

NEWS TODAY

Union Cabinet approves Electronics Component Manufacturing Scheme with funding of ₹ 22,919 crore

The scheme aims to develop a robust component ecosystem, domestic value addition, and integrate Indian companies with global value chains.

Salient Features of the Scheme

- It will provide **differentiated incentives** to Indian manufacturers tailored to overcome specific disabilities for various categories of components.
 - ⊕ The **targeted segments** will include **sub-assemblies** (Display and camera module), **Bare components** like Non-Surface Mount Devices, etc.
- **Tenure: 6 years** with one year gestation period.
- Payout of a part of the incentive is linked with employment targets achievement.

Importance of Electronic Sector

- **Strategic:**
 - ⊕ **National Security:** India's first ever national security semiconductor fabrication plant will be set up under India-US joint cooperation to produce chips for military hardware.
 - ⊕ **Supply Chain resilience:** Over half of India's import (\$89.8 bn in FY23) comes from China and Hong Kong, highlighting the need for diversification and building domestic manufacturing capacities.
- **Economic:**
 - ⊕ **Export Growth:** It rose from 0.38 lakh crores (FY14-15) to 2.41 lakh crores (FY23-24) with a compound annual growth rate (CAGR) of more than 20%.
 - ⊕ **Domestic Production Growth:** It increased from 1.9 lakh crores (FY14-15) to 9.52 lakh crores (FY23-24) with a CAGR of more than 17%.

Union Minister of Ports, Shipping and Waterways introduced Indian Ports Bill 2025 in Lok Sabha

The bill will replace **Indian Ports Act (IPA), 1908**, which was enacted during the colonial period and has become outdated.

- **The bill aims to:** Streamline laws related to ports in India, focus on **promoting integrated port development**, ensure **optimal utilization of country's extensive coastline**, etc.

Key Provisions and Features of The Indian Ports Bill, 2025

- **Applicability:** It applies to existing and new ports, navigable rivers, vessels within port limits, and aircraft using port waters.
- **Establishment of Maritime State Development Council (MSDC)** by the central government with the union minister of ports, shipping and waterways as chairman.
- **Establishment of State Maritime Boards (SMBs):** By the State Governments for effective management of ports, **other than major ports**, within their jurisdiction.
 - ⊕ **SMB will inherit** all debts, contracts, and obligations of State related to port operations.
- **Establishment of Dispute Resolution Committee (DRC):** By State for adjudicating disputes related to ports.
 - ⊕ **Civil courts** are excluded from adjudicating disputes that DRC is empowered to resolve under this Act.
- **Appointment of Port Officers:** Including conservators and health officers, who oversee operations, enforce laws, manage safety, and handle health issues.
- **Safety and Pollution Control:** Ports must provide facilities for vessel waste as per international conventions {**MARPOL (1973), Ballast Water Management Convention (2004)**}.
- **Mega Ports:** The **Central Government** can classify major and non-major ports as **mega ports** based on specific criteria.

Port Governance Structure



Maritime State Development Council

Functions:

- **Recommend Legal and Policy Improvements**
- **Promote** Port Competition
- **Advise** on National Port Development
- **Issue** Data Management Guidelines



State Maritime Boards

Functions:

- **Exercise** Supervision of Port Works
- **Develop** Port Infrastructure
- **Regulate** Navigation & Tariffs
- **Ensure** Environmental Compliance

'Judges must protect Freedom of Speech Even if they don't like what was said': Supreme Court

In **Imran Pratapgadhi vs. State of Gujarat**, Court underscored the importance of protecting the freedom of speech and expression and reminded authorities of their duty to uphold the rights of persons expressing unpopular opinions.

- Judgement came in response to an FIR filed against Rajya Sabha MP **Imran Pratapgadh**, alleging that the content incited enmity between communities (under **Section 153A of IPC**).
- The court found that **Section 153A requires deliberate intent to promote hatred** between communities.
 - ⊕ Under the **Bharatiya Nyaya Sanhita (2023)**, **Section 196** penalizes actions or speech that incite hatred or disharmony between different groups based on religion, race, language, or region, to maintain peace.

Constitutional provision w.r.t. Freedom of speech

- **Article 19(1)(a) of the Constitution of India** guarantees the right to freedom of speech and expression to all citizens. This right includes:
 - ⊕ Expressing opinions and ideas freely.
 - ⊕ The right to receive and impart information.
 - ⊕ Freedom of the press.
 - ⊕ Right to criticize the government and public figures.
- However, **reasonable restrictions** under **Article 19(2)** can be imposed on grounds of **sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality, or in relation to contempt of court, defamation or incitement to an offence.**

Important Judicial Pronouncements

- **K.A. Abbas v. Union of India (1970)**: A film's impact must be assessed as a whole on ordinary viewers.
- **Shreya Singhal v. Union of India (2015)**: Freedom of thought and expression is fundamental to democracy.
- **Manzar Sayeed Khan & Patricia Mukhim v. State of Meghalaya (2021)**: Mens rea (intention) is crucial in cases under Section 153-A IPC.

Over 1,000 species of fungi threatened with extinction: IUCN

A latest press release by the IUCN highlighted that the rapid growth of agricultural and urban areas has replaced fungi habitats, putting 279 species at risk of extinction.

Key findings

- **Risk**: Fungi species on the list have reached 1,300, of which at least 411 are at risk of extinction.
- **Climate change**: Changing fire patterns in the USA have put 50+ species at risk. E.g., **Sierra Nevada forests in the USA** are dominated by firs now.
- **Pollution**: 91 species are at risk due to ammonia runoff from fertilizers.
- **Habitat loss**: 279 species are endangered due to habitat loss and urban expansion.

About Fungi

- Fungi are **eukaryotic organisms** i.e., their cells contain **membrane-bound organelles and clearly defined nuclei**.
- While they were historically classified under the **plant kingdom**, they differ significantly because:
 - ⊕ **Absence of chlorophyll.**
 - ⊕ **Cell Structure**: Fungal cell walls contain **chitin**, whereas plant cell walls contain **cellulose**.
 - ⊕ **Nutrient Absorption**: Fungi **digest organic matter externally** and then absorb it, while plants make their own food.
- **Lichen Mutualism**: Composite organisms made of a fungus and either a single-celled alga or cyanobacterium.
- **Ecological role of fungi**: Fungi decompose organic matter, recycle nutrients, and form symbiotic relationships with plants.
 - ⊕ Scientists in **Germany** have identified **fungi that can degrade synthetic plastics**
- **Other benefits of Fungi**: Food industry (used in **fermentation, baking**, etc.), Drug production (some species contain chemicals that are extracted and used to produce drugs known as **statins, which control cholesterol levels**); etc.



India Dispatches Humanitarian Aid to Myanmar Under 'Operation Brahma' After 7.7 Magnitude Earthquake

The earthquake, with a depth of 10 km, was the strongest in two years. The shallow depth had intensified shockwaves, as they travelled from focus (Earthquake's origin point beneath surface) to surface.

- The quake's epicentre (Ground surface directly above the focus) was located ~17 km from Mandalay (Myanmar).

What caused the Earthquake?

- **Strike-Slip Fault:** The Myanmar earthquake occurred due to "strike-slip faulting" (Sagaing fault) between the Indian and Eurasian plates.

About the Sagaing Fault

- ⊕ **Location:** Runs from north to south through Myanmar, and marks the boundary between Indian and Eurasian plates.

- ⊕ **Feature:** It's one of the longest and most active strike-slip faults globally, spanning 1,500 km.

