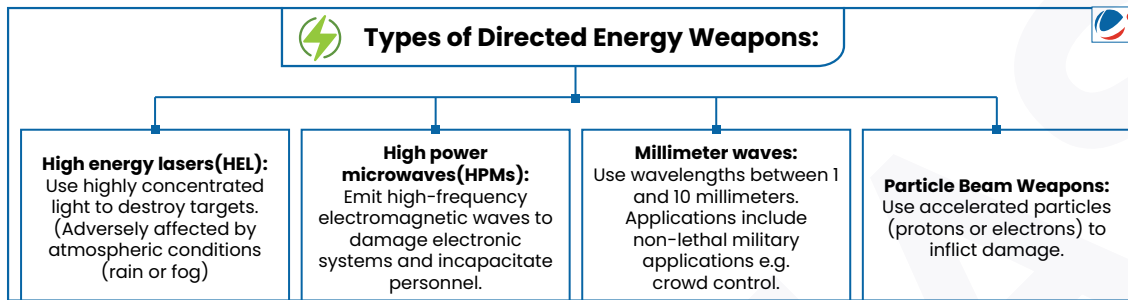


# NEWS TODAY

## The Era of Directed Energy Weapons (DEWs)

Recently significant investments have been made by India in fields of DEWs.

➤ **DEWs** are ranged weapons that use **concentrated energy** from **electromagnetic** or **particle technology**, rather than **kinetic energy**, to degrade or destroy targets



### ➤ Applications of Directed Energy Weapons

- ⊕ **Military Defense:** To intercept and destroy incoming missiles, neutralize drones, and disable enemy electronics.
- ⊕ **Law Enforcement and Border Security:** Non-lethal DEWs e.g. **microwaves** or **lasers** can be used for crowd control and border security.
- ⊕ **Space Operations:** To protect satellites from debris and anti-satellite weapons.

### ➤ Advantages

- ⊕ **Complementary to conventional weapons:** DEWs use energy fired at speed of light, making them faster and potentially less costly.
- ⊕ **Reduced Logistical Demand:** DEWs reduces the need for physical ammunition.
- ⊕ **Other advantages:** Precision, stealth & more destructive etc.

### ➤ Challenges

- ⊕ Less effective for **farther distances**.
- ⊕ **Wider beam DEWs** (High power microwave or millimeter wave weapons) affect all assets, whether friend or foe.
- ⊕ Uncertainty around long-term **health effects of DEWs** on people.

### ➤ Steps taken by India

- ⊕ **Directionally Unrestricted Ray-Gun Array (DURGA)-II Project:** Initiated by DRDO to build 100-kilowatt lightweight DEW.
- ⊕ **2kW Directed Energy Weapon (DEW) System:** Developed by **Bharat electronic limited** for countering new threats like drones.
- ⊕ **Laser Science and Technology Centre (LASTEC):** Laboratory of DRDO developing direct energy weapons.

## NITI Aayog publishes a report titled "Strategy for the development of Seaweed Value Chain"

**Seaweeds** are numerous types of marine plants and macro algae that thrive in rivers, lakes, and other bodies of water.

➤ Cultivation of **seaweeds** are part of **aquacultures**. **Fishing and aquaculture** sector contributes 1.5% of India's GDP.

### Significance of Seaweed Farming

- **Economic:** Valuable for bioactive compounds and applications in **food, pharmaceuticals** etc.
- **Environmental:** Important role in **Carbon Sequestration & climate resilience**.
- **Nutrition imperative:** Provide vital minerals and Vitamins like A, B1, B12, etc.

### Challenges faced by Seaweed Farming

- Lack of a **comprehensive policy framework**,
- **Lack of availability of quality Seeds**
- **Ecological concerns** (Exotic species impact on biodiversity and coral reefs).

### Recommendations For Promoting Seaweed Farming

- **Regulatory and governance reforms:** Forming National Steering Committee; Priority Sector Lending (PSL) for seaweed, etc.
- **Social Security and Financial Support:** Providing crop insurances; mobilization of farmers through SHGs etc.
- **Infrastructure and institutions:** Establishment of seed banks, processing centers, marketing centers etc.

