

# NEWS TODAY

## US, Britain, other countries ink agreement to regulate Artificial intelligence (AI)

- These countries (does not include India) unveiled a document titled **Guidelines for secure AI system development**.
  - ⊖ Guidelines are **non-binding** in nature.
- **Key Provisions of guidelines:**
  - ⊖ **Secure design** (deals with the design stage of the AI system): It includes a holistic process to assess the threats to the AI system.
  - ⊖ **Secure development:** Securing supply chain, track and protect AI related assets.
    - ◆ Manage **'technical debt'** (implied cost incurred when businesses do not fix problems that will affect them in the future) throughout an AI system's life cycle.
  - ⊖ **Secure deployment:** Applying **good infrastructure** security principles in AI system's life cycle, etc.
  - ⊖ **Secure operation and maintenance:** Constant monitoring to observe sudden and gradual changes in behaviour affecting security.
- **Need to Regulate AI:**
  - ⊖ To deal with **vulnerabilities** like-
    - ◆ **Adversarial machine learning (AML):** Exploitation of **fundamental vulnerabilities** in ML components like extracting sensitive model information.
    - ◆ **Data poisoning:** Deliberately **corrupting the training data**.
  - ⊖ **Other:** Disrupt the **democratic process**, lead to job loss, privacy violation etc.
- **Challenges in regulation:** Coordinating with **regulators across borders**, lack of **standardized definitions** and benchmarks, balancing benefits and risks etc.

### About AI and Recent Efforts to Regulate it

- AI is a **machine's ability** to perform the **cognitive functions** we associate with human minds, such as perceiving, reasoning, learning, problem solving, etc.
- **Recent Efforts:**
  - ⊖ **Bletchley Declaration:** Resolved to work together for human-centric, trustworthy and responsible AI at the UK's AI Safety Summit.
  - ⊖ **Hiroshima AI Process (HAP):** Effort by **G7** to determine a way forward to regulate AI.

## Decentralised Autonomous Organisations (DAOs), intersection of blockchain technology and governance

- A **DAO** is a type of organisation that operates according to a **set of rules encoded as computer programmes** known as **smart contracts (automatically execute predefined rules)**.
  - ⊖ It is designed to be **self-governing** and **self-sustaining**.
- It is powered by **blockchain technology**.
  - ◆ **Blockchain** is a **shared, immutable ledger** that facilitates the process of **recording transactions** and **tracking assets** in a **business network**.
- **Key Features of DAO:**
  - ⊖ **Decentralised:** Decision-making in it is done through **democratic process**. **Token holders (participants in DAO)** have a direct say, resulting in a **more equitable distribution of influence**.
  - ⊖ **Transparent:** **Smart contracts** ensures that operations are **transparent** and immutable, **fostering trust** among participants.
  - ⊖ **Inclusive:** It transcends **geographical** and **socio-economic barriers**, enabling global participation.
- **Key Applications:**
  - ⊖ **Finance:** Platforms like MakerDAO have introduced lending and borrowing services, enabling users to participate in the **global financial ecosystem** without relying on banks.
  - ⊖ **Digital Art:** Artists can manage **Non-fungible tokens (NFTs)**.
    - ◆ These are assets that have been tokenized via a blockchain.
  - ⊖ **Other:** **Supply chain management** (transparency and traceability in global supply chains), etc.
- **Challenges associated with DAO:** Prone to cyber-attacks, accountability and dispute resolution (legal recourse and liability), regulation, etc.

## Financial Stability Board (FSB) Publishes List of Global Systemically Important Banks (G-SIBs) 2023

- The list was published in consultation with **Basel Committee on Banking Supervision (BCBS)** and national authorities
  - ⊖ It has **no Indian bank in it.**
- A G-SIB is bank whose **systemic risk profile** is deemed to be of such importance that the **bank's failure** would trigger a **wider financial crisis** and **threaten the global economy.**
  - ⊖ G-SIBs are selected based on the criteria like
    - ◆ **Higher capital buffer**
    - ◆ **Total Loss-Absorbing Capacity (TLAC)**
    - ◆ **Resolvability**
    - ◆ **Higher supervisory expectations.**
  - ⊖ G-SIBs are placed in **five different buckets** corresponding to required levels of additional capital buffers.
  - ⊖ In India, G-SIB has to maintain additional **Common Equity Tier 1 Capital (CET1)**, proportionate to its **Risk Weighted Assets (RWA).**
- On the line of G-SIBs, the **Reserve Bank India (RBI)** has established the **Framework for dealing with Domestic Systemically Important Banks (D-SIB)** in 2014.
  - ⊖ These are placed under **five different buckets.**
    - ◆ **SBI (Bucket 3) ICICI Bank and HDFC bank (Bucket 1)** are currently listed as D-SIBs.
  - ⊖ D-SIBs have to maintain additional **CET1** requirements ranging from 0.20% to 0.80% of **RWA.**

### ➤ About FSB

- ⊖ FSB is an international body that **monitors and makes recommendations** about the **global financial system**, headquartered in Basel (Switzerland).
- ⊖ It was established in 2009 (endorsed by G-20) as the successor to the **Financial Stability Forum.**
- ⊖ India is also member of FSB.

## Ministry of Fisheries, Animal Husbandry & Dairying released the "Basic Animal Husbandry Statistics 2023" on National Milk Day (26<sup>th</sup> Nov)

- **Key highlights**
  - ⊖ Total Milk production in the country is estimated at **230.58 million tonnes** during 2022-23 registered a **growth of 22.81%** over the past 5 years.
  - ⊖ Wool production has **registered a negative growth of 16.84%** and **meat production registered a growth of 20.39%** over the past 5 years.
- National Milk Day is celebrated to honor **Dr. Verghese Kurien**, the "Father of the White Revolution in India," on his birth anniversary.
- **About white revolution**
  - ⊖ India launched **Operation Flood in 1970** to increase milk production.
  - ⊖ India has emerged as the **largest producer of milk in the world** with one-fourth of global production.
  - ⊖ **Major factors that contributed to the success** of the white revolution are
    - ◆ **Institution of cooperatives** especially for marketing of milk.
    - ◆ **Investments in milk processing.**
    - ◆ **Artificial insemination** in cows and
    - ◆ **Absence of restrictive regulations** on milk marketing and trade.
  - ⊖ **Government initiative for dairy development**
    - ◆ **The Rashtriya Gokul Mission** for the development and conservation of indigenous bovine breeds.
    - ◆ **National Livestock Mission** for entrepreneurship development and breed improvement.
    - ◆ **The Livestock Health & Disease Control scheme** to improve animal health.
    - ◆ **National Programme for Dairy Development** to enhance the quality of milk and milk products.

### Challenges faced by the dairy sector

Low productivity of milch animals

Increased emission of greenhouse gases by ruminants

Very low share of export

## President calls for the establishment of an All India Judicial Service (AIJS) for recruiting judges

- The AIJS is a reform push to **centralize the recruitment of judges at the level** of additional district judges and district judges for all states.
- Presently, **according to Article 233** "appointments of persons to be, and the posting and promotion of, **district judges are made by the Governor in consultation with the High Court.**
- The **42<sup>nd</sup> Constitutional Amendment amended Article 312 (1)** empowering Parliament to make laws for creating one or more All-India Services, including an AIJS.
- **Need for AIJS**
  - ⊖ **To fill the existing vacancies:** Over **5000 posts of Judges are currently vacant** in the lower judiciary.
  - ⊖ **To reduce the pendency load:** Nearly **85% of the pending cases** are at the level of the District Judiciary.
  - ⊖ **Favors better representation:** judges will be selected from all sections of society and get elevated to the higher judiciary.
- **Challenges in implementing AIJS**
  - ⊖ **Against Separation of powers:** it allows the executive to step in the process of judicial appointments.
  - ⊖ **Disturbs the federal structure of the judiciary:** centralized mechanism will interfere with the appointment powers of the respective High Courts.
  - ⊖ **Issue of Court language:** the lower judiciary uses the local regional language.

## Lightning kills 24 in Gujarat

- Lightning is an **electrical discharge** caused by imbalances between storm clouds and the ground, or within the clouds themselves.
- **How does lightning occur?**
  - ⊖ The discharges are **generated in giant moisture-bearing clouds.**
  - ⊖ **As water vapor moves upward** in the cloud, the falling temperature causes it to change into small ice crystals.
  - ⊖ They continue to move up, **gathering mass until they are so heavy** that they start to fall to Earth.
  - ⊖ This **leads to a collision** between smaller ice crystals moving up and bigger crystals coming down.
  - ⊖ Collisions **trigger the release of electrons** and free electrons cause more collisions.
  - ⊖ The top layer of the cloud gets positively charged, while the middle layer is negatively charged leading to flow between the layers.
  - ⊖ In comparison **to the middle layer** of the cloud, **Earth becomes positively charged.** As a result, some current gets directed towards the Earth.
    - ◆ It is this flow of current that **results in damage to life and property on Earth.**
- **National Disaster Management Authority guidelines**
  - ⊖ **Early warning and Communication,** lightning incidents can be detected by the ground-based Lightning Detection Network in real time.
  - ⊖ **Prevention, Mitigation, and Preparedness Measures,** including Emergency Plans, installing lightning arrestors, etc.

### Types of lightning

- **Intra-cloud lightning** occurs between **opposite charges within the cloud**
- **Inter-cloud lightning** occurs between Cloud-to-Cloud
- **Cloud-to-ground lightning** occurs between **opposite charges in the cloud and on the ground.**

## Also in News



### Generalised Scheme of Preferences (GSP)

- India is among the top beneficiaries of European Union's GSP in 2022.
- **About GSP:**
  - ⊖ Under the scheme, the EU allows **identified products originating** in certain **developing countries preferential access** to its markets in the form of **reduced or zero rates of customs duties.**
    - ◆ As the items become more competitive and reach a particular threshold, the GSP is withdrawn.
    - ◆ The EU has already withdrawn the GSP benefit on many items.
  - ⊖ The present policy will now continue for another four years until 2027.
- GSP was instituted under the aegis of **United Nations Conference on Trade and Development (UNCTAD).**



### Trade secrets

- An Indian IT Services Company has been asked to pay \$210 million by a US jury for misappropriation of US IT services firm's trade secrets.
- **About Trade secrets:**
  - ⊖ These are **intellectual property (IP) rights on confidential information** which may be sold or licensed.
  - ⊖ Information is considered trade secrets, if it fulfil following criteria:
    - ◆ **Commercially valuable** because it is secret.
    - ◆ **Known only to a limited group of persons.**
    - ◆ Subject to **reasonable steps taken** by the **rightful holder** of the information to keep it secret.



### FASTER 2.0 and electronic Supreme Court Reports (e-SCR) portal

- Chief Justice of India launched the **FASTER 2.0** and a Hindi version of the e-SCR portal.
- **About FASTER 2.0 portal**
  - ⊖ It is **designed to promptly inform** jail authorities, trial courts, and high courts about court orders for the release of prisoners.
  - ⊖ It aims to **ensure that prisoners are not held in jail** longer than necessary due to delays in communication.
- **About e-SCR portal**
  - ⊖ It provides the **digital version of the apex court's judgments** in the same manner they are reported in the official law report.



### AstroSat

- AstroSat has successfully detected its **600<sup>th</sup> Gamma-ray Burst (GRB)**.
  - ⊖ GRB are **short-lived bursts of gamma-ray light**, the most energetic form of light.
- **About Astrosat**
  - ⊖ It is the **first dedicated Indian astronomy mission** aimed at studying celestial sources in X-ray, optical and UV spectral bands simultaneously.
  - ⊖ It aim to **understand high energy processes** in binary star systems containing neutron stars and black holes, etc.
  - ⊖ It enables the **simultaneous multi-wavelength observations** of various astronomical objects.



### Global Capability Centres (GCCs)

- Indian GCCs are increasingly emerging as a **hub for leaders with global roles**.
- **About GCC:**
  - ⊖ GCCs are **offshore units of multinational corporations** that operate across the globe.
  - ⊖ These centres are responsible for **providing various support services**, such as IT, finance, human resources, and analytics, to their parent organizations.
  - ⊖ **Political stability, a growing domestic consumption-driven economy, and a strong financial regulatory structure** in India provide a favourable climate for GCCs.



### Amplifi 2.0

- **Ministry of Housing and Urban Affairs** launched Amplifi 2.0 (Assessment and Monitoring Platform for Liveable, Inclusive, and Future-Ready Urban India).
- **About Portal:**
  - ⊖ The portal aims to **provide raw data from Indian cities** available on a single platform for academics, researchers, and stakeholders to **help data-driven policymaking**.
  - ⊖ Currently, **225 urban local bodies have been on-boarded**, and **data of 150 cities is available** on the portal.
  - ⊖ The initiative provides the opportunity to **create new frameworks for Urban development** based on open data obtained.



### Amaterasu

- Astronomers have detected a **rare and extremely high-energy** 'Amaterasu' particle falling to Earth.
  - ⊖ Its source is still unidentified.
- It is named Amaterasu particle after the **Japanese sun goddess**.
- It has an energy exceeding **240 exa-electron volts (EeV)**.
  - ⊖ Only the "Oh My God particle" detected in 1991 has more energy than "Amaterasu" at 320 EeV.



### Ayushman Arogya Mandir (AAM)

- Centre has decided to rename **Ayushman Bharat Health and Wellness Centres (AB-HWCs)** as 'AAM' with the tagline 'Arogyam Parmam Dhanam'.
- Launched under the **Ayushman Bharat Program** in 2018, there are over **1.6 Lakh centers in the country**.
- They are envisaged to deliver an expanded range of services that go **beyond Maternal and child health care services**.
- They provide care for **non-communicable diseases, palliative and rehabilitative care, Oral, Eye, and ENT care, mental health, and first-level care for emergencies and trauma**.
- They also provide **free essential drugs and diagnostic services**.

## Places in News



### Cyprus (Capital: Nicosia)

- Cyprus wins cheese trademark case against Indian company.
- **Political Boundaries**
  - ⊖ Third largest island in **Mediterranean Sea** after Sicily and Sardinia.
  - ⊖ Situated at **north-eastern corner of Mediterranean**.
  - ⊖ It lies north of Egypt, south of Turkey, west of Syria, and southeast of mainland Greece.
- **Geographical features**
  - ⊖ It has mountains like **Kyrenia and Troodos**.
  - ⊖ **Highest Peak: Mount Olympus**.
  - ⊖ **Longest river: The Pedieos**.

