

# NEWS TODAY

## Union Cabinet approved PM-Vidyalaxmi scheme

It is a new **Central Sector scheme** that seeks to provide **financial support to meritorious students** for higher studies.

- **National Education Policy, 2020**, had recommended financial assistance to meritorious students in both public and private Higher education institutions.

### Salient features of the scheme

- **Objective:** Provide financial support through **collateral free, guarantor free loans from banks and financial institutions** to cover full amount of tuition fees and other expenses related to the course in higher education.
- **Eligibility:** Any student who gets admission in **Quality Higher Education Institutions (QHEIs)**.
- **Coverage:** **860 qualifying QHEIs (Based on NIRF ranking)**, covering more than 22 lakh students.
- **Benefits:** Loan amounts up to Rs.7.5 lakhs will be provided a **75% credit guarantee by the Government of India.**
  - ⊕ **3% interest subvention** for loan up to Rs.10 lakhs during moratorium period for eligible students.
- **Entirely digital system:** **Unified portal "PM-Vidyalaxmi"** for application of education loan as well as to submit request for disbursement of interest subvention.
  - ⊕ Payment of interest subvention will be made through **E-voucher and Central Bank Digital Currency (CBDC) wallets.**
- It will supplement **Pradhan Mantri Uchchar Shiksha Protsahan (PM-USP) Scheme.**

### About Pradhan Mantri Uchchar Shiksha Protsahan (PM-USP) Scheme

- **Objective:** To provide financial assistance to meritorious students from poor families to meet a part of their day-to-day expenses while pursuing higher studies.
- **Eligibility:** Based on the results of the Higher Secondary/ Class 12<sup>th</sup> Board Examination.
  - ⊕ A maximum of **82,000 fresh scholarships per annum.**
- **Components:** Central Sector Interest Subsidy (CSIS) and Credit Guarantee Fund Scheme for Education Loans (CGFSEL).

## Primordial Black Hole (LID-568) Rapid Growth Revealed by Webb Telescope Observations

According to a study published in the journal Nature Astronomy, LID-568 is **expanding at an unprecedented rate** challenging the conventional understanding of black holes.

- Primordial black holes are formed either from the **explosion of the universe's initial stars or the collapse of large gas clouds** present in the early universe.
- LID-568 appeared to be **consuming infalling material due to gravitational attraction known as accretion**, at more than 40 times the **Eddington limit**.
  - ⊕ Its rapid growth suggests that **significant portion of mass growth can occur during single episode of rapid accretion**; it could explain **formation of supermassive black holes early in universe.**

### About Eddington limit

- It is a theoretical limit for the **maximum energy output the black hole can produce** through the accretion process.
- It assumes that the outward force from the **radiation produced during the accretion process balances the gravity of the infalling material.**

### About LID-568:

- It is a supermassive black hole **formed about 1.5 billion years after the Big Bang event.**
- It has a mass about **10 million times greater than the sun**, so 2.5 times that of Sagittarius A\*.
  - ⊕ Sagittarius A\* is a supermassive black hole **located at the center of our galaxy-the Milky Way.**

### About James Webb Space Telescope

- It is the **largest, most powerful space telescope** ever built.
- Developed in **joint collaboration** of NASA, European Space Agency (ESA) and Canadian Space Agency (CSA).
- It is designed to observe the universe primarily in the **infrared spectrum** and **successor to NASA's Hubble Space Telescope.**
- It orbits the **Sun 1.5 million kilometers away from the Earth** at what is called the **second Lagrange point or L2.**

## UN-Habitat released "World Cities Report 2024: Cities and Climate Action"

It noted that cities are both **victims of climate change** and its **worst offenders (Generating Green House Gases)**, although disproportionately exposed to impacts of climate change.

### Key-findings of Report:


- **Exposed to climate change:** More than **2 billion people** currently living in cities could be exposed to an additional temperature increase of at least **0.5 °C by 2040**.
- **Funding gap:** Cities need an estimated **\$4.5-5.4 trillion** per year to build and maintain climate-resilient systems.
  - ⊕ Current financing stands at just **\$831 billion**.
- **Shrinking Green space:** With average share in urban areas worldwide falling from **20% in 1990 to 14 % in 2020**.
- **Impact on Vulnerable People:** Some climate interventions have inadvertently worsened conditions for **vulnerable communities**.
  - ⊕ E.g., **"green gentrification,"** where initiatives like park creation **displace low-income households or drive up property values**.

### Recommendations:

- **Revenue raising based on enabling conditions** e.g. through debt, creating PPPs, and establishing instruments to mobilize climate finance.
- **Integrating climate action into urban planning and Supporting bottom-up(Locally-led) climate adaptation** efforts for effectively building resilience.
- **Strengthening social protection programmes, adopting nature-based solutions** that address climate shocks.



### About UN-Habitat



**ONU-HABITAT**

- 🔬 **Genesis:** In 1978, Habitat I provided foundations of United Nations Human Settlements Program or UN-Habitat.
- 👤 **Objective:** Mandated by **UN General Assembly** to promote socially and environmentally **sustainable towns and cities**.
- 👥 **Partners:** Collaborates with governments, intergovernmental UN agencies, civil society organizations, academic institutions and private sector.
- 📄 **Important documents:** Vancouver Declaration on Human Settlements (**Habitat I**), Istanbul Declaration on Human Settlements (**Habitat II**) etc.
- 🏠 **Flagship publications:** State of the World's Cities, World Cities Report.

## Prime Minister congratulates President-elect of the USA

President elect from Republican Party has secured a decisive victory in U.S. presidential election.

### About the U.S. Presidential Election Process:

- **One Year before Elections:** Candidates from two main political parties, Democrats and Republicans begin their campaign. Candidates participate in televised debates on policies.
- **Primaries and Caucuses:** Party members vote and discuss for best candidate that will represent them in general election.
- **National Conventions**
  - ⊕ Each party holds a national convention to select a **final presidential nominee**.
  - ⊕ Presidential candidates also choose a **Vice Presidential candidate**.
- **General Election**
  - ⊕ People in every state across country **vote for President and Vice President**.
    - ◆ When Americans go to poll, They actually vote for a group of people called electors, **making up electoral college**.
    - ◆ If a candidate receives majority of votes from people of a state then **candidate will receive all electoral votes of that state** (Except in states of Maine and Nebraska).
- **Electoral College**
  - ⊕ There are a total of **538 electors**. Each elector casts one vote following general election, and the candidate who gets **more than half (270) becomes President of the USA**.
    - ◆ **While in India, president is indirectly elected by an electoral college of MPs and elected members of legislative assemblies of state and some UTs.**
    - ◆ Election of Indian President is held in accordance with system of **proportional representation by means of single transferable vote** using secret ballot.

### Election Management Process in USA

- US lack a **centralized authority to oversee elections**, with more than 10,000 local entities across 3,143 counties having their own rules.
- US has a **Federal Election Commission (FEC)**, its influence is largely limited to regulating **campaign finances** unlike India where ECI oversees the entire process.
- US elections are notably held every four years on a fixed date i.e. first Tuesday after first Monday in **November** dating back to 1835.

## Cabinet approved an equity of Rs 10,700 crore for FCI

The fund will be used as **working capital in the financial year 2024-25** by Food Corporation of India (FCI).

- The decision is aimed at **bolstering the agricultural sector and ensuring the welfare of farmers** nationwide.

### Financing of FCI operations

- FCI purchases the food grains for the **Central Pool at the procurement prices** ( known as Minimum Support Price) and issues the same at the Central Issue Prices fixed by the Government of India.
  - ⊖ **The issue prices** do not cover the full economic cost incurred by the Corporation in the **procurement, movement, storage and distribution of food grains.**
- **The difference** represents the consumer subsidy for the **Public Distribution System**, and is paid to the Corporation by the Government of India.

**Challenges with FCI: Low share** in direct procurement (less than 5%), FCI-owned facilities remain under-utilised, **Leakages in godowns**, procurement of poor quality stocks and transit loss, etc.

### Recommendations given by standing committee to improve FCI functioning

- It can assist the **state governments in creating adequate infrastructure** for effective procurement.
- **Adoption of adequate scientific storage measures** to prevent any damage.
- **Strengthen its vigilance mechanism** in coordination with states.

### About Food Corporation of India

- **About: Public sector undertaking** under the Ministry of Consumer Affairs, Food and Public Distribution set up under the **Food Corporation Act of 1964.**
- **Mandates**
  - ⊖ **Undertake procurement of foodgrains** at a minimum support price (MSP) to protect the interest of farmers.
  - ⊖ **Distribution of food grains** throughout the country for **public distribution system (PDS).**
  - ⊖ Maintain a satisfactory level of **operational and buffer stocks of foodgrains** to ensure National Food Security.

## Central Water Commission (CWC) Report highlights expanding Himalayan glacial lakes

Expansion of Himalayan glacial lakes is happening **due to climate change**, posing risk to community and biodiversity because of increased chances of Glacial Lake Outburst Floods (GLOFs).

### Key findings of report:

- **Glacial lakes expansion:** Himalayan region witnessed a **10.8% increase in surface area** of glacial lakes from 2011-24.
  - ⊖ **India:** With a **34% expansion** in surface area, glacial lakes experienced an **even more substantial rise.**
- **High risk lakes: 67 lakes in India** witnessed an **over 40% increase in surface area**, placing them under high-risk category for potential GLOFs.
- **Transboundary risks:** There exist transboundary risks of these expanding glacial lakes in **Bhutan, Nepal and China.**
- **Monitoring:** Precise monitoring was done using 'Sentinel-1' - Synthetic Aperture Radar and 'Sentinel-2' - satellite.

### What are glacial lakes?

- These are water bodies originating from a glacier, **formed when a glacier erodes land and then melts**, filling depression created by it.

### About GLOFs:

- **Sudden release of water retained in a glacial lake** that can be located in front, at side, underneath, within, or on top of a glacier, **causing large amounts of water to flow into nearby rivers.**
  - ⊖ **E.g., GLOF in Sikkim (Oct 2023)** triggered by **bursting of South Lhonak Lake.**

### About CWC:

- **Headquarter:** New Delhi
- **Genesis:** Established in 1945 on advice of Dr B. R. Ambedkar.
- **Ministry:** Ministry of Jal Shakti
- Headed by **Chairman, an Ex-officio Secretary** to Government of India.
- **Aim:** To promote **integrated and sustainable development and management of India's water resources.**
- CWC deals with **only surface water** while Central Groundwater Board (CGWB) deals with **groundwater.**

## Also in News



### CARICOM (Caribbean Community)

Recently, **2<sup>nd</sup> meeting of the India-CARICOM Joint Commission** was held virtually.

### About CARICOM

- It is a **regional organization** to promote economic integration and cooperation in the Caribbean Region.
- **Established:** 1973.
- **Secretariat:** Georgetown, Guyana.
- Enjoys **observer status in UNGA** since 1991.
- **Members:** Consist of 20 countries.
  - ⊖ **15 Members states:** Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Jamaica, Grenada, Guyana, Haiti, Montserrat, Saint Kitts and Nevis, Saint Vincent and Grenadines, Saint Lucia, Suriname, Trinidad and Tobago.
  - ⊖ **6 Associated states:** Anguilla, Bermuda, Cayman Islands, British Virgin Islands, Curacao, Turks and Caicos Islands.



### Environment Protection (Manner of Holding Inquiry and Imposition of Penalty) Rules, 2024

MoEFCC has introduced new rules for conducting inquiries and imposing penalties on polluters after SC's pollution order.

### About new rules:

- **Complaints against violators of environmental regulations can be initiated by key bodies**, including CPCB, SPCBs, Pollution Control Committees and others.
- In cases of **jurisdictional issues**, adjudicating officers may **transfer a case to appropriate authority.**
- **Initiation of enquiry:** By designated adjudicating officer within 30 days, as per **Section 15C of Environment (Protection) Act.**
  - ⊖ **Violators are given at least 15 days to reply** and may be asked to appear in person etc.
- **Timely resolution:** Inquiries be completed **within six months** from the notice date.





### Telecom Technology Development Fund (TTDF) scheme

Centre for Development of Telematics (C-DOT), and IIT Roorkee signed an agreement for the development of Millimeter Wave Transceiver for **5G Rural Connectivity**.

- Agreement is signed under the **Telecom Technology Development Fund (TTDF) scheme**.

#### About TTDF scheme

- It was launched by the **Universal Service Obligation Fund (USOF)**, a body under the **Department of Telecommunications**.
- It aims to fund **R&D in rural-specific communication technology applications** and form synergies among stakeholders to build and develop the telecom ecosystem.



