10th October 2025

1. **National Red List Roadmap and Vision**: Recently, India unveiled its **National Red List Roadmap and Vision** 2025–2030 at the IUCN World Conservation Congress 2025.
   - **Key Highlights:** Launched by **Union Minister of State for Environment, Forest and Climate Change,** at the **Asia Pavilion**.
     - **Aim**: To create a **comprehensive, science-based framework** for assessing and conserving India's **flora and fauna**.
     - The roadmap will **guide India's conservation strategy through 2030** and serve as a foundation for **future biodiversity policies**.
     - **Key Features:** Developed by the **Zoological Survey of India (ZSI)** and the **Botanical Survey of India (BSI)** in collaboration with **IUCN India** and the **Centre for Species Survival**.
       - Promotes a **nationally coordinated and inclusive approach** to biodiversity assessment.
       - Aims to prepare **National Red Data Books** for **flora and fauna by 2030**.
     - **India's Biodiversity Significance**: India is among the **17 megadiverse countries** in the world.
       - Home to **4 global biodiversity hotspots**: **The Himalayas**, **Western Ghats**, **Indo-Burma** & **Sundaland**
       - Occupies **2.4% of the world's land area** but harbours nearly **8% of global flora** and **7.5% of global fauna**.
2. **Saksham**: Recently, the Indian Army began inducting the indigenously developed '**Saksham**' **Counter-Unmanned Aerial System (CUAS) Grid System.**



   - **About Saksham**: The system is designed to **detect, track, identify, and neutralise** hostile **drones and unmanned aerial systems (UAS)** in **real time**.
     - **Purpose**: Ensures **comprehensive airspace security** across the **Tactical Battlefield Space**, including the **Air Littoral** (airspace up to **3,000 metres / 10,000 feet** above ground level).
       - Developed in response to drone-related vulnerabilities revealed during **Operation Sindoor**.
       - Expands the Army's operational domain from the **Tactical Battle Area (TBA)** to the broader **Tactical Battlefield Space (TBS)** — covering both **land and low-altitude air zones**.
     - **Developed by:** Indian Army in collaboration with **Bharat Electronics Limited (BEL), Ghaziabad**.
     - **Full form: Saksham** – Situational Awareness for Kinetic Soft and Hard Kill Assets Management.
     - Operates on the **secure Army Data Network (ADN)**.
3. **Paramyrothecium Strychni**: Recently, scientists identified a new **phytopathogenic fungus species** named **Paramyrothecium strychni** in Kerala, India.



   - **About Paramyrothecium strychni**: **Endemic Location:** Western Ghats, India
     - **Local Names:** Kanjiram or Modirakanjiram
     - **Medicinal Importance:** Contains **alkaloids** with **analgesic**, **anti-inflammatory**, and **antimicrobial** properties.
     - **Traditional Uses:** Treats **fever**, **digestive disorders**, **rheumatism**, and **nervous ailments**.
     - **Conservation Status: Vulnerable (VU)** under the **IUCN Red List**.
     - **Major Threats: Habitat degradation** and **overexploitation**.
     - This newly discovered fungus is associated with **leaf spot and blight disease** affecting **Strychnos dalzellii** (Family: Loganiaceae), an **endemic medicinal plant** of the **Western Ghats**.
     - The discovery is supported by detailed **morpho-cultural characteristics** and **multigene molecular phylogenetic analysis**, confirming it as a **distinct species**.
     - According to the **Index Fungorum**, there are **25 recognized species** of **Paramyrothecium** worldwide, the majority of which are **plant pathogens** responsible for **leaf spot and blight infections** across diverse plant species.

