

Manthan HEADLINES



English

Weekly Compilation
[20th - 25th October, 2025]



Morning Coffees Could Hold the Secret to Spotting Deadly Dyes in Food

Context

- Scientists at **Raman Research Institute (RRI)**, India, developed a sensitive method to detect **Rhodamine B** using the coffee-ring effect and nanotechnology.

Coffee-Ring Effect Mechanism

- As **droplets evaporate**, particles move outward, forming a ring-like deposit.
- This natural effect helps concentrate particles at edges for easier detection.

About Rhodamine B

- **Rhodamine B** is a **bright pink, water-soluble** synthetic fluorescent dye.
- It is used in **scientific research**:
 1. Fluorescence microscopy
 2. Flow cytometry
 3. Biochemical assays (e.g., ELISA)

Health Hazards

- Rhodamine B is **toxic** and possibly **carcinogenic to human health**.
- It can **harm skin, eyes**, and the **human respiratory system** seriously.



Union Minister for Commerce and Industry, Shri Piyush Goyal launches LEAPS 2025 to benchmark logistics excellence in India

Context

- Union Minister for Commerce and Industry, launched the **Logistics Excellence, Advancement, and Performance Shield (LEAPS) 2025**.

About LEAPS 2025

- A **flagship initiative** of **DPIIT**, under the **Ministry of Commerce and Industry**.
- It aims to **recognize and benchmark excellence** in the logistics sector.

Purpose

- It promote **efficiency, sustainability, innovation, and technology adoption** in logistics.

Alignment with Policies

- It Supports the **National Logistics Policy (2022)** and **PM GatiShakti**.
- It also aligns with **Make in India** and **Atmanirbhar Bharat** initiatives.

Key Objectives

- Encourage **best practices** in logistics operations.
- Promote **ESG compliance** and **green logistics**.
- Foster **collaboration** among government, industry, and academia.

Coverage

- Includes a wide range of logistics stakeholders:
 - Air, road, sea, and rail freight operators**
 - Warehousing and multimodal transporters**
 - MSMEs, Startups, and Academia**



What Is UNESCO's Virtual Museum Of Stolen Objects And Why It Matters

Context

- UNESCO launched the **Virtual Museum of Stolen Cultural Objects** at **MONDIACULT 2025**.

About the Virtual Museum

- A **first-of-its-kind global initiative** against **illicit trafficking of cultural property**.
- Developed in response to **Member States' call** for coordinated global action.
- Provides an **immersive, globally accessible digital platform** to raise awareness of stolen heritage.
- Currently showcases **around 240 missing objects** from **46 countries**.
- The museum's goal is to **"empty itself"** as stolen items are recovered and returned.
- Introduced by **architect Francis Kéré**.

Technology and Features

- It uses **3D modelling** and **virtual reality** to reconstruct stolen items.
- Includes **interactive tools, educational content, community stories, and restitution success cases**.

Support and Implementation

- It is **financially supported** by **Saudi Arabia**.
- It is implemented in **partnership** with **INTERPOL**.

Objectives

- Promote **international cooperation** and **best practices**.
- Engage global audiences in **safeguarding cultural heritage**.



IUCN names fossil fuels as 'threat to nature', backs call for global phase-out Treaty

Context:

- The International Union for Conservation of Nature (IUCN) adopted **Motion 042** during its **World Conservation Congress**.

What is Motion 042?

- Calls for **global phase-out of coal, oil, and gas** to protect nature.
- Demands **immediate halt to all new fossil fuel extraction** and development projects.
- Advocates a just **transition for affected workers** and **vulnerable communities** across the globe.
- Urges exploration of a **global Fossil Fuel Non-Proliferation Treaty** for coordinated action.
- Supported by **Indigenous groups, civil society, WWF, and BirdLife International** for urgent reforms.

Relevance & Significance

- IUCN becomes the **first multilateral body** to **officially recognise fossil fuel production** as a threat to nature.
- Marks a **unified global call to address fossil fuels** as a root cause of environmental degradation.
- Strengthens the **push towards integrating climate and biodiversity goals**, especially ahead of **COP30**.



Trade deals weaponised to enforce strict seed patents, warns new report

Context:

- A new report by **GRAIN** warns of growing corporate control over seeds via **free trade agreements**.

About UPOV Convention (1991 Act)

- **UPOV stands for:** Union for the Protection of New Varieties of Plants.
- **Established:** 1961; 1991 Act strengthens corporate seed rights.
- **Headquarters:** Geneva, Switzerland.
- **Grants monopoly rights** to seed corporations over new plant varieties for **20–25 years**.
- It aims to promote development of new plant varieties via **strong IP protection**.

Impact on Farmers

- Farmers are banned from **saving, sharing, or reusing UPOV-protected seeds**.
- **Threatens traditional agriculture**, indigenous seed knowledge, and food sovereignty.
- Originally made for **industrial agriculture in Europe**, now **globalized** through trade deals.



Stay Tuned!