### Steps taken by India

- **PM Matsya Sampada Yojana:** Target of 1 million ton seaweed production per year by 2025.
- **Constitution of an expert committee chaired by Dr. V K Saraswat (NITI Aayog)** to review the draft policy on development of seaweed value chain in India.
- **Offshore cultivation** in Andaman region started by **National Institute of Ocean Technology- Atal Centre for Ocean Science and Technology for Islands (NIOT-ACOSTI)**.
- **Development of a GIS-based portal:** To view the mapped seaweed cultivation sites.

## FDI From China Could Boost India's Exports: Economic Survey

Economic Survey (2023-24) suggested that Foreign Direct Investment (FDI) from China could be leveraged to benefit from 'China plus one Strategy'.

### China Plus One Strategy

- It refers to practice of international businesses active in China coupling their investments with a second facility, generally in another Asian economy.
- It was driven by disruption due to China's zero-COVID policy, growing tensions between the US and China, rising labour costs in China, etc.

### Beneficiaries

- Mexico, Vietnam, Taiwan and Korea were direct beneficiaries of US's trade diversion from China.
- India could capitalize on this strategy by either integrating into China's supply chain or encouraging Chinese FDI, with the latter being more advantageous as:
  - Due to the growing trade deficit with China, it is more effective to have Chinese companies investing in India for export than India importing Chinese goods to re-export with little added value.
  - Many current beneficiaries have also increased FDI inflow from China.

#### India-China Economic Relations

- Bilateral Trade:** China is India's top import partner. Bilateral trade amounted to US\$ 118.4 billion in FY24.
- Trade Deficit:** India is facing a trade deficit of around US\$ 85 billion.
- China's FDI in India:** It was around 0.37% of the total FDI inflow between April 2000 and March 2024.
- India's initiatives to narrow trade deficit:** PLI Scheme, anti-dumping duties, quality control orders, etc.

### Concerns Associated with Chinese FDI in India

- Border Dispute:** Ongoing military tensions and China's tendency to exert regional supremacy.
- Security Risks:** Chinese FDI could open the door to espionage, supported by its laws like the National Intelligence Law, which mandates cooperation with national intelligence efforts.
- China's support for Pakistan

## Cabinet approved 8 National High-Speed Road Corridor Projects

Projects spanning a total length of 936 km at and incurring a total capital cost of Rs. 50,655 were approved (refer the table).

- These projects will be implemented using various PPP (Public Private Partnership) modes, including BOT, HAM and EPC.

### Highways Development in India

- Corridor-Based Approach:** It has led to the identification of 50,000 km of High-Speed Highway Corridors based on GSTN and toll data.
- Trends (2014-2024):** Length of National Highways (NH) has increased 1.6 times from 0.91 lakh km to 1.46 lakh km.
  - Total capital investment in NH has risen from Rs. 50,000 crores to Rs. 3.1 lakh crore.

### Benefits of Corridor-Based Highways

- Logistics Efficiency:** For instance, the Agra-Gwalior corridor will reduce the distance between Agra and Gwalior by 7% and cut travel time by 50%.
  - This will boost freight movement and ease of doing business in India.
- Boost to Tourism:** For example, the Tharad-Ahmedabad corridor will provide connectivity to key tourist destinations in Rajasthan (e.g., Mehrangarh Fort, Dilwara Temple) and Gujarat (Rani ka Vav, Ambaji Temple).
- Other Economic Benefits:** Each rupee spent on infrastructure boosts GDP by 2.5-3 times. The 8 projects will create around 4.42 crore mandays of direct and indirect.

### Key Projects

Name	Mode
Agra-Gwalior	BOT*
Kharagpur-Moregram	HAM^
Tharad-Ahmedabad	BOT
Ayodhya Ring Road	HAM
Raipur-Ranchi	HAM
Kanpur Ring Road	EPC**
Guwahati Ring Road	BOT
Nashik-Khed	BOT

\*BOT: build-operate-transfer, ^HAM: hybrid-annuity model  
\*\*EPC: engineering, procurement and construction

## RBI revises Non-Performing Assets (NPAs) provision norms for Co-operative banks

Need for New Norms arises as some banks were **not recognizing** required provisions for Non-Performing Assets (NPAs) as an expense.

- These new norms (applicable to Urban, state and central co-operative banks) will **bring uniformity in treatment of Bad & Doubtful Debt Reserve (BDDR)**.
- ⊖ **Several co-operative banks** established BDDR for financial stability (For managing bad loans).

### New Norms:

- **All provisions (related to "BDDR" or other head)** under Income Recognition, Asset Classification, and Provisioning (IRACP) norms must be **charged as an expense** to Profit and Loss Account.
- **After accounting for all provisions** as per IRACP norms and other regulations, co-operative banks may make **appropriations of net profits to BDDR**.

### Co-operative Banks:

- Works on principle of cooperation and are **owned and operated by their members**.
- Can be divided into **Rural and Urban co-operative banks**.

### Issues with co-operative Banks:

- **Regional Disparity:** Almost 82 per cent of total UCBs and around 90 per cent branches of all UCBs are **concentrated in Western and Southern regions** of country (2020).
- **Dual Regulation:** Managerial, administrative activities are **overseen by state** governments while banking activities are regulated and **supervised by RBI / NABARD**.
- **Other issues:** Inadequate avenues for raising capital, **High Gross NPAs** etc.

### Steps Taken for Reform in co-operative banks:

- **Banking Regulation (Amendment) Act, 2020:** Brought management, governance, winding up, etc. under RBI's purview.
- **Umbrella Organization for Urban Cooperative Banks:** National Federation of Urban Co-operative Banks and Credit Societies Ltd.

## 52 out of 53 top Indian apps use dark patterns to deceive users: ASCI report

Report by Advertising Standards Council of India (ASCI), titled "Conscious Patterns," reveals that **almost all Indian apps use deceptive or dark patterns** in their business.

### Dark Patterns

- **Definition:** Business practices employing elements of **digital choice architecture**, that **impair consumer autonomy, decision-making or choice**.
- **Impact:** Users often suffer **financial losses, data breaches, and compromised privacy**.
- **Initiative:** ASCI and Department of Consumer Affairs issued **guidelines** for the prevention and regulation of **Deceptive Patterns in 2023**.

### Key Dark Patterns Identified by ASCI Study

- **Privacy Deception:** Manipulating users into **unknowingly sharing more personal data** than intended (e.g., permission for location tracking)
- **Interface Interference:** Hiding certain parts of the platform to **misdirect users** into taking actions (e.g., unlock cashback).
- **Drip Pricing:** Revealing **additional fees gradually** and making the final price higher than that originally quoted (e.g., packaging charges).
- **False Urgency:** Creating a sense of artificial pressure (e.g., only a few seats available).
- **Confirm-Shaming:** Using guilt or social pressure to **manipulate users** into confirming an action (e.g., choice between upgrade now vs. I don't want a smarter software).

### Conscious Pattern Website

- Based on the study a "Conscious Pattern Website" has been created.
- It enables makers to **build Digitally Conscious Products**.
- **Its vision is to enable informed consumer choices online.**

## Also in News



### Axiom Mission 4 (Ax-4)

India selected **Shubhanshu Shukla and Prasanth Balakrishnan Nair** (Group Captains in the IAF) for Axiom-4 mission.

- They will **train in U.S.** and experience gained during the mission will be **beneficial for human space programme**.

### Axiom Mission 4 (Ax-4)

- It is the fourth **private astronaut mission of NASA** and a **private US company Axiom Space**.
- It is expected to **dock with the International Space Station (ISS)** for fourteen days.
- Axiom Space has contracted **SpaceX as a launch provider**.



### Global Alliance for Improved Nutrition (GAIN)

GAIN, launched a report titled 'The Case for Investment in Nutritious Foods Value Chains: An Opportunity for Gender Impact'.

- Report calls for **nutrition investments in the agri-food sector** which can **reduce gender inequalities, increase productivity and enhance business resilience**.