theIAShub © 2025 | All Rights Reserved

4. **DRAVYA**: Recently, the Ministry of Ayush launched an innovative digital platform called **DRAVYA (Digitised Retrieval Application for Versatile Yardstick of Ayush).**
   - **About DRAVYA**: An **AI-ready digital portal** designed to **catalogue and unify research** on **Ayush medicinal substances**.
     - Developed by the **Central Council for Research in Ayurvedic Sciences (CCRAS)**.
     - **Aim**: To create a **comprehensive, evidence-based digital repository** for **Ayush substances**, integrating **classical knowledge** with **modern scientific data**.
     - Marks a key step toward **digital transformation** and **evidence-based integration** in traditional medicine.
     - Designed to support **cross-disciplinary innovation**, **global research collaboration**, and **policy development**
     - **Key Features**: Equipped for future integration with **artificial intelligence tools** for analysis and data mining.
       - Will interlink with the **Ayush Grid** and other **Ministry initiatives** related to **drug policy** and **medicinal substances**.
       - Allows researchers, practitioners, and students to access verified, dynamic information.
5. **Breathable Art**: Recently, the Ministry of Environment, Forest and Climate Change (MoEFCC) inaugurated '**Breathable Art**', a living art installation made of air-purifying plants to promote awareness about air quality, sustainability, and clean urban living.
   - **About Breathable Art:** A **living, eco-art installation** that merges **aesthetics with environmental science**, using **air-purifying plants and sustainable materials** to **naturally cleanse the air** and **inspire eco-friendly lifestyles**.
     - **Under: 'Breath of Change – Clean Air, Blue Skies'** campaign
     - **Key Features:** Constructed with **air-purifying plant species** such as **Areca Palm, Money Plant, Spider Plant, Peace Lily, and Bamboo Palm**, known to **absorb pollutants** like **formaldehyde** and **benzene**.
       - Equipped with **QR codes** that provide visitors with information on **air-purifying plants** and **sustainable practices**.
       - Serves as an **educational and engagement platform** for **students, schools, RWAs, and volunteers**.
       - Designed as a **strategic urban intervention** in **pollution hotspots** to enhance **air quality** and **urban aesthetics** simultaneously.
6. **National Agriculture Market (e-NAM)**: Recently, the Government of India expanded the **National Agriculture Market (e-NAM)** by adding 9 new commodities, raising the total number of tradable items to **247**.
   - **About e-NAM:** A **pan-India electronic trading platform** launched on **14 April 2016**, designed to connect **Agricultural Produce Market Committee (APMC) mandis** across the country into a **unified national market** for agricultural commodities.
     - **Objective:** To promote **uniformity in agricultural marketing**, eliminate **information asymmetry** between buyers and sellers, and ensure **transparent price discovery** based on **demand, supply, and quality**.
     - **Key Features: Digital Marketplace:** Links **APMCs, private markets, and buyers** across India on a single online platform.
       - **Price Transparency:** Ensures **real-time electronic auctioning** and **fair price determination** for farmers.
       - **Quality Assurance:** Incorporates **assaying systems** to enable **value-based bidding** and **quality-linked pricing**.
       - **Ease of Transaction:** Supports **online payments**, **warehouse-based trading**, and a **mobile app** for easy access to market data.
       - **Inclusive Platform:** Benefits **farmers, traders, processors, exporters, and mandis**, promoting **seamless trading and integration**.

theIAShub © 2025 | All Rights Reserved

7. **Bridgeoporus Kanadii**: Recently, researchers discovered a new fungus species, **Bridgeoporus kanadii**, in the forests of Arunachal Pradesh, northeast India.



   - **About Bridgeoporus Kanadii**: This remarkable fungus is noted for its **enormous fruiting bodies**, some measuring **over three meters in radius**—large enough to **support the weight of a person**.
     - The species has been **named in honour of Indian mycologist Dr. Kanad Das**, recognizing his significant contributions to the study of **Indian macrofungi**.
     - The **only other known species** in this genus, **Bridgeoporus nobilissimus**, occurs in **North America** and produces fruiting bodies up to **1.5 meters**, making ***B. kanadii*** roughly **twice as large**.
     - Ecologically, **Bridgeoporus fungi** are vital to **forest regeneration**, as they **decompose dead wood** and recycle nutrients back into the ecosystem.
     - Most **B. kanadii** specimens were observed **growing on dead fir trees** in the region.
8. **Lightweight Multirole Missile (LMM):** Recently, India and the United Kingdom finalized a £350-million ($468 million) deal for supplying **Lightweight Multirole Missile (LMM) systems** to the Indian Army.
   - **About LMM:** An **advanced, precision-guided weapon** developed by **Thales** for **air defence and multi-domain combat**.
     - It is designed to deliver **accuracy, versatility, and low collateral damage** in **air, land, and naval operations**.
     - The LMM provides effective engagement against a **wide range of modern battlefield threats**.
     - **Key Specifications: Weight:** 13 kg (super lightweight)
       - **Operational Range:** Over 6 km
       - **Speed:** Greater than Mach 1.5
       - **Guidance System:** Laser beam riding technology
       - **Warhead:** Triple-effect warhead with a proximity fuse
     - **Key Features:** Laser beam riding system ensures accurate targeting with minimal risk to surroundings.
       - Can target **light armoured vehicles, wheeled or tracked platforms, and low-flying aerial threats**.
       - Suitable for **air defence, land-based combat, and naval protection missions**.
       - Optimised for effectiveness across diverse and challenging combat environments.
9. **Surrogacy Act:** Recently, the Supreme Court of India ruled that the Surrogacy Act's age limits won't apply to couples who started the process before the law began.
   - **Key Highlights:** The Court clarified that the **Act cannot be applied retrospectively** to couples who had **already completed embryo freezing** under earlier legal conditions.
     - The **right to surrogacy** for these couples was **established at the time of embryo freezing**, which took place before the introduction of any **age limits**.
     - The judgment reinforces that **reproductive autonomy and parenthood** are **fundamental rights** under **Article 21 of the Constitution**.
   - **Legal Context**: Under **Section 4(iii)(c)(I)** of the **Surrogacy Regulation Act, 2021**, surrogacy is permitted only if:
     - The **woman** is between **23–50 years** old.
     - The **man** is between **26–55 years** old.
   - **Court's Key Observations: Surrogacy commencement** is defined as the point when **gametes are extracted and embryos are frozen** — at which stage the couple has **completed all essential steps**.
     - The Court said that **once the embryo is frozen**, the couple's intention to pursue surrogacy is **crystallised**.
     - The **state cannot retrospectively impose restrictions** that **invalidate lawful actions** taken under previous rules.

theIAShub © 2025 | All Rights Reserved