analogy), producing the correct, pure form matters enormously for **drug safety and efficacy**.
- **Real-World Example**
 - Thalidomide was introduced in the late 1950s as a sedative, widely prescribed, including to pregnant women for morning sickness.
 - By 1961, doctors linked the drug to severe birth defects. Thousands of babies across 46 countries were affected, many with phocomelia (severely shortened or absent limbs).
 - **Thalidomide exists as two enantiomers** (mirror-image molecules). One enantiomer produced the desired sedative effect, while the other caused birth defects.
 - It was later found that **the two forms can interconvert** inside the body — meaning even giving only the "safe" enantiomer wouldn't have prevented harm, since the body could convert it into the harmful form.

Current Affairs - 08 October 2026

DETENTION VS ARREST: WHAT THE LAW ACTUALLY SAYS ABOUT POLICE POWERS AT PROTESTS

- **Arrest** is a formal act of police taking a person into custody in connection with an offence, marking the beginning of criminal proceedings. Once arrested, a range of constitutional and statutory safeguards immediately apply.
- **Detention**, by contrast, is **not defined** by the Bharatiya Nagarik Suraksha Sanhita (BNSS), which replaced the CrPC. Instead, the BNSS grants police a set of powers to stop, remove, or temporarily hold people in certain situations — including, but not limited to, when a crime has actually occurred.
- **Why disputes arise:** A person may be taken away, held for hours, and released without any case being registered. To the person, it feels like an arrest. Legally, police may claim they were exercising preventive powers, not arresting someone for an offence.
- In short-term custody, "they are temporarily not allowed to leave wherever they are detained, and they are not put under a formal arrest either."
- **Criticism**
 - Critics argued the distinction is often used strategically — "The police know that the power to arrest cannot be exercised casually when there is **no cognizable offence** punishable with more than seven years being committed by the protestors."
 - A cognizable offence is one for which police can arrest without a warrant.

The Legal Provisions Enabling Detention

- **Section 170, BNSS — Preventive action before an offence.** A police officer who knows of a design to commit any cognizable offence may arrest the person without a magistrate's order or warrant, if the offence "cannot be otherwise prevented."
- **Section 172, BNSS — Detaining non-compliant persons.** A police officer "may detain or remove any person resisting, refusing, ignoring or disregarding" a lawful direction.
 - The officer must then produce the person before a magistrate, or in petty cases, release them within 24 hours.

Current Affairs - 08 October 2026

When Can Police Detain Protesters?

- Most protest-related detentions begin with police claiming they are preventing a law and order problem, often backed by a prohibitory order.
 - On October 2, Delhi Police imposed Section 163, BNSS across New Delhi (a prohibitory-order provision).
- If protesters refuse to disperse or continue prohibited activities, police may use preventive powers to remove or temporarily hold them.
- Disobeying such an order is itself an **offence under Section 223 of the Bharatiya Nyaya Sanhita (BNS)**. This is the point where detention can escalate into arrest with an FIR.
- Courts have set limits, though. Police action cannot be arbitrary — officers must justify why restricting liberty was necessary.

Rights of a Detained or Arrested Person

- Once liberty is restricted, several constitutional protections apply:
 - **Article 22** requires: production before a magistrate within 24 hours; information about grounds of arrest; and the right to legal representation.
 - The Supreme Court has repeatedly held that **written grounds of arrest** must be furnished — and just last month, ruled that violating Article 22 safeguards makes an arrest unconstitutional.
 - **Section 38, BNSS** allows an arrested person to meet an advocate of their choice during interrogation (though not throughout).
 - **Free legal aid** is provided at State cost if a person cannot afford a lawyer.
 - **Section 43(5), BNSS** bars arresting a woman between sunset and sunrise, except in exceptional circumstances with a judicial magistrate's prior permission.

Conclusion

The gap between "detention" and "arrest" isn't a technicality — it's the gap between accountability and its absence. Section 172's new, untested detain-and-remove power gives police a tool with almost no litigated boundaries, even as courts insist liberty cannot be restricted arbitrarily.

