

# NEWS TODAY

## Prime Minister of New Zealand pays an official visit to India

Both countries reaffirmed to further strengthen growing bilateral relationships and agreed to cooperate in diverse areas of trade, defence etc.

### Key outcomes:-

- Launch of negotiations for **Free Trade Agreement (FTA)**: for mutually beneficial trade agreement and early implementation of cooperation in the **digital payments sector**.
- Launch of negotiations on **Mobility Arrangements for Professionals & Skilled Workers**: to support engagement in sectors of innovation, new & emerging technologies.
- New Zealand also joined the **Indo-Pacific Oceans' Initiative (IPOI) & Coalition for Disaster Resilient Infrastructure (CDRI)**.
  - ⊕ IPOI was launched by India at **14<sup>th</sup> East Asia Summit (EAS)** in 2019 aimed at regional cooperation & focuses on safety, security and stability of **maritime domain**.
  - ⊕ CDRI was launched by India at the **United Nations Climate Action Summit** in 2019 aims to promote **resilience of new and existing infrastructure systems to climate and disaster risks**.
- Bilateral documents were also signed on **Defence, Authorized Economic Operator - Mutual Recognition Agreement (AEO-MRA)**, cooperation in fields of **Forestry, Education, Sports, Horticulture** etc.



### India New Zealand (NZ) Relations

- **Bilateral Trade: US\$ 1.75 billion (2023-24)**. India has a trade surplus of **0.07 billion USD**
  - ⊕ **India imports** wool, Iron & Steel, fruit & nuts and aluminium
  - ⊕ **India exports** pharmaceuticals/medications, mechanical machinery, pearls, precious stones & metals
- **People to People & cultural ties:**
  - ⊕ ~8,000 Indian students are pursuing higher education in New Zealand.
  - ⊕ Close sporting links exist particularly in **cricket, hockey & mountaineering**.
- **Defence Cooperation:**
  - ⊕ It includes visits of the Chief of Naval Staff, port calls, **Customs Cooperative Arrangement 2024** (against transnational organized crime) etc.

## Scientists confirm Meteorite fall in a village in Beed (Maharashtra)




Meteorites are when a **meteoroid** survives its trip through the atmosphere and **hits the ground**.

### Significance of studying Meteorites

- **Understanding Solar Systems:** They contain in themselves past records of our solar system's history.
- **Geological composition:** They provide insights into **geochemistry and mineral composition** of the planets and solar system.
- **Helps in understanding evolution of terrestrial planets** including Earth and probe origin and evolution of life.

### Exploration Initiatives

- **NASA All Sky Fireball Network:** It is a network of cameras to observe **meteors** in the sky **brighter than Venus**, which are called **fireballs**.
- **Canada's CMOR (Canadian Meteor Orbit Radar):** It aims to detect the speed, direction, and location of meteoroids.

Difference between Meteoroid, Meteor and Meteorite		
IN SPACE Meteoroid	IN ATMOSPHERE Meteor	ON EARTH Meteorite
 <ul style="list-style-type: none"> <li>• They are <b>space rocks</b>, usually, pieces of other, larger bodies that have been broken or blasted off. E.g. Planets, asteroids, comets.</li> <li>• They are both <b>rocky and/or metallic</b>.</li> <li>• They are <b>smaller</b> than asteroids and contain <b>less water and ice</b> than comets.</li> </ul>	 <ul style="list-style-type: none"> <li>• They are formed when meteoroids enter the Earth's or a planet's <b>atmosphere</b>.</li> <li>• They are called '<b>shooting stars</b>' as they enter with <b>high speed</b> and <b>burn up</b> due to atmospheric pressure.</li> <li>• '<b>Meteor showers</b>' is a celestial event where <b>several meteors</b> hit Earth's atmosphere over a short period.</li> </ul>	 <ul style="list-style-type: none"> <li>• When a <b>meteoroid</b> survives the trip through the atmosphere and <b>hits the ground</b>, it is called a Meteorite.</li> <li>• <b>Types:</b> stony, iron, and stony-iron.</li> <li>• They have a <b>dark, burned exterior</b> with a roughened, smooth, or thumbprint surface due to <b>thermal ablation</b>.</li> <li>• They can create '<b>Impact Craters</b>' on impact with the surface. E.g. <b>Lonar Lake (Maharashtra)</b></li> </ul>
<p><b>Note1:</b> &gt;50,000 meteorites have been found on Earth. Of these ~99.8% come from asteroids. (NASA).  <b>Note2:</b> In India, <b>Geological Survey of India (GSI)</b> is the custodian of all meteorite falls/finds in the country.</p>		

