WHAT IS THE SAMHITA PROJECT?



India and Sri Lanka are strengthening their cultural cooperation through the preservation of their shared Buddhist heritage, with the launch of the SAMHiTA Project at Colombo's Gangaramaya Temple.

- The SAMHiTA (**South Asian Manuscript Histories and Textual Archive)** Project is an initiative to **create a relational database and digital archive of Indian** and broadly **South Asian manuscripts housed in libraries**, archives, and other **repositories outside India,** through collaboration with institutional partners.
- The word '**samhita**' in **Sanskrit means 'collection'** or '**compilation**'. SAMHiTA's goal is to **consolidate information** dispersed across institutions **on an online platform accessible to all.**
- The **information collected** will be **shared on PANDiT: Prosopographical Database of Indic Texts and Records**, a **database on South Asian intellectual history.**

The initiative is being **undertaken by the India International Centre in New Delhi**, with **grant assistance from the Government of India** and is **supported by the Ministry of External Affairs (MEA).**

It aims to digitise ancient manuscripts and preserve their historical, religious, and cultural knowledge for future generations.

It is the **first attempt** to **bring together repositories from outside India and South Asia on a common platform.**

Current Affairs - 25 October 2026

WHAT IS THE FUND FOR RESPONDING TO LOSS AND DAMAGE (FRLD)?

The Fund for Responding to Loss and Damage (FRLD) has provisionally set aside $21.6 million for Nepal's August 2026 floods, marking its first response to a specific disaster.

- It is an **international climate-finance fund** set up to **help developing countries** that are particularly **vulnerable to climate change respond to economic and non-economic losses,** including from **extreme weather and slow-onset events.**
- It **operates under** the **financial mechanism of the UN Framework Convention on Climate Change (UNFCCC).**
- It was **established** at the 27th Conference of the Parties **(COP 27) to the UNFCCC in Sharm el-Sheikh, Egypt,** in **2022** and **operationalised at COP28 in Dubai,** United Arab Emirates, in **2023**.

A **Board of 26 members** was constituted in 2023, and subsequently, the **Philippines** was **selected as the host of the Board** in 2024, while the **World Bank** was selected to **host the Secretariat,** and as the **Fund Trustee.**

The **Board** of the FRLD consists of **members from Parties to the UNFCCC** and Paris Agreement, with **members from developed and developing country**

By financing recovery initiatives from climate-related losses and damage, the Fund empowers communities to rebuild and adapt.

It strives for country-led, locally driven solutions, ensuring interventions are aligned to country needs, priorities, and contexts.

Cross And Climb

FARMER ID SCHEME - DIGITAL AGRICULTURE MISSION AND KEY BENEFITS

- The Farmer ID Scheme is an initiative under the Union Government's **Digital Agriculture Mission** to provide farmers with a unique digital identity linked to verified agricultural and land records.
- The Farmer ID functions as an Aadhaar-like identity for agricultural service delivery. It is dynamically linked to State land records and contains information such as demographic details, land ownership and crops sown.
- The database created through these identities is known as the **Farmers' Registry**, which forms part of Agri-Stack, the digital public infrastructure being developed for India's agricultural sector.
- The Union Cabinet approved the Digital Agriculture Mission in 2024, with the objective of improving agricultural service delivery through digital technologies.

Key Components of Agri-Stack

- Agri-Stack comprises three core digital registries designed to strengthen agricultural data management and policy implementation.
    - **Farmers' Registry:** Maintains farmers' digital identities and associated agricultural information.
    - **Geo-referenced Village Maps:** Provides geographically referenced village-level information to support agricultural planning.
    - **Crop Sown Registry:** Records information about crops cultivated across agricultural areas.
- Together, these registries can help integrate agricultural data, improve coordination between government departments and support more informed decision-making.

Benefits of the Farmer ID Scheme

- The Farmer ID is intended to reduce administrative burdens and make agricultural support more transparent and accessible.