Current Affairs - 08 October 2026

FROM THE BRINK TO A COMEBACK, HOPE FOR INDIA'S WILDLIFE

- The recovery of endangered species demonstrates that extinction is not always irreversible.
- The **Great Indian Bustard**, Iberian lynx, scimitar-horned oryx and saiga antelope show how habitat restoration, scientific intervention, breeding programmes and community participation can revive threatened wildlife.
- India, as one of the **17 megadiverse countries**, bears a major responsibility for protecting its exceptional biodiversity.
- The challenge is not merely preventing extinction but enabling species to recover, reproduce and survive sustainably in the wild.

India's Biodiversity and the Conservation Challenge

- India occupies only **2.4% of the world's land area**, yet supports nearly 8% of global flora and 7.5% of fauna.
- It contains parts of four biodiversity hotspots, while many Indian species are endemic.
- However, habitat destruction, infrastructure expansion, climate change, pollution, poaching, invasive species and human-wildlife conflict pose serious threats.
- Of 7,516 Indian animal species assessed under the IUCN Red List, 1,012 are threatened.
- However, assessments cover only about **7.2% of documented animal species**, indicating that the actual scale of biodiversity risk remains uncertain.
- The **National Red List Assessment** can address this knowledge gap. India's National Red List Roadmap, launched in 2025, aims to produce National Red Data Books for plants and animals by 2030. This can provide a scientific basis for prioritising conservation action.

Government Schemes and Species Recovery

- The **Integrated Development of Wildlife Habitats** scheme supports recovery efforts for 24 identified species and their habitats through research, habitat improvement, protection and community participation.

Current Affairs - 08 October 2026

- Conservation strategies must be species-specific.
- The Great Indian Bustard requires grassland protection, the **Sangai** depends on wetlands, the **dugong** needs healthy seagrass ecosystems, and the **hangul** requires protected forest habitats.
- Thus, effective conservation must combine species-specific planning, habitat protection and scientific monitoring.

The Path Forward

- **Political Support Is Essential**
 - Conservation cannot succeed through science alone.
 - **Political commitment** determines whether species receive sustained funding, administrative coordination and protection from competing land-use demands.
 - State governments must integrate biodiversity into infrastructure, land-use and livelihood decisions.
 - Forest departments need trained personnel for surveys, habitat assessment, conservation breeding and genetic analysis.
 - Since species recovery may take decades, programmes require **long-term funding**, measurable targets and adaptive management.
- **Funding and Community Participation**
 - Less-publicised species often struggle to secure adequate resources.
 - State conservation funds can unite governments, industry, philanthropy and scientific institutions around local priorities.
 - International initiatives such as the **Phoenix Species Project**, which committed \$200 million to recover 100 threatened species, demonstrate the importance of dependable multi-year funding. India similarly needs predictable resources for habitats, research and monitoring.
 - **Community participation** is equally important.
 - Compensation for fishing gear damaged while releasing dugongs, for instance, recognises local conservation efforts and creates incentives for stewardship.

Current Affairs - 08 October 2026

KEY FACTS ABOUT GARO TRIBE



- The Garo are a **Tibeto-Burman ethnic group** primarily residing in the **Garo Hills of Meghalaya** with smaller populations in Assam, Tripura, Nagaland, and West Bengal.
- They are the **second largest tribal community** of Meghalaya.
- Historically, the tribe **originated in Tibet** and **migrated to India 400 years ago**.
- The main **language** spoken by these tribes is **Garo**, also known as "**Garrow**" and "**Mande**", which belongs to the **Bodo branch** of the **Bodo-Naga-Kachin family** of the **Sino-Tibetan phylum**.
- The Garo people live mostly in rural villages, with **community life centered around agriculture**.
- They practice both **shifting (jhum) and wet rice cultivation**, growing rice, millet, and vegetables.
- They are **one of the last remaining matrilineal tribes** in the world.
- **Women play a central role** in both family and economic life, as **property and clan lineage are inherited through the female line**.
- **Villages are organized into exogamous clans**, and social life is vibrant, featuring **communal work, festivals, and traditional music and dance**.
- Their **homes are typically built on stilts**, reflecting **adaptation to the hilly terrain**.
- **Beliefs:**
 - **Historically**, the Garo practiced **Songsarek**, an **indigenous animistic religion** centered on the worship of spirits, nature deities, and ancestors.
 - **Since the late 19th century**, **Christianity** has become the **predominant faith** among the Garo.
 - However, elements of traditional beliefs and rituals persist, especially in rural areas, and festivals such as **Wangala (the harvest festival)** continue to reflect their spiritual heritage.