# 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.

# Other Initiatives to Promote Digital Technology in Agriculture



## National Agriculture Market (e-NAM):

Pan-India electronic trading portal providing Digital services to traders, farmers, mandis etc.



## National e-Governance Plan in Agriculture (NeGP-A):

Funds are given for project involving use of modern technologies viz. Al, Machine Learning drones etc.



#### Other:

Kisan Call centers, mKisan portal & Mobile app, Direct benefit transfer Under PM KISAN Scheme, etc.

# 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)** 

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.

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.



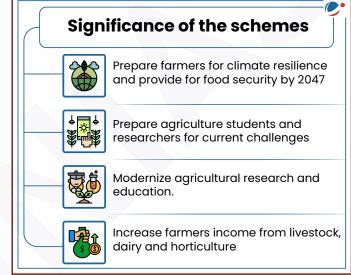




# Cabinet approves seven major schemes for improving farmers' lives and livelihoods

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



# 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.

#### **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.

> Other: Implement time-bound targets, strengthen the post-crash care system, dedicated data surveillance departments 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 Al-powered anti-drone system.
- **PLI Scheme for Drones and Drone Components.**







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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
- 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).
  - 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.
- **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 (Tenchungkha 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 aeroengines (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-IDDM)' category, with indigenous design and at least 50% IC, are also eligible to participate.



#### Odisha famine of 1866

This famine severly affected people of Odisha (Killing Around onethird 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 (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

**JODHPUR** LUCKNOW

**PRAYAGRAJ** 

PUNE

RANCHI