### Vietnam-India Bilateral Army Exercise (VINBAX) 2024

5<sup>th</sup> edition of **Vietnam-India Bilateral Army Exercise (VINBAX)** has started at **Ambala (Haryana)**.

- This edition marks a significant increase in scope with **Bi-Service level participation for first time** by personnel of Army and Air Force from both countries.



### Tuna Fish

Fisheries department notified development of **Tuna clusters in A&N Island** under **Pradhan Mantri Matsya Sampada Yojana**.

#### About Tuna fish:

- Group of **saltwater fish**, known for their **streamlined bodies**, powerful swimming ability and wide distribution in **tropical and temperate oceans**.
- These are highly valued in global fishing industry for its meat (**rich in protein**).
- **Habitat:** Tunas are pelagic fish, meaning they live beyond the continental shelf in open sea.

#### Significance of Tuna cluster:

- Generate **economies of scale, increase incomes, and accelerate growth** in fisheries sector.
- Help in developing infrastructure for **export connectivity to Southeast Asian countries**.



### Sagarmala Parikrama

Sagar Defence Engineering completes **Sagarmala Parikrama autonomous voyage** with Indian Navy Support.

#### About Sagarmala Parikrama

- It aligns with **global advancements in autonomous surface and underwater systems**, offering transformative applications in both military and civilian sectors.
- It is supported by the **Indian Navy's Naval Innovation and Indigenisation Organisation (NIIO)** and the **Innovations for Defence Excellence (IDEX) initiative**.
- It will pave the way for **future deployment of autonomous vessels** expanding the Indian Navy's operational reach.

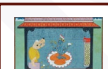


### Agrivoltaic farming

Practical implementation of agrivoltaic systems was showcased in 7<sup>th</sup> session of the International Solar Alliance (ISA).

#### About Agrivoltaic farming

- It is the practice of **growing crops underneath solar panels**.
- It uses land for both **agriculture and solar photovoltaic energy generation**.
  - ⊕ It's also sometimes referred to as **agrisolar, dual use solar, low impact solar**.
- **Benefits:** Diversified income for farmers, reduced land use competition, reduced carbon footprint and energy resilience.



### Haridasa Movement

Mysuru Sangeetha Sugandha festival is celebrating the revered **Dasa traditions of Carnatic music of Haridasa movement**.

#### Haridasa Movement

- **Origin:** in Karnataka, and spread to eastern states such as Bengal and Assam.
  - ⊕ This movement was **started by the Haridasas** (lit "servants of Lord Hari") and took shape in the **13-14<sup>th</sup> century**.
- **Objective:** To propagate the **Dvaita philosophy of Madhvacharya** (Madhva Siddhanta) through Dasa Sahitya i.e. literature.
  - ⊕ Madhvacharya's philosophy of **shuddha-dvaita, or pure dualism**, logically established that God is eternally a person and is forever distinct from His creation.

## Personality in news

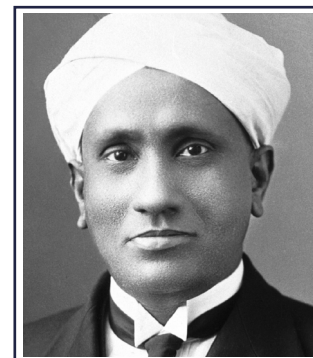


### Chandrasekhara Venkata (C.V) Raman (1888-1970)

Recently the birth anniversary of CV Raman was celebrated.

#### About CV Raman

- Born at **Tiruchirappalli, Tamil Nadu**, he founded
  - ⊕ **Indian Journal of Physics**.
  - ⊕ **Indian Academy of Sciences**, registered as Society under Societies Registration Act in 1934.
- **Awards:** Won **Nobel Prize in Physics in 1930** and Awarded **Bharat Ratna in 1954**.
- **National Science Day** is celebrated every year to commemorate his discovery of the Raman Effect in 1928.
  - ⊕ Raman Effect is a phenomenon when a **stream of light passes through a liquid**, a fraction of light scattered by liquid is of a different colour.
- **Values:** Scientific rigour, Fortitude, Excellence, Curiosity, etc.



AHMEDABAD



BENGALURU



BHOPAL



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HYDERABAD



JAIPUR



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RANCHI