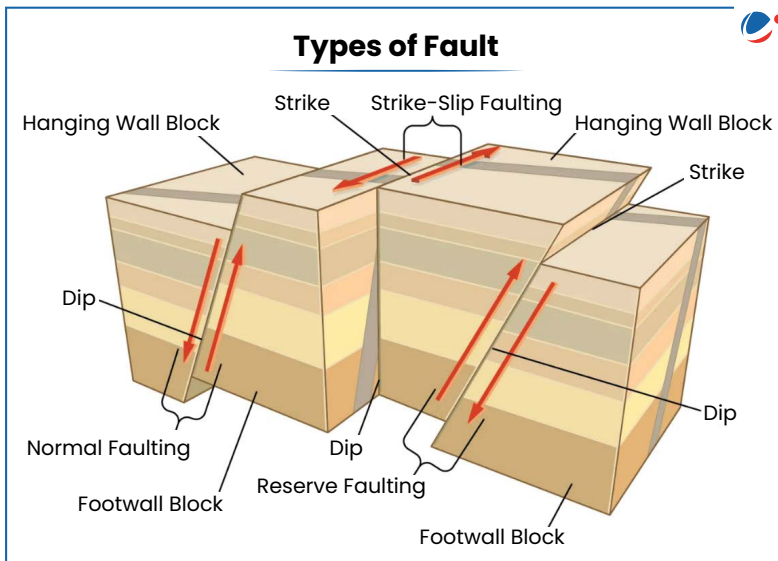
- ⊕ **Tectonic Movement:** Indian plate is moving northward compared to Eurasian plate, causing stress along fault.

About Fault

- **Definition:** Faults are fractures in the Earth's crust where rocks move relative to each other, caused by tectonic stress.
- ⊕ The movement along these fault planes releases accumulated strain, leading to earthquakes.

The primary types of faults are (See image):

- **Normal Fault:** The hanging wall moves downward relative to the footwall, common at divergent boundaries. E.g., East African Rift Valley and the Basin
- **Reverse Fault:** The hanging wall moves upward, occurring at convergent boundaries due to compression. E.g., the Rocky Mountains and the Himalayan Mountains.
- **Strike-Slip Fault:** Horizontal movement, minimal vertical displacement. E.g., Anatolia Fault, Turkey.
- **Transform Fault:** A type of strike-slip fault, forming boundaries between tectonic plates. E.g., San Andreas Fault, California.



Also In News



Hybrid Annuity Model

Cabinet Committee on Economic Affairs has approved the 4-lane access-controlled Patna–Arrah–Sasaram corridor under the Hybrid Annuity Model.

About Hybrid Annuity Model

- HAM is a public-private partnership (PPP) model used in infrastructure projects, primarily in road construction.
- **Funding:** 40% of project cost funded by government during construction & private concessionaire funds remaining 60%.
 - ⊕ HAM enables private developers to recover costs through structured government annuity payments over time.
- **Benefits over Other Models:** Balanced risk-sharing, assured returns for private players etc.



Bond Yield

Indian bond yields drop sharply in FY25 amid foreign inflows & policy shifts.

- **Definition:** A bond is a loan made by an investor to a borrower for a set period of time in return for regular interest payments.
- Relationship Between Bond Price and Yield**
 - When bond prices rise, yields fall, and when prices fall, yields rise.
 - If market interest rates rise, new bonds offer higher yields, making existing bonds with lower yields less attractive.
 - ⊕ This causes existing bond prices to drop, which in turn raises their yields.



River Teesta

Bangladesh welcomes participation of China in Teesta River Comprehensive Management & Restoration Project.

About Teesta River

- **Origin:** Originates as **Chhombu Chhu** from a glacial lake **Khangchung Chho** in Sikkim.
 - ⊕ The glacial lake lies at the snout of the Teesta **Khangse glacier** descending from **Pauhunri peak**.
- It flows through **Sikkim & West Bengal**, and then enters **Bangladesh**, merging with **Jamuna River (Brahmaputra)**.
- **Tributaries:**
 - ⊕ **Left-bank Tributaries:** Lachung Chhu, Rangpo Chhu, Chakung Chhu etc.
 - ⊕ **Right-bank Tributaries:** Rangeet River (largest tributary).
- **Teesta Treaty:** In 2011, a draft agreement was proposed where **India would get 42.5% and Bangladesh 37.5% of Teesta's water** during the dry season.
 - ⊕ **Implementation was halted** due to objections from West Bengal.



Carriage of Goods By Sea Bill

Lok Sabha passed Carriage of Goods By Sea Bill, 2024

- **Objective of the bill:** To simplify the language of the provision for the ease of understanding.

About the Bill

- It replaced the **Indian Carriage of Goods by Sea Act, 1925**.
- It establishes the responsibilities, liabilities, rights, and immunities in case of goods carried from a port in India to another port in India or any other port in the world.
- It is in conformance with the **International Convention for the Unification of Certain Rules of Law relating to Bills of Lading of August 1924 (Hague Rules)** and subsequent amendments to it.



Photonic Chip

Government of India supporting photonic chip research for next-gen computing.

About photonic chip

- **Concept:** A photonic chip is similar to an electronic chip but uses light (photons) instead of electricity (electrons).
- **Components:** Instead of resistors and transistors, PICs have optical components like waveguides, lasers, and polarizers.
- **Significance:**
 - ⊕ Transmit data at ultra-high speed, high bandwidth, and good energy efficiency.
 - ⊕ They generate minimal heat, are immune to electromagnetic interference, etc.
 - ⊕ These chips are better suited for new applications such as 6G, Artificial Intelligence (AI), quantum computing, data centers, etc.



FPV Armed Drones

Recently, Indian Army has successfully tested a First Person View (FPV) drone developed indigenously by Major Cephass Chetan in collaboration with Chandigarh-based Terminal Ballistics Research Laboratory.

About First Person View (FPV) Drones

- **Key features**
 - ⊕ **Precision strike capability:** Can target enemy bunkers, vehicles, and smaller systems effectively.
 - ⊕ **Pilot-controlled trigger:** Activation is done **only via radio controller**, minimizing premature detonation risks.
 - ⊕ **Real-time payload monitoring:** Operators receive live payload status via FPV Goggles for better accuracy.
- **Strategic importance**
 - ⊕ **Indigenous defence technology:** It will reduce reliance on foreign suppliers.
 - ⊕ **Cost-effective weaponry:** Provides a low-cost precision strike alternative for battlefield operations.

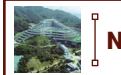


Exercise INDRA 2025

14th Edition of Exercise INDRA is taking place in Chennai from March 28, 2025 to April 02, 2025.

About Exercise INDRA

- It is a **bilateral naval exercise between India and Russia**, taking place since 2003.
- The exercise will be conducted in two phases - **Harbour phase** (at Chennai), and **Sea phase** in Bay of Bengal.
- **Participation:** Russian Federation Naval Ships **Pechanga, Rezkivy, and Aldar Tsydenzhapov** and Indian Naval Ships **Rana, Kuthar, and Maritime patrol aircraft P8I**.



National Gene Bank

Union Government has announced the **establishment of second National Gene Bank (NGB)** to conserve 10 lakh crop germplasm, ensuring future food and nutritional security.

- The **first NGB** was established in 1996 at the **ICAR-National Bureau of Plant Genetic Resources (NBPGR)** in New Delhi.

About Gene Banks

- Gene banks are **biorepositories** that store genetic material of plants, animals, and microorganisms **to preserve biodiversity and ensure long-term food security**.
- **Types of Gene Banks:** **Seed Banks** (Svalbard Global Seed Vault, Norway), **Field Gene Banks** (live plants conserved in natural conditions), **Cryo-preservation Banks** (preserve tissues, embryos, and cells), **Pollen and DNA Banks**, etc.
- **Other Gene Banks in India**
 - ⊕ **Animal Gene Bank:** ICAR-National Bureau of Animal Genetic Resources (NBAGR), Haryana.
 - ⊕ **Microbial Gene Bank:** ICAR-National Bureau of Agriculturally Important Microorganisms (NBAIM), Uttar Pradesh.

Place in News



South Korea (Capital: Seoul)

Currently, South Korea is facing its **worst-ever wildfires**.

Political Features

- **Location:** East Asia
- **Boundary:** **Democratic People's Republic of Korea** (North Korea) to the north, East Sea (Sea of Japan) to the east, the East China Sea to the south, and the Yellow Sea to the west.
 - ⊕ North and South Korea are divided along the **38th Parallel (Demilitarized Zone)**.

Geographical Features

- **Mountains:** Dominated by the **Taebaek Mountain range** along the eastern coast.
 - ⊕ **Highest Peak:** extinct volcano **Mount Halla on Jeju Island** (1,950 meters)
- **Islands:** Jeju Island is the largest, located in the Korea Strait.
- **Rivers:** Han River, Nakdong River etc.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI