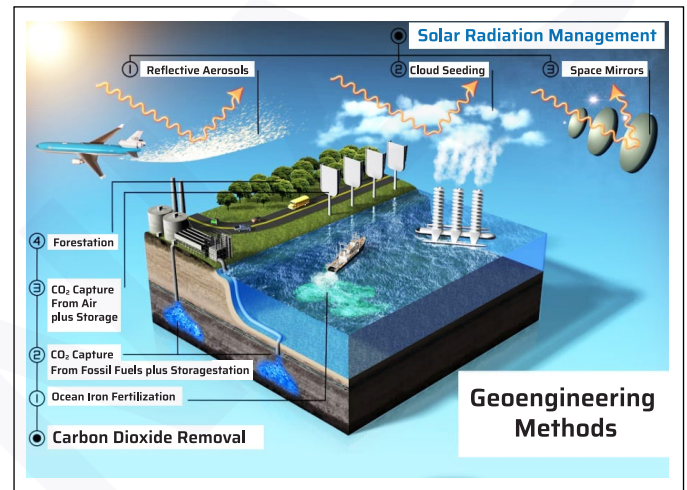


# NEWS TODAY

## University of Washington is assessing efficacy of a Geoengineering method under Marine Cloud Brightening (MCB) Programme

- The **MCB programme** seeks to increase the number of **cloud condensation nuclei** in low marine clouds (formed over oceans and reefs with the help of sea salt crystals).
  - ⊕ Increasing nuclei would raise the **number of droplets** that such clouds are made of while decreasing their size, so that they **reflect more sunlight into space**.
- **Geoengineering** refers to a **set of emerging technologies** that could manipulate the environment and partially offset some of the impacts of climate change.
- **Types of Geoengineering:**
  - ⊕ **Solar Radiation Management:** It reflects sunlight back into space. E.g. **Using orbiting mirrors, modifying clouds**, etc.
  - ⊕ **Carbon Dioxide Removal:** In it, techniques suck carbon out of the atmosphere using a combination of **biological and mechanical methods**. E.g. Seeding ocean with iron pellets to create plankton blooms.
  - ⊕ **Earth Radiation Management:** It allows heat to escape into space from Earth. For instance, by **thinning cirrus clouds**.
- **Concerns associated with Geoengineering:**
  - ⊕ **Aerosol particles** in the **stratosphere** could have implications for recovery of ozone layer.
  - ⊕ **Repercussions for weather patterns** in the lower atmosphere.
  - ⊕ **Creating a “moral hazard”**, providing stakeholders with an excuse to not reduce the use of fossil fuels.



## National Human Rights Commission (NHRC) India holds Statutory Full Commission meeting

- The objective of the meeting was to discuss the issue of ensuring the **protection of the rights of the vulnerable and marginalized sections**.
- **About NHRC**
  - ⊕ Established in **1993** as a **Statutory body** under the **Protection of Human Rights Act (PHRA), 1993** as amended by the **Protection of Human Rights (Amendment) Act, 2006**.
    - ◆ Its establishment is aligned with the **Paris Principle** (sets out the international minimum standards for national human rights institutions).
  - ⊕ **Composition:** A Chairperson, five full-time Members and seven deemed Members.
    - ◆ **Deemed Members** include Chairpersons of other key National commissions such as National Commission for Scheduled Caste etc.
    - ◆ **Protection of Human Rights (Amendment) Act, 2019** provided that **Judge of the Supreme Court** can be appointed as chairperson in addition to the person who has been the Chief Justice of India.
  - ⊕ **Tenure:** **Three years** or till the age of seventy years for both the Chairperson and Members.
- **Power and Functions of NHRC**
  - ⊕ It has all the powers of a civil court while trying a suit under the **Code of Civil Procedure, 1908**.
  - ⊕ Inquire into any violation of human rights or negligence in the prevention of such violation by a public servant, either **suo motu or on a petition**.
  - ⊕ **Intervene in proceeding** w.r.t. allegation on violation of HRs pending before a court.

### Key Initiatives and Challenges

- **Key Initiatives**
  - ⊕ Guidelines to check misuse of the **power of arrest by the police**.
  - ⊕ Elimination of **manual scavenging**.
- **Key Challenges**
  - ⊕ **Global Alliance for National Human Rights Institutions (GANHRI)** had deferred its re-accreditation.
    - ◆ It has been done mainly due to **Political interference** in appointments, involving the **police in probes into human rights violations**, etc.
    - ◆ Without the accreditation, NHRC will be unable to represent India at the **UN Human Rights Council**.

## 50 years of Chipko Movement

- Chipko movement was a **non-violent protest to prevent felling of trees in Himalayas** that begun in **Chamoli district of Uttarakhand** (then Uttar Pradesh) in 1973 under the leadership of **Sundarlal Bahuguna, Gaura Devi, etc.**
  - ⊕ **Name of the movement 'chipko'** comes from the word 'embrace', as the villagers hugged the trees to prevent their felling.
  - ⊕ **Original Chipko movement** started by **Rajasthan's Bishnoi community in 18<sup>th</sup> century** to save sacred trees.
- Chipko movement is **renowned for its collective mobilization of women** in the effort to conserve forests, manifesting the philosophy of **Eco-feminism**.
- **Eco-feminism**: It is a **philosophical and political movement** that examines **connections between ecological concerns and women**.
  - ⊕ It contends that our culture is dominated by a **capitalist patriarchal system**, where societal values and ethics are dictated by a **profit-driven, sexist, and male-centric society**.
- **Reasons behind emergence of Eco-feminism**
  - ⊕ **Interconnectedness** of exploitation and degradation of the natural environment and the subjugation of women in patriarchal societies.
  - ⊕ **Significance of traditional knowledge** often held and transmitted by women, in promoting sustainable practices.
  - ⊕ **Women's lived experiences** where women have close and direct relationship with natural environment, being responsible for collecting water, firewood, etc.
- **Contemporary relevance of Eco-feminism**: Critique of capitalist exploitation, valuing traditional ecological knowledge, recognition of Environmental Justice, etc.



### Other Important eco-feminist movement

- **Narmada Bachao Andolan (1985)**: Led by environmental activist **Medha Patkar** against construction of large dam on Narmada.
- **Appiko Movement (1980s)**: Inspired by the Chipko movement, **women in Karnataka's Western Ghats** embraced trees to prevent deforestation.
- **Silent Valley Movement (1973)**: To **save a rainforest from being flooded for a hydroelectric project** in Kerala.
- Women's fight against **human and environmental injustice in the infamous Bhopal Gas tragedy**.

## United Nations Secretary- General Highlights India's Multilateral Development Banks (MDBs) reform Efforts

- The Secretary- General has also said that the **reform of MDBs will be a key theme at the Summit of the Future 2024**.
  - ⊕ **Summit of the Future 2024** will be hosted by the **United Nations General Assembly (UNGA)**.
- **About MDBs**:
  - ⊕ MDBs are **international financial institutions** that provide financial and technical assistance to developing countries.
  - ⊕ These banks are owned by **multiple member countries** and **operate globally** to promote economic development, reduce poverty, and support sustainable growth in their member countries.
  - ⊕ **Major MDBs include** the World Bank Group, Asian Development Bank, etc.
- **Need of Reforming MDB's** :
  - ⊕ **Adaptation to changing development needs of the 21st century**: It includes climate change, income inequality etc.
  - ⊕ **Representation and Voice**: Developing countries are pushing for **greater voting power** and a more equitable say in MDB decision-making.
  - ⊕ **Private Sector Mobilization**: MDBs traditionally focus on public financing. Reforms aim to leverage private capital alongside MDB resources to multiply development impact.
- **Challenges in Reforms**: Difficulty in achieving consensus among diverse member countries, limited financial and technical resources for implementing reforms, slow approval processes etc.

### Recommendation of independent expert group (IEG) on MDB reform (set up during India's G20 presidency):

- **Tripling the annual lending levels** of MDBs to \$390 billion by 2030;
- **Adopting a triple mandate for MDBs** to eliminate extreme poverty, boosting shared prosperity and contributing to global public goods;
- Expanding and **Modernizing funding models**.
- **Other**: Enhancing engagement with the **private sector** to the center of MDB operations, etc.

## Private credit faces liquidity risks if stress rises, says IMF report

- **IMF's Global Financial Stability Report** outlines critical role of private credit in debt markets and points to possible risks arising out of it.
- **Private Credit (PC):** It is **non-bank corporate credit** provided through bilateral agreements or small "club deals" outside the realm of public securities or commercial banks.
  - ⊖ It **excludes bank loans, funding provided through publicly traded assets** such as corporate bonds, etc.
- **Significance of PC**
  - ⊖ **Access to credit:** For companies **deemed too risky/large for commercial banks** and too small for public markets.
  - ⊖ **Customized lending terms:** To provide flexibility in times of stress.
- **Threats to financial stability due to PC**
  - ⊖ **Regulations:** PC markets are comparatively **less regulated and opaque to stakeholders.**
  - ⊖ **Interconnectedness:** PC value chain is a complex network that includes leveraged players ranging from borrowers to funds to end investors posing risk of spillovers.
  - ⊖ **Borrower's vulnerabilities:** PC caters to mostly **small and mid-size borrowers** with higher leverage, implying more risk, particularly in stagflation scenario.
- **Policy Recommendations**
  - ⊖ **Robust supervisory and regulatory approach** to PC funds, institutional investors, and leverage providers.
  - ⊖ Strengthen regulation on **valuation independency, governance, and frequency.**
  - ⊖ Strengthen cross-sectoral and **international regulatory cooperation.**

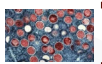
## Australia recognizes India as top-tier Security Partner

- Australian Government in its **National Defense Strategy (NDS) 2024** identified India as **'top-tier security partner' in the Indo-Pacific Region (IPR).**
  - ⊖ NDS also highlighted that Australia will continue to seek opportunities with India to drive **practical bilateral and multilateral cooperation, defense industry cooperation and information sharing.**
- **India-Australia Security Partnership in IPR**
  - ⊖ **Quadilateral Security Dialogue (Quad):** Both the countries, along with Japan and the US, are actively cooperating in Quad to tackle urgent challenges in the IPR.
  - ⊖ **Bilateral cooperation:** Both countries upgraded their bilateral ties to the level of **Comprehensive Strategic Partnership (CSP)** in 2020.
    - ◆ **Joint Declaration on a shared vision for Maritime Cooperation in Indo-Pacific (2020)** emphasized on promoting peace, security, stability, and prosperity in the IPR.
  - ⊖ **Defense cooperation: Mutual Logistics Support Arrangement and Defense Science and Technology Implementing Arrangement** provide a framework to deepen defense cooperation.
    - ◆ **AUSTRAHIND** is a joint military exercise between two countries.
- **Significance of India-Australia Partnership in IPR:** Shared interest in maintaining a rules-based order, freedom of navigation, and respect for international laws, collaboration in emerging technologies and critical minerals, securing regional balance of power in the backdrop of Chinese aggression, etc.

### Other aspects of India-Australia ties

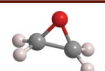
- **Economic:** Both countries signed Economic Cooperation and Trade Agreement in 2022.
- **Clean Energy cooperation:** Letter of Intent signed in 2022 on New and Renewable Technology.
- **Critical Mineral Investment Partnership:** MoU signed in 2022 between AU Critical Minerals Office and Khanji Bidesh India Ltd (KABIL).
- **Nuclear cooperation:** Civil Nuclear Cooperation Agreement signed in 2014.

## Also in News



### Genomic Accordion

- A recently study shows that mpox virus use a 'genomic accordion' to evolve and infect humans.
- **Genomic Accordions**
  - ⊖ Used to describe **evolution of Poxviruses**, which is a **multi-step process of gene amplification, mutation, and reduction.**
    - ◆ **Gene amplification** is a natural or artificial process that **increases number of copies of a gene.**
  - ⊖ It **allows viruses to adapt rapidly** against host antiviral defences.
- **Mpox Virus**
  - ⊖ It is a **double-stranded DNA virus.**
  - ⊖ Belongs to **orthopoxvirus genus in Poxviridae family**, which includes **variola, cowpox, vaccinia, and other viruses.**



### Ethylene Oxide

- Singapore Food Agency (SFA) has ordered a recall of India's Spice product due to the presence of ethylene oxide.
- **About Ethylene Oxide:**
  - ⊖ It is a **colourless, flammable gas** with a sweet odor.
  - ⊖ It is **used to make other chemicals**, including antifreeze, textiles, plastics, detergents, and adhesives.
  - ⊖ It is also used **as a pesticide and sterilizing agent** for medical equipment.
- **Health Impact:** Long-term exposure can result in irritation of eyes, skin, and respiratory passages and affects nervous system. Also, it is carcinogenic to humans.



### Exercise Poorvi Lehar

- **Indian Navy** conducted Exercise Poorvi Lehar on East Coast under the Operational Control of Eastern Naval Command.



### Mahanadi river

- Recently, a passenger boat capsized in Odisha's Mahanadi River.
- **About Mahanadi River**
  - ⊕ **Origin:** Originates from a pool in **Dhamtari district of Chhattisgarh** and **drains into Bay of Bengal.**
  - ⊕ **States:** Basin spread over **Chhattisgarh, Odisha, Jharkhand, Maharashtra, and Madhya Pradesh.**
  - ⊕ **Important tributaries:** Seonath, Hasdeo, Mand, Ib, Ong, Tel, Jonk, etc.
  - ⊕ **Important Projects:** Hirakud dam, Mahanadi Reservoir Project, etc.
  - ⊕ **Protected areas:** Satkosia Tiger Reserve, Baisipalli Wildlife Sanctuary, etc.



### Pink Hydrogen

- Nuclear energy can be used for the generation of **Pink Hydrogen.**
- **About Pink Hydrogen:**
  - ⊕ It is generated through **electrolysis** powered by nuclear energy.
  - ⊕ It can also be referred to as **purple hydrogen** or **red hydrogen.**
  - ⊕ Also, the very high temperatures from nuclear reactors could be used in other hydrogen productions by **producing steam for more efficient electrolysis** or **fossil gas-based steam methane reforming.**
- **Other key Hydrogen type:** Green Hydrogen (from renewable energy); Blue Hydrogen (from natural gas), etc.



### Aadharshila

- The Ministry of Women and Child Development (**MWCD**) has released the **National Curriculum for Early Childhood Care and Education (ECCE) 2024** titled 'Aadharshila'.
- **About Aadharshila**
  - ⊕ It is a **detailed 48-week curriculum** meant for learning in the age-group of **three to six-year olds** in anganwadis.
    - ◆ It is aligned with the **National Education Policy 2020.**
  - ⊕ It will **serve as a base for States to develop their own culturally appropriate curriculums.**



### Ross Ice Shelf

- As per recent research, **Antarctica's Ross Ice Shelf** makes sudden jumps twice a day.
  - ⊕ **Ross Ice Shelf** is a massive slab of ice about the size of France.
- A **sudden jump occurs** when two sections of ice press against each other (rubbing creates tension), just as tectonic plates on Earth cause earthquakes.
- Jumps might cause "**icequakes**" - seismic disturbances that occur within the ice. These icequakes can be harmful, especially to animals and explorers close.



### NOTTO-ID

- **Union Ministry of Health and Family Welfare (MoHFW)** directed that all cases of organ transplants, whether from living or deceased donors, be given a unique NOTTO-ID.
- National Organ and Tissue Transplant Organisation (NOTTO)-ID will be an **identification number for both organ donors and recipients.**
- Directive aims to **eliminate commercial dealing in organs**, especially those involving foreign citizens.
- **NOTTO is a national-level organization under MOHFW** which undertakes activities of coordination and networking for procurement and distribution of Organs and Tissues.

## Places in News



### Sudan (Capital: Khartoum)

- According to the United Nations, Sudan's war is being fuelled by weapons from foreign supporters.
- **Political Boundaries**
  - ⊕ Located in **north-eastern Africa.**
  - ⊕ Bordered with **Egypt, Libya, Chad, Central African Republic, South Sudan, Ethiopia and Eritrea.**
  - ⊕ Shares its **maritime border with Saudi Arabia** in the **Red Sea.**
- **Geographical Features:**
  - ⊕ **Highest Peak:** Deriba Caldera (Jabel Marra Mountain).
  - ⊕ **Major River:** Nile River (White Nile and Blue Nile merge in Khartoum).