### About GAIN

- **Swiss-based Non-governmental Organization** launched at the **United Nations in 2002** to tackle the human suffering caused by malnutrition.
- Supports **public-private partnerships** to increase access to the missing nutrients in diets.



### Surrogate Advertisement

**Ministry of Health** asked Sports Authority of India and BCCI to prevent surrogate advertisement of tobacco/alcohol by sportspersons.

#### Surrogate advertising

- It involves **advertising a product that cannot be advertised openly due to legal restriction.**
- Advertisers **create ads that help in building a brand, and without naming the actual product** that is being indirectly advertised. For example, a Tobacco company selling stationary products.
- These advertising came into India after the **Cable Television Networks (Regulation) Act, 1995** and its rule **banned direct liquor, tobacco and cigarette advertisement.**
- They are **banned under the Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022.**



### World Trade Statistics 2023

The WTO issued "World Trade Statistics 2023".

#### Highlights of World Trade Statistics 2023 on Agriculture Export

- The top **5 exporters** were **EU > US > Brazil > China > Canada.**
- Collectively, the **top ten exporters represented a 71.9% share of world exports in 2023.**
- India was the **8th largest exporter.**
  - India's exports worth **\$51 billion** constituted 2.24% of agriculture exports in 2023.



### Sovereign Green Bond (SGrB)

Second sovereign green bond auction of current financial year (FY25) received low response as traders refused to pay greenium.

- Greenium** refers to **pricing benefits** based on logic that **investors are willing to pay extra/accept lower yields for sustainable impact.**

#### About SGrB:

- Green bonds are used to **finance or refinance eligible green projects**, resulting in environmental benefits.
- Union Budget 2022-23** announced SGrB for mobilising resources for green infrastructure.
- Framework for the SGrBs** was issued by the government in 2022.



### Schistura Sonarengensis

**Recently a new species of loach fish** has been found in Sonarenga, Nakama, and Chiabol caves of Meghalaya's South Garo Hills district.

#### About Loach fish:

- These are small **elongated freshwater fishes** of family **Cobitidae** and are **native to central and southern Asia.**
- Usually **nocturnal fishes that inhabit both still and flowing waters.**
- Use their **barbels(Sensory Organs)** to comb the bottom for worms, larvae, and **other food.**

#### About Schistura Sonarengensis

- Morphological Features: Prominent eyes & dull white or pale-beige body.**
- Distinction:** They are not blind like other cave species found in Jaintia and Khasi Hills.



### FASTag

New FASTag rules to link it with Vehicle registration and mobile number came into effect from August 1, 2024.

#### About FASTag:

- Device that employs **Radio Frequency Identification (RFID) technology** for making toll payments directly **while the vehicle is in motion.**
  - Technology **uses radio waves** to identify objects by reading information **contained in wireless tag** from a distance.
- Flagship programme of **Ministry of Road Transport and Highways & NHAI.**

#### Benefits:

- Operationalizes **National Electronic Toll Collection (NETC) program** with nationwide interoperability.
- Reduces congestion** and cash handling at toll plazas.



### Maritime Partnership Exercise (MPX)

Recently Indian Naval Ship Tabar participated in maritime Partnership Exercise (MPX) **between India and Russia.**

## Personality in News



### Pingali Venkayya

PM recently paid tributes to Pingali Venkayya on his birth anniversary (2nd August 1876).

#### About Pingali Venkayya (1876 - 1963)

- Born in Krishna district of Andhra Pradesh.
- Freedom fighter who believed in Gandhian Principles.**

#### Key Contribution:

- Designed Indian National Flag** on request of Mahatma Gandhi.
- Served as a soldier in the British Army in South Africa during the **Anglo Boer war in Africa.**
- Participated in different movements** including Swadeshi Andolan under the leadership of Mahatma Gandhi.
- Literary works:** 'Bharatha Deshaniki Oka Jatiya Patakam' (National flag of India).
- Earned several titles, including **Patthi (Cotton) Venkayya & Jhanda (flag) Venkayya.**

#### Values:

Courage, Nationalism, Patriotism, etc.

