

NEWS TODAY

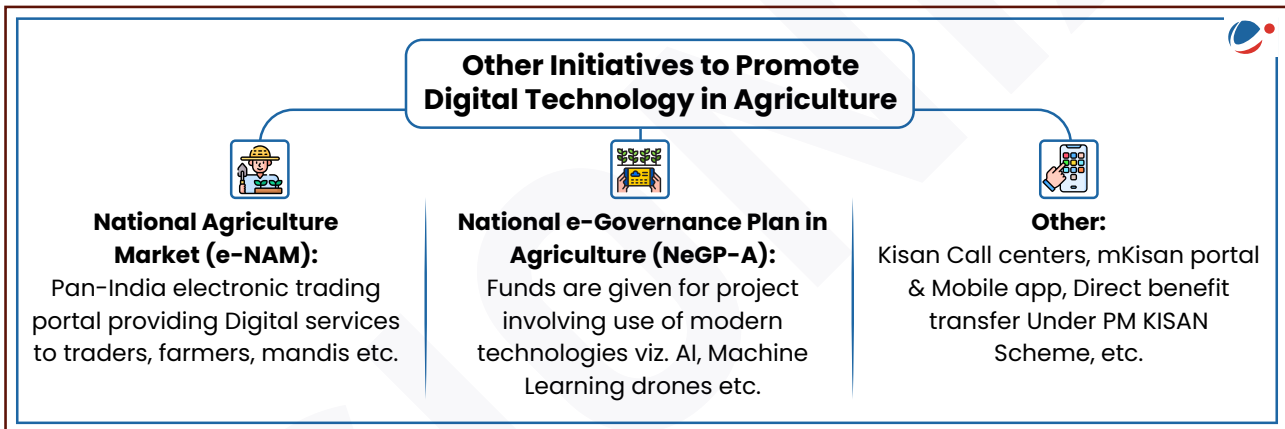
Union Cabinet approves Rs 2817 crores Digital Agriculture Mission (DAM)

About DAM

- It is conceived as an **umbrella scheme to support digital agriculture initiatives**, such as creating **Digital Public Infrastructure (DPI)**, implementing the **Digital General Crop Estimation Survey (DGCES)** etc.
 - ⊖ DPI is a set of **digital systems that enables countries to safely and efficiently provide economic opportunities and deliver social services.**
- Based on structure of DPI, **following 3 DPIs to be built under the mission.**
 - ⊖ **AgriStack:** Consists of three foundational registries/databases—**farmers' registry, geo-referenced village maps, and crop sown registry.**
 - ◆ Farmers will be given a **digital identity similar to Aadhaar**, which will be **linked to state's land records, livestock ownership etc.**
 - ⊖ **Krishi Decision Support System:** It will leverage **geospatial data, drought and flood monitoring, weather and satellite data, and groundwater availability information to assist farmers in making informed decisions.**
 - ⊖ **Soil Profiling:** Detailed Soil Profile Maps on a 1:10,000 scale of about 142 million ha of the country's agricultural land are envisaged to be completed.

Significance

- Enable **efficient, easier, and faster services and scheme delivery** to farmers.
- Provide **employment opportunities to about 2.5 lakh trained local youth and Krishi Sakhis.**
- **Efficient value chains for agricultural inputs and post-harvest processes.**



Cabinet approves one more semiconductor unit under India Semiconductor Mission (ISM)

The approved unit will be set up in Sanand, Gujarat with a **capacity of 60 Lakh chips per day.**

- More such units are being set up in Dholera, Gujarat, Morigaon, Assam etc. with cumulative capacity of about 7 crore chips per day.

Why is India focussed on developing Semiconductor manufacturing?

- **Dependency on imports:** Semiconductors are **essential components in various modern technologies**, from smartphones to medical devices and vehicles.
 - ⊖ The **consumption of electronic devices has sharply increased in India** and majority of this demand is being fulfilled by imports.
 - ⊖ For instance in 2019, semiconductor exports from India stood at US\$ 0.33 billion while **imports were higher at US\$ 4.65 billion.**
- **Global supply chain diversification:** The semiconductor value chain has seen a shift due to pandemic-related disruptions and rising labour costs, prompting global producers to diversify away from China.
 - ⊖ Currently, about **70% of the world's semiconductor manufacturing is concentrated in South Korea, Taiwan, China, the United States, and Japan.**

About India Semiconductor Mission (ISM)

- **India Semiconductor Mission (ISM)** is a specialized and independent Business Division within the Digital India Corporation.
 - ⊖ It has been working as nodal agency for the Schemes approved **under Semicon India Programme.**

Semicon India Programme/Modified Programme for Semiconductors and Display Fab Ecosystem under MeitY


- Approved with outlay of Rs 76,000 crore for the **development of semiconductor and display manufacturing ecosystem in the country.**
- It aims to provide **financial support to companies** through schemes such as:
 - ⊖ **Semicon India Future Design:** Design Linked Incentive (DLI) Scheme
 - ⊖ 'Modified Scheme for setting up of Semiconductor Fabs in India'
 - ⊖ 'Modified Scheme for setting up of Display Fabs in India' (for manufacturing TFT LCD or AMOLED based display panels)
 - ⊖ 'Modified Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab etc.


Cabinet approves seven major schemes for improving farmers' lives and livelihoods


With the outlay of Rs 14,235 Crore, 7 schemes include:


- **Digital Agriculture Mission:** Based on the structure of Digital Public Infrastructure.
- **Crop science for food and nutritional security:** It has following pillars:
 - ⊖ Research and education
 - ⊖ Plant genetic resource management
 - ⊖ Genetic improvement for food and fodder crop
 - ⊖ Pulse and oilseed crop improvement
 - ⊖ Improvement of commercial crops
 - ⊖ Research on insects, microbes, pollinators etc.
- **Strengthening Agricultural Education, Management and Social Sciences:** It is under Indian Council of Agricultural Research (ICAR) and aligns with the New Education Policy 2020.
 - ⊖ It emphasizes using the latest technologies, such as Digital DPI, AI, big data, and remote sensing.
 - ⊖ It also includes a focus on natural farming and building climate resilience.
- **Sustainable livestock health and production programme:** Emphasizing upon:
 - ⊖ Animal health management and veterinary education,
 - ⊖ Dairy production and technology development,
 - ⊖ Animal genetic resource management, production and improvement,
 - ⊖ Animal nutrition and small ruminant production and development.
- **Sustainable development of Horticulture:** Comprising of Tropical, sub-tropical and temperate horticulture crops; Root, tuber, bulbous and arid crops; Vegetable, floriculture, and mushroom crops etc.
- **Strengthening of Krishi Vigyan Kendra**
- **Natural Resource Management**

Significance of the schemes

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Prepare farmers for climate resilience and provide for food security by 2047
- 

Prepare agriculture students and researchers for current challenges
- 

Modernize agricultural research and education.
- 

Increase farmers income from livestock, dairy and horticulture

Report "South-East Asia Regional Status Report on Road Safety" released by WHO

Report launched at 15th World Conference on Injury Prevention and Safety Promotion, finds that the South-East Asia Region accounts for 28% of global road traffic deaths with an estimated 330,222 deaths.

Findings related to India:

- **Road Traffic Deaths (2021):** Estimated 216 618 (+2.1 % change since 2010) while reported road traffic deaths were 153 972.
 - ⊖ Deaths of Two-three wheelers Drivers/riders constitute the highest (45.1%)
- **Road traffic deaths per 100,000 populations:** It is 15.4 for India (2021), higher than global rate of 15.

Issues related to Road Safety in South-East Asia

- **Fragmented Efforts:** Due to absence of an effective lead agency with relevant expertise and adequate resources.
- **Poor Quality Infrastructure:** Due to absence of budgetary allocations for road safety & structured system for road safety audits.
- **Other:** Non-compliance of safe vehicle standards, inadequate emergency & trauma care systems etc.

Recommendations of report for road safety

- **Integrate road safety into other processes** such as urban planning, environment policy etc,
- Align road design with star ratings corresponding to **International Road Assessment Programme standards.**
- **Other:** Implement time-bound targets, strengthen the post-crash care system, dedicated data surveillance departments etc.

Road Safety Measures in India

- **National Road Safety Policy (2010):** Establishing road safety information databases, encouraging safer road infrastructure, etc.
- **Motor Vehicle (Amendment) Act, 2019:** creation of Motor Vehicle Accident Fund, implementation of Cashless Treatment Scheme during Golden Hour etc.
- **Integrated Road Accident Database:** initiative of Ministry of Road Transport and Highways to enrich accident databases
- **Others:** Road safety audits, constitution of National Road Safety Council etc.

Grenade-bearing drones bombarded parts of Manipur

Manipur police has formed a **high-level committee** to investigate the **deadly drone bomb attack** and **devise countermeasures**.

About Drone Technology: It refers to the **use of unmanned aerial vehicles (UAVs)**, also known as drones, which are aircraft that can be controlled remotely or fly autonomously

Security implications posed by Drone technology

- **Drone terrorism:** The affordability, maneuverability, and payload capacity of drones make them attractive tools for terrorist organizations.
- **Surveillance and Intelligence gathering:** Drones are used to monitor military installations, border areas, or sensitive government facilities.
- **Disruption of Critical Infrastructure:** Drones can carry out cyber-attacks, electronic jamming or physical attacks to disrupt infrastructure networks.
- **Cross-Border Smuggling and Trafficking:** of contraband, narcotics, or illegal weapons.
 - ⊖ Pakistan uses drones to smuggle improvised explosives, weapons and drugs.
- **Privacy concerns:** Drones with cameras threaten privacy and security of individuals and sensitive facilities like nuclear plants.

Mitigating Drone-Related Threats

- **Counter-Drone Technology:** To neutralise unauthorized or malicious drones.
- **Enhance Capacity Building:** Of security forces that focus on drone detection, identification, and response.
- **Public-Private Partnerships:** To encourage the development of indigenous drone technology to strengthen national capabilities.

Drone Regulations & initiatives in India

- **Drone Rules 2021:** It divides the Indian airspace into three zones Green, Yellow and Red based on acceptability of flying drones.
- **Drone Import Policy,2022:** Banning import of foreign drones and freeing up import of drone components.
- **Anti-Drone System:** Indrajaal, India's first **AI-powered anti-drone system**.
- **PLI Scheme for Drones and Drone Components.**

Digital Current Affairs

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Also in News



E shram Portal

E shram has achieved over 30 crore registrations in the span of just 3 years.

- Envisaged as **"One-Stop-Solution"** for Country's unorganised workers
- Seeks to **create a National Database of Unorganized Workers (NDUW)**, including migrant workers, construction workers, gig and platform workers, etc.
- The NDUW will be seeded with Aadhaar.
- **Launched by:** Ministry of Labour & Employment
- **Aim:** to facilitate access of various social security schemes being implemented by different Ministries/ Departments to unorganised workers like Pradhan Mantri Jeevan Jyoti Bima Yojana, Pradhan Mantri Suraksha Bima Yojana, Ayushman Bharat etc.



Investor Education and Protection Fund Authority (IEPFA)

IEPFA has launched a new **five-digit toll-free number – 14453 – to better serve claimant queries.**

About IEPFA

- Under aegis of the **Ministry of Corporate Affairs**.
- Established under the **Companies Act, 2013**.
- Responsible for managing the **Investor Education and Protection Fund (IEPF)**.
 - ⊖ IEPF focuses on **safeguarding investor interests by facilitating the refund of shares, unclaimed dividends, and matured deposits/debentures.**
- Through its initiatives, the IEPFA aims to **ensure transparency, protect investors' rights, and promote financial literacy across the country.**



Cocoa

Scientists are working to grow cocoa beyond the tropics and make the crop more resilient.

About Cocoa (Theobroma cacao L.)

- A **tropical and perennial crop**, mainly grown in African continent.
 - ⊕ In India, **mainly grown in southern states.**
- **Origin:** Native of the Amazon region of South America.
- **Climatic Requirements:**
 - ⊕ **Rainfall:** Average rainfall of 1250-3000 mm. per annum, distributed throughout the year.
 - ⊕ **Temperature:** 15-39°C with **optimum temperature is around 25° C.**
 - ⊕ **Soil:** Predominantly grown on clay loam and sandy loam soils.
 - ⊕ **Other:** Can withstand flooding, but can't tolerate stagnant, waterlogged conditions.



Geographic Information System (GIS)

NHAI will track around 100 toll plazas with GIS-based software for seamless movement of traffic at National Highways

- GIS (under the larger umbrella of Geospatial Technologies) is a **computer-based tool for mapping and analyzing things** that exist and events that happen on Earth.
- GIS can show many **different kinds of data on one map**, such as streets, buildings, and vegetation.
- **Examples of GIS Systems in India:** PARIVESH, e-Green Watch and Van Agni Geo-portal of MoEF&CC, Gram Manchitra by Ministry of Panchayati Raj.



Glacial Lake Outburst Floods (GLOFs) Early Warning System (EWS)

Centre recently initiated an **EWS for 188 critical lakes in the Indian Himalayan Region** prone to GLOFs following the 2023 Sikkim disaster.

- A delegation set up by the National Disaster Management Authority (NDMA) visited the **first lake (Tenchungka lake) in Sikkim** under the **GLOF EWS Mission.**
- It is composed of **NDMA, ISRO and the State Disaster Management Authority**, to make on-ground assessments for the GLOF EWS Mission and to plan mitigation measures.
- Identified critical lakes are located in **Uttarakhand, Arunachal Pradesh, Sikkim, Himachal Pradesh, Ladakh, Jammu and Kashmir, Meghalaya, Manipur and Nagaland.**



Buy (Indian) category

Recently, cabinet approved the proposal for procurement of 240 aero-engines (AL-31FP) for Su-30 MKI aircraft **under Buy (Indian) category from Hindustan Aeronautics Limited (HAL).**

- Engines will have **indigenous content (IC) over 54%.**

About Buy (Indian) category

- Under the **Defence Acquisition Procedure 2020**, it refers to the acquisition of products from an Indian vendor which may not have been developed indigenously, having 60% IC on cost basis of the base contract price.
- Vendors in the 'Buy (Indian-IDDMM)' category, **with indigenous design and at least 50% IC, are also eligible to participate.**



Odisha famine of 1866

This famine severely affected people of Odisha (Killing Around one-third of Odisha's total population).

- Also known as '**Na-Anka Famine**' because it occurred during **Gajapati Divyasinghadeva's ninth regnal year.**
- **Causes:** Carelessness of British administrators, natural and economic disasters.
- Occurred during tenure of **Thomas Edward Ravenshaw** (Commissioner of Odisha division).
- **Aftermath:**
 - ⊕ **Puri Canal or Coast Canal** connecting Hooghly River (**West Bengal**) to River Matai (**Odisha**) was built after Famine.
 - ⊕ Thomas Edward Ravenshaw established number of **vernacular schools** in rural areas with an **emphasis on Odia language**, converted the Cuttack Zilla School into **Ravenshaw College.**



Wood Wide Web

Just like we use the internet to communicate with each other and order supplies, **trees and other plants have their own network: fungi.**

- Scientists refer to this network as "**the Wood Wide Web.**"
- These are **underground fungal threads known as mycelium** which connect the roots of plants, allowing them to share nutrients and communicate through chemical signals.

Places in News



Brunei Darussalam (Capital : Bandar Seri Begawan)

PM of India embarked on a first ever bilateral visit by an Indian PM to Brunei Darussalam.

Political Features

- **Location:** Country in **Southeast Asia** consisting of two unconnected parts, situated on **northern coast of island of Borneo.**
- **Border:** Apart from northern **coastline on South China Sea**, it is completely surrounded by Malaysian **state of Sarawak.**
- It is a member of **Commonwealth and ASEAN.**

Geographical Features

- **Landforms:** Narrow coastal plain in north & rugged hills in south.
- **Highest point:** Pagon Peak
- **Major rivers:** Belait, Tutong, Brunei, Pandaruan etc.
- **Climate:** Equatorial climate influenced by monsoon systems



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI