

# **Today's Prelims Topics**

# Pradhan Mantri Virasat Ka Samvardhan (PM-VIKAS) Scheme

#### Context

Union Minister of State for Minority Affairs inaugurated the PM-VIKAS Skill Development and Women Entrepreneurship Programme at the Indian Institute of Information Technology (IIIT) Kottayam

#### About PM-VIKAS (Pradhan Mantri Virasat Ka Samvardhan )

- It is a Central sector scheme under the Ministry of Minority Affairs (MoMA).
- It aims to empower **minority** and artisan communities through inclusive development.
- PM-VIKAS is an integrated scheme combining (5) existing schemes of MoMA viz. **Seekho aur Kamao**, **USTTAD**, **Hamari Dharohar**, **Nai Roshni and Nai Manzil**.
- Scheme Components:
  - Skilling and Training: Includes traditional (arts & crafts) and non-traditional (NSQF compliant) skill training.
  - **Leadership and Entrepreneurship:** Focuses on leadership development and entrepreneurship support, particularly for women.
  - **Education:** Provides open schooling opportunities (8th, 10th, and 12th) for school dropouts.
  - o **Infrastructure Development:** Development of "Vishwakarma Villages" (hub and spoke model) to promote art, craft, tourism and commerce.

#### **Minorities**

- The Constitution of India does not define the term "Minority".
- The Central Government has notified six communities as minority communities under Section 2(c) of the National Commission for Minorities Act, 1992.
  - Muslims, Christians, Sikhs, Buddhists, Zoroastrians (Parsis), and Jains.
  - As per census 2011, the percentage of minorities in India's population is 19.3%.

**Source: The Hindu** 



# **Green Hydrogen From Bio Waste**

#### **Context**

Union Minister of New & Renewable Energy Prahlad Joshi lauded the innovation of producing green hydrogen from bio-waste at the Indian Institute of Science, Bengaluru.

#### **Process Overview**

- Biomass Gasification: Agricultural waste is subjected to thermochemical gasification, producing
  a mixture of gases like carbon monoxide (CO), hydrogen (H₂), methane (CH₄), etc.
- Water-Gas Shift Reaction: CO reacts with water vapor to form more hydrogen and carbon dioxide.
- **Hydrogen Separation & Purification:** Advanced filtration and separation systems are used to isolate **high-purity hydrogen (99%+)** from the gas mixture.
- Carbon-Negative Output: For every kg of hydrogen produced, more than 1 kg of CO₂ is removed from the atmosphere, making the process carbon-negative.

#### **Significance**

- Supports National Green Hydrogen Mission: Aligns with the National Green Hydrogen Mission (NGHM) target of:
  - o 5 MMT annual green hydrogen production
  - o 125 GW of additional renewable energy
  - ₹8 lakh crore investment and over 6 lakh jobs
  - O Directly contributes to reducing 50 MMT CO<sub>2</sub> emissions/year.
- Carbon-Negative Innovation: Unlike electrolysis (which is net-zero if renewable-powered), this system removes CO₂ while generating hydrogen a game-changer for climate action.
- Cost-Efficient Pathway: Offers an alternative to expensive electrolysis, potentially lowering the cost of green hydrogen (currently ₹300–₹400/kg) toward the target of ₹100/kg or \$1/kg by 2030.

Source: PIB



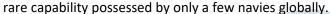
#### Nistar

#### **Context**

The Indian Navy received the 'Nistar' vessel from Hindustan Shipyard Limited in Visakhapatnam.

#### **About Nistar**

- 'Nistar' is the first indigenously designed and built Diving Support Vessel (DSV) in India.
- The name 'Nistar' is derived from Sanskrit, meaning liberation, rescue, or salvation.
- The vessel has been constructed following the classification standards of the Indian Register of Shipping (IRS).
- It is a highly specialized ship, capable of conducting deep-sea diving and rescue operations, a





#### **Key Features of Nistar**

- Dimensions: Measures 118 meters in length and weighs around 10,000 tons.
- Equipped with advanced diving systems, allowing Deep Sea Saturation Diving up to 300 meters depth.
- Contains a Side Diving Stage to facilitate diving operations up to 75 meters.
- Acts as the 'Mother Ship' for the Deep Submergence Rescue Vessel (DSRV), used for rescue and evacuation of submarine personnel in emergencies.
- Fitted with Remotely Operated Vehicles (ROVs) capable of diver monitoring and salvage tasks up to 1000 meters below the surface.
- Built with approximately 75% indigenous components, showcasing a major step toward selfreliance (Aatmanirbhar Bharat) and supporting the Make in India initiative.

Source: <u>TheHindu</u>



# **Pratibha Setu**

#### **Context**

The **Employees' State Insurance Corporation (ESIC)** recently made headlines for recruiting **451 Insurance Medical Officers** via the **UPSC's Pratibha Setu portal**.

#### What is UPSC PRATIBHA Setu?

- UPSC PRATIBHA Setu stands for Professional Resource And Talent Integration Bridge for Hiring Aspirants.
- It is a **talent-bridging platform** launched by **UPSC** to connect verified employers with candidates who cleared the **UPSC Prelims and later stages**, but did **not make the final merit list**.
- Aims to provide **alternate employment opportunities** to high-performing aspirants who narrowly missed final selection.

#### **Background and Evolution**

- Originally launched on August 20, 2018, as the Public Disclosure Scheme (PDS) for a few exams like Combined Medical Services.
- Due to its success, the scheme was **renamed to PRATIBHA Setu**, expanding its scope to multiple exams such as Civil Services, Engineering Services, and more.
- Reflects a transition from mere data disclosure to active talent matchmaking.

#### Who Can Register?

- Candidates who cleared all stages of UPSC exams (e.g., CSE, IES, IFS, CAPF, Geo-Scientist, CDS, CMS) but were not recommended in the final list.
- Participation is voluntary and consent-based, ensuring data privacy and candidate control.
- Employers eligible to register include ministries, PSUs, autonomous bodies, and private firms.
  - Private companies must register using their CIN (Corporate Identification Number), which is verified through the Ministry of Corporate Affairs.

#### **How the Platform Works**

- Registered employers get secure login access to browse a database of over 10,000 highperforming candidates.
- Employers can view **candidate biodata**, educational qualifications, exam details, and contact info.
- The platform provides discipline-wise filtering to help match candidates to job requirements.
- Employers can **shortlist**, **wishlist**, **reject**, **and contact** candidates directly for interviews and recruitment.

#### **Key Features**

- Secure, interactive dashboard for smooth employer navigation and candidate management.
- Access to civil service—level talent for critical roles in both public and private sectors.
- Encourages efficient talent utilization and supports the nation's broader skill deployment goals.

**Source: TimesOfIndia** 



# **Chronic Venous Insufficiency**

#### **Context**

U.S. President Donald Trump was recently diagnosed with **Chronic Venous Insufficiency (CVI)**, a medical condition that affects blood flow in the veins.

#### What is Chronic Venous Insufficiency (CVI)?

- CVI occurs when the veins in the legs fail to return blood efficiently to the heart.
- Normally, valves in the veins ensure one-way blood flow toward the heart.
- In CVI, faulty or weakened valves allow blood to flow backward and pool in the legs.
- Though not typically life-threatening, CVI can cause pain, swelling, leg cramps, skin discoloration, varicose veins, and leg ulcers.

#### Who is at Risk?

- Individuals are more likely to develop CVI if they are:
  - Overweight
  - o Pregnant
  - Have a family history of venous issues
- The risk also increases in people who have:
  - Suffered leg injuries
  - Undergone leg surgeries
  - Experienced blood clots
- CVI is common in older adults, affecting approximately 1 in 20 adults.

# Symptoms of Venous Insufficiency varicose veins pain and heaviness restless leg syndrome swelling leg cramps or spasms itchy skin

#### **Treatment Options for CVI**

- Lifestyle changes are the first line of treatment:
  - Regular physical activity
  - o Elevating the legs
  - Weight control
- Medical therapies include:
  - o Medications that improve blood flow
  - O Compression therapy, using tight stockings or bandages to support veins
- In severe cases, surgical procedures may be considered.

Source: IndianExpress



# Sanitary and Phytosanitary Measures (SPS)

#### **Context**

India and the European Union (EU) continue to differ on Sanitary and Phytosanitary (SPS) measures, especially over strict EU food safety standards such as pesticide residue limits and aflatoxin levels, impacting agricultural exports from India.



# **WTO Members**

Have the right to protect human, animal or plant life and health, basing their measures on science and only applying them to the extent necessary, without unjustifiable discrimination. It also encourages the use of international standards developed by Codex Alimentarius, IPPC and OIE.



#### **About the SPS Agreement**

- The SPS Agreement is a treaty under the World Trade Organization (WTO).
- It came into effect on January 1, 1995, alongside the establishment of the WTO.
- It sets rules for food safety and animal and plant health standards in international trade.

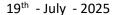
#### **Key Provisions of the SPS Agreement**

#### Scientific Basis

- SPS measures must be based on **scientific principles** and supported by sufficient evidence.
- o **Provisional measures** may be allowed in cases of insufficient evidence, but must be reviewed within a reasonable time.

#### Harmonization

- Member countries are encouraged to align their SPS measures with international standards.
- Key standard-setting bodies include:





- Codex Alimentarius Commission (food safety)
- OIE (World Organisation for Animal Health)
- IPPC (International Plant Protection Convention)

#### • Equivalence

Countries should accept **equivalent SPS measures** from other nations if they provide a **similar level of health protection**, even if the methods differ.

#### • Risk Assessment

- Members must carry out scientific risk assessments to determine the appropriate level of health protection.
- These assessments consider the impact of **pests, diseases, and contaminants**.

#### • Regionalization

Countries should recognize **pest- or disease-free zones**, even if these are just specific regions within a country or group of countries.

#### Transparency

- Members must notify the WTO about changes in SPS measures.
- They must also share regulatory information through the WTO's SPS Notification System.

#### • Dispute Resolution

• If disputes arise and consultations fail, the matter can be taken to the WTO's Dispute Settlement Body (DSB).





# Polavaram Banakacherla Link Project (PBLP)

#### **Context**

The Centre has announced the formation of a **high-level technical committee** to examine inter-state water disputes—most notably the **Polavaram–Banakacherla link project**—between Andhra Pradesh and Telangana.

#### **About the Banakacherla Reservoir Project**

- A proposed irrigation project by the Andhra Pradesh government to divert surplus Godavari water to droughtprone Rayalaseema region.
- Location: Banakacherla, Nandyal district, Andhra Pradesh.
- Involves water transfer via the Godavari-Krishna-Penna river linkage.

#### **States Involved**

- Andhra Pradesh: Project implementing state.
- Telangana: Objecting state, citing legal and environmental concerns.

# Polavaram - Banakacherla Link Project (Andhra Pradesh vs. Telangana)



#### **Project Features**

- River Diversion Plan: Polavaram Right Main Canal capacity to be increased from 17,500 to 38,000 cusecs.
  - Thatipudi Lift Canal upgraded from 1,400 to 10,000 cusecs.
  - Construction of a reservoir at Bollapalli to lift and transfer water via a tunnel through the Nallamala forest to Banakacherla.
- Lift Stations:
  - Five key lift points: Harischandrapuram, Lingapuram, Vyyandana, Gangireddypalem, Nakirekallu.
- River Linkage:
  - Connects **Godavari** → **Krishna** → **Penna**, facilitating water flow to Rayalaseema.

#### **Concerns Raised by Telangana**

- Violation of AP Reorganisation Act, 2014: Telangana argues the project lacks mandatory approvals required under the Act for inter-basin transfers.
- No Clearance from Regulatory Bodies: Lacks approvals from:
  - Krishna River Management Board (KRMB)
  - Godavari River Management Board (GRMB)
  - Central Water Commission (CWC)
- Godavari Tribunal Allocation Ignored: Telangana was allocated 968 TMCft out of 1,486 TMCft by the Godavari Water Disputes Tribunal.
  - O Claims that surplus water estimation is **not formally recognized**.
- Threat to Telangana Irrigation Projects: Fears that diversion may negatively impact its reservoirs and irrigation schemes dependent on Godavari waters.

Source: NewsOnAir



# **News in Short**

#### **Mahila Aarogyam Kaksh**

**News?** The Department of Legal Affairs, Ministry of Law and Justice, inaugurated Mahila Aarogyam Kaksh.

#### **About it**

- **Purpose:** It is a first-of-its-kind initiative aimed at institutionalising **workplace wellness** for women employees within government offices.
  - It serves as a dedicated health, fitness and wellness space exclusively for female staff of the Department.

#### • Key Objectives:

- Promote physical fitness, mental well-being, and work-life balance for women employees.
- Provide inclusive facilities such as gym equipment and a private lactation room for nursing mothers.
- Reflect the commitment to gender-sensitive workspaces and support the wider vision of a Fit India Movement and Viksit Bharat.

Source: PIB

#### Allographa effusosoredica

**News?** A team of Indian scientists has uncovered a previously unknown species of lichen, Allographa effusosoredica from western ghats.

#### **About the Specie**

- Taxonomy & Features:
  - A crustose lichen (thin and crust-like growth on surfaces).
  - Characterised by effuse soredia (powdery reproductive structures) and rare chemical traits.
  - Contains **norstictic acid**, a relatively uncommon lichen metabolite.
  - Morphologically resembles Graphis glaucescens, but phylogenetically close to Allographa xanthospora.
  - Algal symbiont identified as a species of **Trentepohlia**.

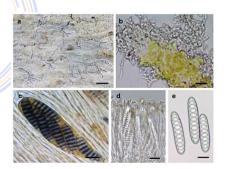
#### Significance:

- First Allographa species from India supported by molecular data.
- Enhances understanding of lichen-algal symbiosis and locally adapted photobionts.
- Adds to the taxonomic richness: 53rd Allographa species reported from India, 22nd from Western Ghats.

#### What are lichens?

- Lichens are composite organisms formed from a symbiotic association between:
  - A **fungus** (mycobiont): provides structure and protection.
  - o A **photosynthetic partner** (photobiont): usually green algae or cyanobacteria, produces food via photosynthesis.

Source: PIB





# **Editorial Summary**

# Indian inequality and the World Bank's claims

#### Context

India's inequality debate reignited after a 2025 World Bank report claimed a significant decline in poverty and consumption inequality, prompting both praise and skepticism about data validity and broader interpretations.

#### **World Bank Findings**

- India has nearly eradicated extreme poverty, pulling around 27 crore people out of poverty between 2011 and 2023.
- Consumption inequality has declined, with the Gini coefficient falling from 28.8 (2011-12) to 25.5 (2022-23).
- The **bottom 20%** of the population has shown notable **dietary and asset improvements**, even **excluding free food and cash transfers**.
- India now ranks among the top four least unequal countries globally in consumption terms.
- The findings are based on HCES 2022-23, which used the Modified Mixed Reference Period (MMRP) a method aligned with international best practices.

#### **Issues with the Findings**

- HCES does not fully capture elite/top 5% consumption, which may underestimate actual inequality.
- Consumption inequality ≠ Income inequality; income data is lacking, and comparisons can be misleading.
- World Inequality Lab (WIL) estimates of income inequality are based on implausible assumptions, such as most households spending more than they earn.
  - E.g., WIL estimates suggest that 70–80% of households spend more than they earn, year after year a logically inconsistent assumption.
- WIL uses pre-tax income, ignoring India's substantial welfare transfers and tax redistribution, skewing perceived inequality.
  - E.g., In AY 2023-24, the top 1% of taxpayers paid 72.77% of total taxes; but this isn't reflected in WIL's pre-tax inequality figures.
- Media often **misrepresents inequality** by overemphasizing top 1% shares without acknowledging **data flaws or post-tax realities**.

#### **Way Forward**

- Develop official, robust income surveys to track income distribution directly.
- Incorporate post-tax and post-transfer effects in inequality measurement.
- Improve data collection on high-income households and elite consumption.
- Distinguish clearly between income and consumption-based inequality in public discourse.
- Focus policy on equal access to quality education, healthcare, and employment to address structural inequalities.
- Recognize and **celebrate progress** while staying vigilant about remaining gaps.

Source: <u>The Hindu</u>