Cross And Climb

- **Simplified access to schemes:** Reduces repeated submission of documents and verification for different government programmes.
- **Agricultural credit:** Can facilitate access to bank loans and Kisan Credit Card services.
- **Crop insurance:** Supports more transparent assessment and disbursement of compensation under the Pradhan Mantri Fasal Bima Yojana.
- **Disaster relief:** Helps identify eligible beneficiaries and accelerate assistance during emergencies.
- **MSP procurement:** Can improve transparency in procurement and reduce the role of intermediaries.
- **Policy planning:** Verified data can improve the monitoring of schemes, coordination among departments and agricultural policymaking.

- The system is also intended to reduce duplication and fraud, helping government benefits reach eligible farmers more efficiently.

Challenges and Inclusion Priorities

- The effectiveness of the Farmer ID Scheme depends on the accuracy of records and the inclusion of cultivators who may not appear as landowners.
  - **Tenant farmers and sharecroppers:** Actual cultivators may lack formal ownership records, making their identification and registration essential.
  - **Forest Rights holders:** Farmers cultivating land under recognised forest rights need to be included through appropriate mechanisms.
  - **Data accuracy:** Errors or outdated land records may affect registration and access to benefits.
  - **Digital accessibility:** Farmers with limited digital literacy or access to technology may require assistance.
  - **Privacy and governance:** Agricultural databases require appropriate safeguards for data security, access and responsible use.

Cross And Climb

MAHARASHTRA VS FSSAI - THE FEDERAL DISPUTE OVER FOOD-SAFETY ENFORCEMENT

- The Maharashtra Government has approached the Bombay High Court against the Union Health Ministry and the Food Safety and Standards Authority of India (FSSAI).
- The State government alleges that the central regulator has created a **parallel food-safety enforcement mechanism** that encroaches upon the statutory powers of State authorities.
- The petition, filed through Maharashtra's Food Safety Commissioner Tukaram Mundhe, challenges the manner in which centrally licensed food businesses are regulated and inspected.

Core Issue - Centralisation vs Decentralisation:

- The dispute centres on the **interpretation and implementation** of the Food Safety and Standards Act (FSS Act), 2006.
- Maharashtra argues that the legislation was intended to decentralise food-safety administration, with implementation primarily involving -
    - State Commissioners of Food Safety;
    - Designated Officers and Food Safety Officers;
    - Food Analysts; and
    - Panchayati Raj Institutions and Urban Local Bodies.

Major Point of Contention:

- Maharashtra alleges that the **FSSAI order** (dated May 12, 2023) restricted State Food Safety Commissioners and their officers from independently enforcing the FSS Act in establishments holding a Central Licence.
- The State claims that FSSAI subsequently created or **deployed positions** such as Central Licensing Authorities, Central Food Safety Officers and Central Food Analysts, thereby establishing a parallel enforcement structure.
- The petition argues that such arrangements effectively "**usurp**" the powers of State Commissioners of Food Safety.

FSSAI AND ITS ROLE:

- The FSSAI is India's **apex statutory food-safety regulator** established under the FSS Act, 2006.
- **Key functions of FSSAI:**
  - Lays down science-based standards for food articles.
  - Regulates the manufacture, storage, distribution, sale and import of food.
  - Provides a **unified legal framework** for food safety by replacing multiple earlier food-related laws.
  - Regulates licensing and registration of Food Business Operators (**FBOs**).
  - Coordinates food-safety enforcement with State and Union Territory authorities.
  - Prescribes standards for food testing and facilitates a network of food laboratories.
  - Undertakes risk assessment, surveillance and food-safety monitoring.
  - Regulates imported food articles at ports of entry.
  - Promotes food-safety awareness and capacity building.
- Every FBO is required to obtain the applicable FSSAI registration or licence under **Section 31** of the FSS Act.

FSSAI-State Relationship and Relief Sought by State:

- **Enforcement structure:**
  - The FSS Act envisages that **State enforcement** is carried out through the Commissioner of Food Safety, Designated Officers, Food Safety Officers, Food Analysts and local bodies.
  - **FSSAI** exercises its statutory functions at the national level.
  - Thus, the present dispute is essentially about where the **line between** central standard-setting/licensing and State-level enforcement should be drawn.
- **Maharashtra's main grievances:** The State has argued that -
  - FSSAI has progressively **centralised** food-safety enforcement.

- State officers have been **restricted** from inspecting centrally licensed establishments.
- Creation of central enforcement posts allegedly goes beyond the statutory framework.
- **Revised licensing** thresholds were allegedly introduced without adequate public consultation.
- **FoSCoS** may result in excessive central control over food-business databases and licensing.

- **Relief sought:** Maharashtra has sought -
  - Quashing of the challenged provisions of the 2011 Licensing and Registration Regulations, 2018 Recruitment Regulations and 2026 Amendment Regulations;
  - An interim stay on the May 2023 order;
  - Restoration of State authorities' inspection powers over centrally licensed businesses; and
  - Transfer of relevant FoSCoS database records back to State authorities.

WHAT IS THE ADVANCED EMERGENCY BRAKING SYSTEM (AEBS)?



- AEBS is an **active vehicle safety technology** designed to **prevent collisions** or **reduce their severity.**
- It is a **combination of braking and sensor technology** integrated into automobiles to recognise and prevent crashes.
- The system **continuously monitors the road ahead, warns the driver** when it detects a potential collision with another vehicle, pedestrian, or cyclist, and **automatically applies the brakes if the driver fails to respond** in time.
- AEBS is a **key feature of Advanced Driver Assistance Systems (ADAS),** a collection of more than 100 electronic technologies designed to improve road safety.

Cross And Climb

How does AEBS work?

- AEBS **operates continuously** while a vehicle is moving.
- It uses a **combination of radar sensors, cameras, or Light Detection and Ranging (LiDAR) technology**, typically mounted near the front bumper or windscreen, to **assess the distance from obstacles, their relative speed,** and the time remaining before a potential collision.

  The system generally works in **three stages:**

  - **Warning stage**: When the **system detects an obstacle** approaching rapidly and calculates that a collision is imminent, it **issues an audio-visual alert,** such as a dashboard warning light and a beeping sound, prompting the driver to brake.
  - **Partial or pre-braking stage**: If the driver does not respond, the system may apply a **brief, sharp brake pulse as a warning** and pre-charge the braking system to maximise stopping power.
  - **Full emergency braking stage: If the driver still fails to take action** and a collision is imminent, **AEBS automatically applies maximum braking force.**
- AEBS can reduce the impact of various crashes, including head-on, rear-end, right-turn, and pedestrian collisions.

Which countries have adopted AEBS?

- European Union
- Japan
- United States
- United Kingdom
- China

Cross And Climb

WHAT IS GIRDLING?



- Girdling is a commonly used habitat and forest management technique that **deadens a tree without felling it** for a specific purpose.
- Girdling involves the **removal of bark and cambium** from the target tree **using continuous and connected cuts** that **completely encircle the entire tree.**
- It **destroys the cambium** so **no growth can occur** and **disrupts the flow of water and nutrients** in the tree. As a result, **roots are starved of nutrients,** and the **plant cannot grow more stems and foliage.**

What is Cambium?

- It is a **layer of actively dividing cells between xylem** (wood) **and phloem** (bast) tissues that is **responsible for the secondary growth of stems and roots.**
  - **In secondary growth**, a **plant grows wider.** Contrast this to primary growth, in which a plant grows taller.
- A cambium may also form within callus tissues—masses of cells that grow over the injured surface of a wound, leading to healing.
- **In a typical woody stem,** the **arrangement** from outside to inside is:
  - **Bark → Phloem → Vascular cambium → Xylem → Inner stem**

What is Bridge-Grafting?

- A bridge graft is an example of a **repair graft.** It is done to **rescue established trees that have been girdled** by mechanical damage or animals.
- Bridge-grafting consists of **connecting the cambium layers above and below the girdled area.**
- This process **restores the flow of carbohydrates** from the leaves down to the roots, thereby **allowing the tree to continue its normal life**
- The connection or **bridge is usually made with scions (Bridge Wood).** Scions are taken from **dormant one-year-old stems.**

Cross And Climb