## Free Trade Agreements (FTAs) provide resilience to India despite global tariff challenges: SBI Report

Report highlights that India's trade strategy of forging FTA would **boost bilateral trade and create new opportunities in digital trade.**

### About FTAs

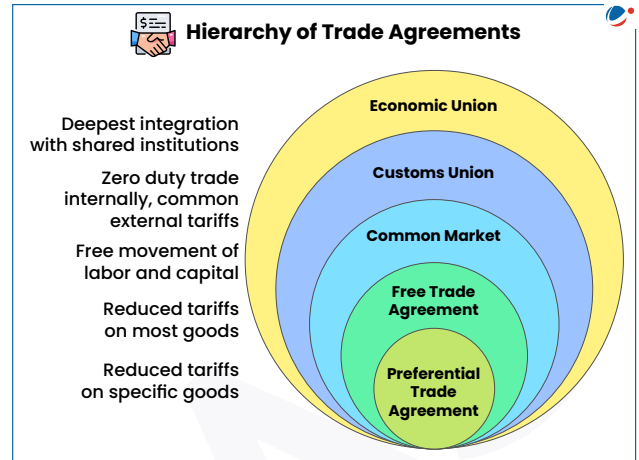
- FTAs are arrangements **between two or more countries or trading blocs** that agree to **reduce or eliminate customs tariff and non-tariff barriers** on substantial trade between them.
- It **covers trade in goods** (like agricultural or industrial products) or **trade in services** (like banking, construction, trading etc.) and also areas like **intellectual property rights (IPs)**, etc.

### Benefits of FTAs

- Easier access to foreign markets:** By eliminating tariff and non-tariff barriers.
- Opportunities to Small and Medium Enterprises (SMEs):** Tariff concessions give opportunities for exports of SMEs' products.
- Others:** Address behind-the-border barriers impeding trade, encourage investment; improve the rules affecting e-commerce, promote regional integration, etc.

### India and FTAs

- India has signed **13 FTAs in the last five years** with its trading partners like Mauritius, UAE, Australia, etc. to boost its **export oriented domestic manufacturing (SBI Report)**.
- Example:** India ASEAN Trade in Goods Agreement, South Asia Free Trade Agreement, etc
- It is currently negotiating FTAs with the UK, Canada, and the European Union.



### Other Key highlights of the Report

- Foreign Institutional Investor (FII) Inflows:** During FY24, India received FII inflows of **\$41 billion**, highest since FY16.
- Export Diversification:** India has diversified its exports basket with value addition, exploring alternate areas and new supply chain algorithms.

## \$92 Trillion Worth White Hydrogen Deposit discovered in Moselle Region of France

This 46 million tons reserve is touted as a game-changing moment in the **clean-energy sector.**






### About White Hydrogen

- Occurrence:** Like oil and gas, white hydrogen is **naturally occurring**, generated by **continuous geochemical reactions** in hard rock.
- Characteristics:** Differs from hydrocarbon molecules as it is **small and light** and more likely to escape cap rocks.
- Status:** Currently, the white hydrogen industry is in **nascent stage** with only a handful of innovators.

### Advantages of White Hydrogen

- Naturally Occurring:** Unlike other forms of Hydrogen, and hence requires **no industrial production.**
- Environmentally Superior:** Does not emit Carbon.
- Cost Effective:** Does not require inefficient energy conversion or manufacturing processes, can be **produced at scale** from reservoirs sited close to end-user markets.
- Co-existence with Helium:** Offering a valuable commercial lever for **white hydrogen exploitation.**

### Other Different Types of Hydrogen

Type	Production	Key Characteristic
 <b>Green Hydrogen</b>	Made using <b>clean electricity</b> from surplus renewable energy, such as solar or wind power.	<b>Expensive Production Process.</b>
 <b>Blue Hydrogen</b>	Produced from natural gas, using <b>steam reforming process</b>	' <b>Low-carbon hydrogen</b> ', as the steam reforming process releases some greenhouse gases.
 <b>Grey Hydrogen</b>	Produced from <b>natural gas, or methane</b> , using <b>steam methane reformation.</b>	Most <b>Common</b> type, does <b>not capture greenhouse gases.</b>
 <b>Black and brown hydrogen</b>	Made from <b>fossil fuels</b> through ' <b>gasification</b> ' process.	<b>Environmentally Damaging.</b>
 <b>Pink Hydrogen</b>	Generated through electrolysis powered by <b>nuclear energy.</b>	Also referred to as <b>purple or red hydrogen</b> , used as <b>energy storage medium.</b>

## Arunachal Pradesh releases State Biodiversity Strategy and Action Plan (SBSAP): A People's Plan

It is the first SBSAP to include district-level action plans aligning with National Biodiversity Strategy and Action Plan (NBSAP) and Kunming-Montreal Global Biodiversity Framework (KMGBF).

- ⊕ KMGBF, adopted in CoP-15 (Convention to Biological Diversity, CBD), contains 23 action-oriented global targets for urgent action to be achieved by 2030.

### Role of State Governments in Biodiversity Conservation

- **Act as Natural Mainstreamers:** They are uniquely positioned to tailor global biodiversity goals to local contexts.
- **Local knowledge and experience:** Lessons learnt on the ground are shared with higher levels of governance.
- **Understand Ground Realities:** They are best placed to understand and act upon the constraints for systemic change in their regions.
- **Robust Monitoring and Reporting:** These functions can be performed more effectively at local level.

### Initiatives fostering participation of State Governments in Biodiversity Conservation

- **Global**
  - ⊕ **The Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity (2021-2030):** Under CBD.
  - ⊕ **IUCN (International Union for Conservation of Nature):** Introduced a new category for local governments to its membership.
- **India:** Provides for a three-tier institutional structure comprising the National Biodiversity Authority, State Biodiversity Boards, and local Biodiversity Management Committees in its updated NBSAP (2024-2030).
  - ⊕ **Article 6 of the CBD** requires every party to prepare NBSAPs.
- **Cases Studies:** Hornbill nest adoption initiative in Pakke Tiger Reserve (Arunachal Pradesh), Biodiversity Strategy 2020 of Aichi (Japan) focused on "creation of ecological network" etc.

## \$1 Billion Boost for Creator Economy through Public-Private Partnership

The fund announced by central government will be used to enable digital content creators to enhance their skills, upgrade their production, and expand into global markets.

- Funds have also been allocated for establishing the Indian Institute of Creative Technology (IICT) to foster expertise in creative and digital technologies.

### What is creators' economy?

- It is a rapidly expanding field comprising artists, educators, gaming streamers, video creators, podcasters, and others who monetize their creative content on digital platforms such as YouTube and Instagram.
  - ⊕ Globally, size of creators economy is expected to double from \$250 billion (2023) to \$480 billion (2027).
- It is an emerging field within the larger 'Orange Economy' (or 'Creative Economy'), which consists of advertising, architecture, arts, music and movie production etc.

