

NEWS TODAY

Second meeting of U.S.-India Initiative on Critical and Emerging Technology (iCET) held in New Delhi

iCET led by **Indian National Security Council Secretariat** and **U.S. National Security Council** was launched in 2023.

➤ It is a **framework for cooperation on CET in areas including** space, semiconductors, telecommunications, clean energy, biotechnology, etc.

Key highlights

➤ **Innovation:** Unlock over **combined \$90 million in government funding over next five years** for **U.S.-India Global Challenges Institute** to foster research partnerships in areas of semiconductor technology, sustainable agriculture, etc.

➤ **Space Technology Cooperation:** Both sides agreed to-

- ⊕ **Launch NASA-ISRO Synthetic Aperture Radar**, jointly developed satellite to map Earth's surface twice every 12 days as part of efforts to combat climate change.
- ⊕ Explore opportunities to **participate in Lunar Gateway Programme (LGP)**.
 - ◆ LGP aims to build a **space station around moon** as part of collaborative **Artemis programme** headed by US.

➤ **Telecommunications:** Partnerships to **deploy cost-effective Open Radio Access Network technology**; strengthen **cooperation in 6G technologies** etc.

➤ **Biotechnology:**

- ⊕ Developing **joint Strategic Framework for optimizing and strengthening global biopharmaceutical supply chain**.
- ⊕ Launch of **"Bio-X" initiative** to **promote cooperation in biotechnology** and enhance competitiveness of biotechnology industries.

➤ **Clean Energy:** Enhancing Mineral security partnership through **co-invest in lithium resource project** in South America and rare earths deposit in Africa.

Significance of ICET

- Vital for India's growing role as a **trusted supply chain partner and contributor in the global technology value chain**.
- Deals directly with **disruptive domains** which are central to the next Industrial Revolution and future warfare.
- **Open new markets for India's deep technology players**.

The Prime Minister granted certificates to 30,000 Krishi Sakhis

Krishi Sakhis are the **practicing farmers and trained para extension professionals** in agriculture at grass root level.

➤ Certificates were granted under **Krishi Sakhi Convergence Program (KSCP)**.

About KSCP

➤ It is an initiative under MoU of **the Ministry of Agriculture and Farmers' Welfare and the Ministry of Rural Development** to enhance the skills of rural women.

➤ This certification course aligns with the objectives of the **"Lakhpati Didi" Program**.

- ⊕ The Lakhpati Didi program aims to catalyze **economic empowerment and financial independence** among women in rural areas.

Women Workforce in Agriculture Sector

➤ **Status:** Agriculture employs about 80% of rural women (NITI Aayog).

➤ **Ownership:** The percentage of **female operational holdings** has increased from 12.78 percent during 2010-11 to 13.78 percent during 2015-16.

➤ **Significance:**

- ⊕ Responsible for producing **60-80% of the country's food**.
- ⊕ The ratio of women to men working in the **agricultural sector has increased** and made a greater amount of **contribution to GDP per capita**.
- ⊕ Women's leadership in agriculture can **tackle gender inequality**.

➤ **Challenges:** Limited access to credit and markets, lack of inheritance of land in many societies, lack of information, etc.

Government Schemes for women farmers

- **Mahila Kisan Sashaktikaran Pariyojana:** to empower women by making systematic investments to enhance their participation and productivity.
- **Namo Drone Didi:** to provide training to women of selected Women SHGs on drones for rental services to farmers for agriculture purpose.
- **Pradhan Mantri Kisan Samman Nidhi (PM-KISAN):** for providing financial assistance to landholding farmer families including women farmers.

Centre introduced Offshore Areas (Existence of Mineral Resources) Rules, 2024

It has been introduced by central government by exercising powers conferred by **Offshore Areas Mineral (Development and Regulation) Act, 2002**.

- The Act provides for **development and regulation of mineral resources** in the territorial waters, continental shelf, exclusive economic zone and other maritime zones of India.

About Rules

- **Rules shall apply to all minerals** except
 - ⊖ On **mineral oils and hydrocarbons**.
 - ⊖ On minerals specified in **Part B** of the First Schedule to the **Mines and Minerals (Development and Regulation) Act, 1957**
- It defines the **stages of exploration, feasibility studies, economic viability assessments, and classification** of mineral resources and reserves.

Offshore mining

- It is the **process of retrieving mineral deposits from the deep seabed**, at a depth of more than 200 metres.
- **Significance of Offshore Mining for India**
 - ⊖ India's offshore mineral reserves **include gold, diamond, copper, nickel, cobalt, copper, manganese, and rare earth elements** essential for development.
 - ⊖ **India's Exclusive Economic Zone (EEZ)** of over two million square kilometers holds significant recoverable resources.
 - ⊖ Offshore mining will **increase the availability of minerals and reduce dependence** on imports.
- **Challenges:** Lack of private participation, requirement of high skilled labour, require high capital, etc.

Types of resources that can be mined from the deep sea

- **Polymetallic nodules:** These are small, potato-shaped lumps of minerals found on the seabed, containing high concentrations of metals like manganese and iron.
- **Seafloor massive sulphides:** These are deposits of metal sulphides formed around hydrothermal vents, containing valuable minerals such as copper, gold, silver, and zinc.
- **Cobalt-rich ferromanganese crusts:** These are crust-like deposits that form on seamounts and other underwater mountains.

Chief of Defence Staff (CDS) released India's first Joint Doctrine for Cyberspace Operations

During Chiefs of Staff Committee meeting, Joint Doctrine was released laying **emphasis on understanding military aspects of cyberspace operations**.

- **Cyberspace has emerged as crucial domain** in modern warfare, in addition to traditional domains of Land, Sea, and Air.
- **Preventing hostile actions in cyberspace, which can impact nation's economy, cohesion, political decision-making, and ability to defend itself**, highlights the need of Joint Doctrine.

Significance of Joint Doctrine

- Provides **conceptual guidance to commanders** of armed forces, staff and practitioners in **planning and conducting Cyberspace Operations**.
- **Promote Jointness and Integration** of three services (**Army, Navy and Air Force**).
- Integrated with **national security strategies**. This will help to develop goals, methods, and resources to gain benefits and impact events in all areas of operation and through all forms of power.

Cyberspace warfare

- It is defined as a **cyber-attack by state or no state actors** that either constitute serious **threat to a nation's security** or are conducted in response to a **perceived threat against a nation's security**.
- Cyber-attacks can **disable official websites and networks, disrupt or disable essential services**, steal or alter classified data, cripple financial systems etc.
- **Cyber warfare ecosystem** includes Cyber terrorism, Cyber Fraud, Cyber Spying, Cyber stalking.

Chief of Defence Staff (CDS)

- **Head of the Department of Military Affairs**, created within Ministry of Defence and function as its Secretary.
- CDS is **Permanent Chairman of Chiefs of Staff Committee, member of Defence Acquisition Council** chaired by Ministry of Defence and **Defence Planning Committee** chaired by National Security Advisor.
- CDS acts as **Principal Military Adviser to Ministry of Defence** on all tri-services matters of military and **Military Adviser to Nuclear Command Authority**.
- **CDS do not exercise any military command**, including over the three Service Chiefs.



The Post Office Act 2023 comes into effect

It repeals the **Indian Post Office Act, 1898**.

Provisions of the Post Office Act, 2023

- **Director General of Postal Services (DGPS)** will be appointed to head India Post.
 - ⊖ DGPS will have powers to make regulations on matters such as **charges for services, supply and sale of postage stamps**.
- **Powers to intercept postal articles:**
 - ⊖ Government can intercept an article transmitted through India Post on specified grounds.
 - ⊖ Grounds include **security of the State, friendly relations with foreign states, public order, emergency, or public safety**.
- **Exemptions from liability:** Post office will not incur any liability with regard to its services, except such liability as may be prescribed with regard to a service provided by the Post Office.
- There are **no penal provisions prescribed** in the Act.
- **Importance of the Act**
 - ⊖ It creates a simple legislative framework for delivery of **citizen centric services, banking services and benefits of Government schemes** at the last mile.
 - ⊖ It enhances the **ease of doing business and ease of living**.

Postal System During British Era

- The East India company opened its **first post office in 1727**.
- **Lord Dalhousie** recognized the Indian Post Offices as a **separate organization of national importance**.
- Present site of the **General Post Office of Kolkata** was the site of the **first Fort William**.

Supreme Court to organize Special Lok Adalat on 75th year of its establishment for dispute settlement

Lok Adalats is one of the **Alternative Dispute Redressal Mechanisms (ADRM)**.

➤ About Lok Adalat (People's Court)

- ⊖ Accorded statutory status under **Legal Services Authorities Act, 1987**.
 - ◆ In 2002, Act was amended to **establish permanent Lok Adalats** for public utility services, which are **guided by principles of natural justice**.
 - ◆ They are not bound by **Code of Civil Procedure (CPC), 1908** and **Indian Evidence Act 1872**.
- ⊖ It has **same powers as a civil court** under **CPC, 1908**.
- ⊖ Decision made by Lok Adalats is **final and binding** and **no appeal** can be made against its decision.
- ⊖ **Cases referred to Lok Adalat includes**
 - ◆ Any case pending before any court,
 - ◆ **Any dispute which has not been brought before any court** and is likely to be filed before court.
- ⊖ Types of cases undertaken includes **matrimonial disputes, property disputes, motor accident claims, land acquisition etc**.
- ⊖ **First Lok Adalat** was held in 1982 at **Junagarh, Gujarat**.
- **Significance of Lok Adalats**
 - ⊖ Quick **settlement of conflicts**.
 - ⊖ **Economical in nature** as there is **no court fee** applicable while filing a dispute in Lok Adalats.
 - ⊖ Help to **reduce judiciary's burden** of pending cases.

Other major ADRM in India

- **Arbitration** (quasi-judicial proceeding, decision is binding)
- **Mediation** (decision making on voluntary and consensual basis)
- **Conciliation** (conciliator assists parties to reach a mutually agreed settlement, non-binding)

Also in News



Speaker Pro tem of Lok Sabha

For 18th Lok Sabha a pro-tem Speaker will be chosen to **swear in the new Members of Parliament**.

About Speaker Pro tem

- The office of the **Speaker becomes vacant** immediately before the first meeting of the new Lok Sabha.
- The duties of the Speaker are to be performed by a Member of the House **appointed for this purpose by the President** as Speaker pro tem.
 - ⊖ The President administers the **oath to the Speaker pro tem**.
- Normally, **the senior most Members** (in terms of number of years of membership of the House) are chosen for the purpose.



Container Port Performance Index (CPPI)

Nine of Indian ports have found their position among top 100 global ports in **CPPI in 2023**.

About CPPI (2023)

- It is developed by the **World Bank and S&P Global Market Intelligence**.
- The Index is a comparable assessment of **performance based on vessel time in port**.
- It helps to **identify opportunities to improve a terminal or a port** that will ultimately benefit all public and private stakeholders.
- Top-ranked container port in the CPPI 2023 is **Yangshan Port (China)**.



Kafala System

Fire in Kuwait that killed 49 people raised questions about the kafala system.

The Kafala (Sponsorship) System

- It emerged in the 1950's to regulate the relationship between employers and migrant workers in many countries in West Asia.
- Objective was to provide temporary, rotating labour that could be rapidly brought into the country in an economic boom.
- The migrant worker cannot enter the country, transfer employment nor leave the country for any reason without first obtaining explicit written permission from the sponsor.



National Financial Reporting Authority (NFRA)

NFRA is planning to increase the number of audit firms it inspects annually.

About NFRA (HQ: New Delhi)

- Genesis:** Constituted in 2018 by Government of India under Section 132 (1) of Companies Act, 2013.
- Objective:** To continuously improve the quality of all corporate financial reporting in India.
- Composition:** Consists of a chairperson, appointed by Central Government and such other members not exceeding 15 consisting of part-time and full-time members.
- Functions and Duties:**
 - Recommend accounting and auditing policies and standards to be adopted by companies for approval by Central Government.
 - Monitor and enforce compliance with accounting standards and auditing standards.
- Accounts Audit:** By Comptroller and Auditor-General of India.



Gene Therapy

Recently, a tech millionaire was reported to have gone under gene therapy to edit his DNA.

- A gene is defined as the functional unit of inheritance.
- Genes are made up of sequences of DNA and are arranged, one after another, at specific locations on chromosomes in the nucleus of cells.

Gene Therapy

- It is a technique that modifies a person's genes to treat or cure diseases such as cancer, genetic disorders, etc.
- Human gene therapy seeks to modify or manipulate the expression of a gene or to alter the biological properties of living cells for therapeutic use.

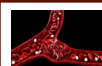


Light Combat Helicopter (LCH)

Ministry of Defence has issued Request for Proposal to Hindustan Aeronautics Limited (HAL) for procurement of 156 LCH.

About LCH

- First indigenous Multi-Role Combat Helicopter designed and manufactured by HAL.
- Capable of firing air-to-ground and air-to-air missiles.
- Possesses modern stealth characteristics, robust armour protection and formidable night attack capability.
- Capable of operating from high altitude terrain and carrying out precision strike at high altitude targets areas (like Siachen glacier).
- Uses radar-absorbing material to lower radar signature and has a significantly crash-proof structure and landing gear.



Sickle Cell Disease (SCD)

World Sickle Cell Day 2024 is being celebrated on 19th June.

- Theme for 2024: "Hope Through Progress: Advancing Care Globally".

About SCD

- It refers to a group of inherited blood disorders, wherein a genetic mutation causes abnormal haemoglobin to clump together.
- In SCD, normal round shape of red blood cells become like crescent moon.
- Sickle-shaped cells cause blockages in blood flow which can lead to anaemia, pain, infections and other complications.
- It is more common in tribal population of India, but occurs in non tribals too.
- In India, National Sickle Cell Elimination Mission was launched to eliminate SCD by 2047.



Angel tax

Confederation of Indian Industry (CII) suggested the removal of the 'Angel Tax'.

About Angel Tax

- It was first introduced in 2012 under Income-tax Act, 1961.
- It is levied on the capital raised via the issue of shares by unlisted companies if the share price of issued shares is seen in excess of the fair market value of the company.
- It helps in curbing money laundering and make it easier for businesses to comply with the tax norms.

Places in News



Thailand (Capital: Bangkok)

Thailand's senate has approved bill to legalize same-sex marriage.

Political features

- Located in centre of mainland Southeast Asia.
- Land Border: Myanmar (northwest), Cambodia (east), Laos (northeast) and Malaysia (south).
- Water bodies: Andaman Sea and Gulf of Thailand.

Geographical features

- Highest mountain: Doi inthanon.
- Major rivers: Mekong, Chao Phraya etc.
- Climate: Tropical monsoon.
- Natural resources: Tin, Rubber, Natural Gas, Tungsten, Tantalum, Timber etc.