### Significance of creators' economy for India

- **Contribution to GDP:** E.g. YouTube's ecosystem alone added >₹10,000 crore to India's GDP (2022).
  - ⊕ India's overall orange economy was valued at \$30 billion in 2024, contributing nearly 2.5% to India's GDP.
- **Employment Generation:** It provides livelihoods to millions of creators, influencers and knowledge professionals through brand collaborations, sponsored content, merchandise sales etc.
- **Soft Power:** Content in areas like music, dance, education etc. has gained international appeal, enhancing India's soft power and bringing in foreign revenue.

### Challenges in India's creators' economy

- **Digital Infrastructure Gaps:** E.g. uneven internet access, slow BharatNet rollout, high data/device costs, and low digital literacy hinder creators, especially in rural areas.
- **Policy and Regulatory Challenges:** E.g. unclear taxation, privacy law compliance burdens, weak copyright enforcement, and platform policy shifts create uncertainty for creators.
- **Financial Constraints:** E.g. Limited ad revenue, high international platform payment fees, and lack of access to capital stifle financial stability and growth for creators.

## Also In News



### Online Assurances Monitoring System (OAMS)

Union Parliamentary Affairs Minister highlighted the role of OAMS in managing Government Assurances.

#### About OAMS

- Implemented by the Ministry of Parliamentary Affairs (MoPA), it is a digital platform for ensuring that assurances made by Ministers in Parliament are systematically tracked, monitored, and fulfilled.
  - ⊕ Assurances (in the form of promises, undertakings, etc.) are given during the course of answers to Questions or debates, by Ministers on the floor of the House.
  - ⊕ Given due to non-availability of information at that time and are to be fulfilled within a period of three months.
  - ⊕ MoPA is assigned the function of implementation of assurances under Government of India (Allocation of Business) Rules, 1961.



### Prime Minister's Internship Scheme

The Minister of Finance launched a dedicated mobile app for the Prime Minister's Internship Scheme (PMIS).

#### About PMIS

- Launched in 2024 by the Ministry of Corporate Affairs.
- **Objective:** Provide internship opportunities to 1 crore youth (aged 21 to 24) in India's top 500 companies over 5 years.
  - ⊕ Bridges the gap between academic learning and industry requirements.
  - ⊕ Enhances employability of participants by fostering skill development and professional growth through practical exposure.
- **Duration and Compensation:** 12-month paid internships with monthly financial assistance of ₹5,000 per intern, and a one-time financial assistance of ₹6,000.





**Bureau of Indian Standards (BIS)**

BIS cracks down on E-Commerce platforms selling unsafe Non-Certified products.

**About BIS (Hq: New Delhi)**

- It is a **National Standard Body of India** established under the **BIS Act 2016**.
- **Purpose:** Harmonious development of the activities of **standardization, marking and quality certification of goods**.
- **Benefits:** Provides **safe, reliable quality goods; minimizes health hazards to consumers; promotes exports and imports substitute, etc.**
- **Bureau Members:** **25 members** representing both Central and State governments.



**IUCN Green List**

Four new sites have been added to the IUCN Green List.

- These include **Sharaan Nature Reserve and King Abdulaziz Royal Nature Reserve of Saudi Arabia, Aqaba Marine Reserve of Jordan and Sir Bu Nair Protected Area from UAE.**

**About IUCN Green List**

- It is a **global programme of certification** aiming to achieve and promote effective, equitable, and successful protected and conserved areas.
- **Focus:** Highlights **best practices**, and sets **benchmarks** for progress in conservation management.
- **Objective:**
  - ⊕ **increase number of protected and conserved areas** that are effectively and equitably managed.
  - ⊕ **deliver conservation outcomes**, contributing to **SDG 15 "Life on land"** and towards meeting **Aichi Target 11** of the **Convention on Biological Diversity (CBD)**.



**Comptroller and Auditor-General (CAG)**

Supreme Court has issued a notice to central government regarding a PIL filed for neutral process to appoint CAG.

**About CAG**

- **Article 148-151** of Indian Constitution deals with **CAG**.
  - ⊕ **Appointment:** by **President** by warrant under his hand and seal.
    - ◆ **Not eligible for further office** either under the Government of India or any State after he has ceased to hold his office.
  - ⊕ **Salary and other conditions of service:** determined by Parliament by law or until so as specified in the **II Schedule**
  - ⊕ **Removal:** On like manner and grounds as a Judge of Supreme Court
- **Administration of Oath of Office:** by the President or some person appointed on that behalf by him.
- **Powers & Duties of CAG as per Article 149:** Audits accounts of the Union, States, and other bodies as prescribed by law made by the Parliament.



**Microprocessors**

ISRO and Semiconductor Laboratory (SCL) of Chandigarh have developed **32-bit microprocessors VIKRAM3201 & KALPANA3201** for space applications.

- **VIKRAM3201** is the **first fully "Make-in-India" 32-bit microprocessor** for use in the harsh environmental conditions of launch vehicles.

**About Microprocessors:**

- It is a **multipurpose, programmable, clock-driven, register-based electronic device**.
- It consists of millions of **small transistors, resistors and diodes** assembled on a **semiconductor material (Integrated Circuit (IC) chips)**, creating key components of a **Central Processing Unit (CPU)**.
- **Components:** Arithmetic Logic Unit (ALU), Control Unit and register array.
- **Function:** **Read binary instructions** from a **storage called Memory**, accept binary data as **input**, **process data** and provide **results as output**.
- **Examples:** Intel 4004, 8085, Pentium etc.



**Caracal**

Recently, first photographic record of Caracal was shared from Rajasthan's **Mukundra Hills Tiger Reserve**.

**About Caracal**

- **Native:** To many countries across **Africa, Middle East, Central Asia** and South Asia, including **India**.
- **Characteristics:** It is a **primarily nocturnal cat species** known for its distinct and **pointy ears**, which give the animal its name.
  - ⊕ Caracal is a Turkish word (karakulak) meaning **'black ears'**.
- Among the 22 species under the **Species Recovery Programme**.
- **Conservation Status:**
  - ⊕ **IUCN:** Least Concern
  - ⊕ **WPA, 1972:** Schedule I
  - ⊕ **CITES:** Appendix I (Asian Population)



**Bodo Tribe**

As per the Union Home Minister, Over 80% of **2020 Bodo Peace Accord** conditions have been implemented.

- The Accord was signed between the **Centre, Assam Government and Bodo Groups** giving greater autonomy to **Bodoland Territorial Region (BTR)**.

**About Bodo Tribe**

- **Largest ethnolinguistic group** in Assam.
- Concentrated mainly in the **BTR**.
  - ⊕ An autonomous region in Assam having four districts.
- **Language:** **Bodo** (or Boro) is recognized as **one of India's 22 scheduled languages**.
- **Constitutional Status:** Recognized as a **plain tribe under the Fifth and Sixth Schedules**.

**Place in News**



**Yemen (Capital: Sanaa)**

The **United States** carried out new air strikes on **Houthis** in **Yemen**.

**Political Features:**

- **Location:** **South-Western tip of the Arabian Peninsula** in **Middle East**.
- **Land Boundaries:** Saudi Arabia (North), Oman (East).
- **Maritime Boundaries:** Red Sea (West), Gulf of Aden (South), Arabian Sea (Southeast).
- **Strategic location:** On **Bab el Mandeb**, the strait linking **Red Sea and Gulf of Aden**, an important shipping route.
- Yemen's **Socotra Archipelago** is located in the Indian Ocean.

**Geographical Features:**

- **Climate:** **Hot and humid** along **west coast**; **temperate** in western mountains affected by seasonal monsoon; **dry, harsh desert** in east (**Rub' al-Khali desert**).
- **Natural resources:** Petroleum, fish, rock salt, marble etc.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI