UNESCO Releases State of the Ocean Report (2024)

The report, structured around the UN Decade of Ocean Science for Sustainable Development (2021-2023), offers insights into ocean-related scientific activities describing the current and future state of the ocean.

Key findings

- Warming: Ocean is now warming at twice the rate it was twenty years ago.
 - Ocean temperatures have increased by an average of 1.45°C, with hotspots above 2°C in the Mediterranean, Tropical Atlantic Ocean and Southern Oceans.
- Rising Seal level rise: Mostly due to accelerated ice mass loss from the Greenland and West Antarctica ice sheets, and to a lesser degree from accelerated ocean warming.
- Acidification: Ocean absorbs around 25% of annual anthropogenic CO₂. This process reduces seawater pH (ocean acidification).
 - Ocean acidification would increase by more than 100% by the end of the century.
- **Deoxygenation:** Ocean oxygen content is decreasing, resulting in worsening hypoxia.
 - ⊕ However, it is unclear whether deoxygenation is accelerating in response to ocean heat content increase.
- Coastal blue carbon ecosystems: Mangroves, seagrasses and tidal marshes provide refuge against a warmer, more acidic ocean, and are an important store of carbon.

Key Recommendations

- Marine spatial planning to help reduce the pressures on marine ecosystems.
- Greater global effort on increasing knowledge of the seafloor is required (75% of the ocean floor remains unmapped).
- Better engage Indigenous peoples in marine policy and planning to transition to 'the ocean we need for the future we want'.
- Building global ocean literacy where people universally appreciate and cherish the ocean's vital role.
- ⊕ However, their protection is not guaranteed and 20-35% have been lost since 1970.

UNICEF releases "Child Nutrition Report, 2024"

The report reveals severe child food poverty (CFP), defined as children's inability to access and consume a nutritious and diverse diet in early childhood (first five years of life), globally.

Key findings

- Prevalence: ~27% children live in severe CFP, globally. In India, 40% of children suffer from severe CFP (2nd highest burden in South Asia after Afghanistan).
- Poor Diet: Unhealthy foods are becoming entrenched in children's diets replacing nutrient-rich foods.
- Income and CFP: Severe CFP affects children in both poor and non-poor households, indicating income is not the only driving factor.

0-2 food groups/day

Pulses,

nuts and

seeds

Causes: Growing inequities, conflict and climate crises, combined with rising food prices, the overabundance of unhealthy foods, harmful food marketing strategies and poor child-feeding practices.

Recommendations

- Strengthen data systems to assess the severity of CFP.
- Transform food systems to make nutritious foods accessible, affordable and desirable option for feeding young children.
- Leverage health systems to deliver

Measurement of CFP

To meet the minimum dietary diversity for healthy growth and development, children need to consume foods from at least five out of the eight defined groups.

3-4 food groups/day

moderate child food

they are living in

poverty

Q

Breastmilk

If children

are fed:

they are living in severe child food poverty



Dairy

products

Flesh foods

(meat,

poultry and fish)

Eggs

they are

poverty

Vitamin A-rich fruits and vegetables

5 or more food groups/day

not living in child food



Other fruits vegetables

essential nutrition services, including counselling on child feeding.

India's initiative

Saksham Anganwadi and Poshan 2.0 focuses on maternal nutrition, infant and young child feeding norms, etc.

Grains,

roots, tubers

and

plantains

Introducing millets in Mid-Day Meal Scheme (renamed as 'PM Poshan' scheme).







TRISHNA - ISRO announces Indo-French Thermal Imaging Mission

TRISHNA (Thermal Infra-Red Imaging Satellite for High-resolution Natural Resource Assessment) mission is a collaborative endeavor between ISRO and CNES (French Space Agency) to monitor surface temperature and water management at regional to global scale.

About TRISHNA Mission

- Objective: Detailed monitoring of energy and water budgets of continental biosphere for quantifying terrestrial water stress and water use and high-resolution observation of water quality and dynamics.
 - It will also help in a comprehensive assessment of urban heat islands, detection of thermal anomalies linked to volcanic activity and geothermal resources, etc.

2 Primary payloads

- features a four-channel long-wave infrared imaging sensor.
- (VNIR-SWIR) payload: Developed by ISRO, includes seven spectral bands designed for detailed mapping of surface reflectance.
- It will operate in a Sun-synchronous (SSO) orbit and is designed for a 5-year operational life.
 - SSO is a particular kind of polar orbit in which satellites are synchronized to always be in the same position relative to the Sun.

India's international Space Cooperation

- India-France: Strategic Space Dialogues, signed Letter of Intent on Defense Space Cooperation, space exchanges and defense space industrial cooperation, etc.
- situational India-US: Bilateral space awareness arrangement (2022), NASA-ISRO Synthetic Aperture Radar (NISAR) Mission, etc.
- Others: Lunar Polar Exploration (LUPEX) Mission between India and Japan, South Asia Satellite (SAS) to boost communication and improve disaster links among India's 6 neighbors, etc.
- Significance: Climate monitoring such as droughts, permafrost changes, and evapotranspiration rates; better urban planning with detailed urban heat island maps and heat alerts; etc.

Two bird sanctuaries of Bihar added to Ramsar list

Nagi and Nakti bird sanctuaries, both located in Bihar's Jamui district, are now recognised under the Ramsar Convention taking total Ramsar sites in India to 82.

- Both sanctuaries are man-made reservoirs (Nagi dam and Nakti dam) and feature dry deciduous forests surrounded by hills.
 - Although Nagi lies in the Gangetic Plains of India, it has a landscape reminiscent of the Deccan Plateau.
- They are also recognised as an Important Bird and Biodiversity Area (IBA) by BirdLife International.
- Major birds' habitat
 - Migratory birds: Bar-headed Goose, Greylag Goose, Northern Pintail, Red-crested Pochard, Steppe Eagle, etc.
 - Resident birds: Indian Robin, Ashy-crowned Sparrow-Lark, Asian Koel, Asian Pied Starling, Bank Myna, etc.

Ramsar Convention

- An intergovernmental treaty for the conservation and wise use of wetlands and their resources.
- Adopted at Ramsar (Iran) in 1971 and came into force in 1975.
- India became a party in 1982 (Maximum Ramsar sites are in Tamil Nadu followed by Uttar Pradesh).
- 'List of wetlands of international importance' or the Ramsar List contains wetlands which hold significant value for humanity as a whole.

Ramsar list

- Wetlands in the Ramsar list meet at least one of nine criteria as defined under the conventions including supporting vulnerable, endangered, or critically endangered species or threatened ecological communities.
- Contracting Parties are expected to manage their Ramsar Sites to maintain their ecological character.
- Montreux Record include Ramsar sites where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference.
 - Loktak (Manipur) and Keoladeo National Park (Rajasthan) of India are included in it.







WTO members held first formal meeting on dispute settlement reform

Recently, WTO members met at Heads of Delegation level on dispute settlement reform, with an initial focus on how to resolve issues regarding appeal/review.

Need of reforms in WTO Dispute settlement

- Since August 2017, the US opposed the launch of selection processes to fill vacancies on the Appellate Body until its systemic concerns regarding WTO's dispute settlement system are addressed.
- This denies WTO members their legal right to a binding, twostage dispute settlement process which is a fundamental pillar of WTO system.

WTO Dispute Settlement process

- ▶ Dispute Settlement Body (DSB): Settling disputes is the responsibility of DSB (General Council), which consists of all WTO members.
 - It has the sole authority to establish "panels" of experts to consider the case, and to accept or reject panels' findings or the results of an appeal.
 - It monitors the implementation of rulings and recommendations, and has the power to authorize retaliation when a country does not comply with a ruling.
- ▶ Appellate Body: Either side can appeal a panel's ruling before the Appellate Body.
 - Dispute Settlement Body has to accept or reject the appeals report within 30 days — and rejection is only possible by consensus.

About WTO Appellate Body

- ➤ Established in 1995 under Article 17 of the Understanding on Rules and Procedures Governing the Settlement of Disputes.
- ▶ It is a standing body of 7-persons.
- Each appeal is heard by three members of the Appellate Body.
- Currently, Appellate Body is unable to review appeals as it has no members. The term of the last sitting member expired on November 30, 2020.

India attends Indo-Pacific Economic Framework for Prosperity (IPEF) Ministerial meeting

At the meeting, IPEF members signed multiple agreements which are first-of-their-kind approaches to address 21st century challenges and strengthen economic engagement across Indo-Pacific.

Key outcomes of the meet

- ▶ IPEF Clean Economy Agreement: To accelerate efforts of IPEF partners towards energy security and transition, climate resilience and adaptation, GHG emissions mitigation, etc.
- IPEF Fair Economy Agreement: To create a more transparent and predictable business environment in member countries.
- Cooperative Work Programme (CWP): 3 new CWPs announced on emissions intensity accounting, e-waste urban mining (led by India), and Small Modular Reactors.
- ➤ Operational launch of IPEF Catalytic Capital Fund: To support expansion of the pipeline of quality clean economy infrastructure projects.

Note: These agreements will enter into force after at least five IPEF partners complete their internal legal procedures for ratification, acceptance, or approval.

India did not formally sign these agreements as domestic approval processes are still underway and will be completed after formation of the new government.

About IPEF

- ➤ Launched in 2022 by 14 countries including India, the USA, Australia, among others.
- Objective: To strengthen economic engagement among partner countries to advance growth, peace and prosperity in the Indo-Pacific region.
- 4 pillars: Trade (Pillar I), Supply Chains (Pillar II), Clean Economy (Pillar III), and Fair Economy (Pillar IV).
- India has joined Pillars II to IV of IPEF while it has an observer status in Pillar-I.

Also in News



Cotton Corporation of India (CCI)

CCI plans to open depots in Coimbatore (Tamil Nadu).

About CCI

- Genesis: Established as a PSU under the Companies Act, 1956 in 1970.
- Ministry: It is under the administrative control of Ministry of Textiles.
- Headquarters: Navi Mumbai.
- Functions
 - Undertakes price support operations, whenever market prices of kapas (seed cotton) fall below minimum support prices, without any quantitative limit.
 - Undertakes commercial purchase operations to fulfill raw material requirement of domestic textile industry.
- Operations: Cover all cotton growing states in northern (Punjab, Haryana, Rajasthan), central (Gujarat, Maharashtra, Madhya Pradesh, Orissa), and southern zones (Andhra Pradesh, Telangana, Karnataka, Tamil Nadu).



Information Fusion Centre for Indian Ocean Region (IFC-IOR)

Delegation of **Royal Navy of Oman visited IFC-IOR,** Gurugram (Haryana)

About IFC-IOR

- Hosted by the Indian Navy.
- Established in 2018 within the Information Management and Analysis Centre (IMAC).
 - At IMAC data from various sensors and databases is aggregated, correlated and then disseminated to various stations for enhanced awareness.
- Established to promote collaboration for maritime safety and security in line with India's vision of Security and Growth for All in the Region (SAGAR)
- Hosts International Liaison Officers (ILOs) from partner nations and engages multinational maritime constructs.









Duty Drawback

Now, the Central Board of Indirect Taxes and Customs (CBIC) will electronically disburse duty drawback amounts directly to exporters' bank accounts using the Public Finance Management System.

This will enhance trade facilitation and promote paperless customs.

Duty Drawback

- Duty Drawback under section 75 of the Customs Act, 1962 rebates customs duty chargeable on any imported materials or excisable materials used in the manufacture of export goods.
- It helps exporters offset some of the costs accrued during the export process, particularly in the supply or value chain.



Milgromian Dynamics (MOND)

Studies conducted by the Cassini-Huygens Mission challenged MOND theory.

Cassini is a joint endeavour of NASA, European Space Agency, and the Italian Space Agency to study Saturn and its complex system of rings and moons.

About MOND

- It is an alternative paradigm of dynamics, proposed by Mordehai Milgrom, seeking to replace Newtonian dynamics and General Relativity.
- It aims to account for the ubiquitous mass discrepancies in the Universe, without invoking the dark matter that is required if one adheres to standard dynamics.



Biopharmaceutical Alliance

India, South Korea, the US, Japan, and European Union launched Biopharmaceutical Alliance in response to the drug supply shortages experienced during the COVID-19 pandemic.

The announcement was made at the inaugural meeting of the Biopharmaceutical Alliance during the Bio International Convention 2024.

Significance

- Build a reliable, sustainable, and resilient supply chain in pharmaceuticals as production of essential raw materials and ingredients is concentrated in a few countries.
- Coordinate bio policies, regulations, and R&D support measures with the member countries.



'Air of the Anthropocene (AoA)' project

Researchers and artists have joined the 'Paint with Light' initiative as a part of the AoA project.

'AoA' project

- Created by artist Robin Price and an environmental scientist at the University of Birmingham to document air pollution levels around the world through photography.
- 'Paint with light' involved combining digital light painting and low-cost air pollution sensors, to produce photographic evidence of air pollution in cities of India, Ethiopia and the UK.
- It has also been used to raise air pollution awareness by UN.



Applicability of RTI on MPLAD Scheme

Delhi High Court has observed that Chief Information Commissioner (CIC) has no jurisdiction to comment upon utilization of funds by Members of Parliament (MPs) under MPLAD Scheme.

Member of Parliament Local Area Development (MPLAD) scheme is a central sector scheme aimed to enable each Member of Parliament to recommend works of developmental nature based on the locally felt needs of the people.

Applicability of RTI on MPLAD Scheme

- Any citizen can seek information on any aspect of the scheme and work recommended by MPs, sanctioned or executed under it.
- Implementing District Authorities are responsible to provide such information.



United Nations Security Council (UNSC)

United Nations General Assembly (UNGA) elected Denmark, Greece, Pakistan, Panama, and Somalia to UNSC.

Each year UNGA elects five non-permanent members (out of 10 in total) of UNSC for a two-year term through a secret ballot.

- It is one of the six principal organs of the UN (others are UNGA, Economic and Social Council, Trusteeship Council, International Court of Justice, and UN Secretariat).
- Composed of 15 Members (5 permanent and 10 non-permanent).
- 5 Permanent members (China, France, Russia, UK, and US) enjoy veto power.
- Holds primary responsibility for the maintenance of international peace and security.

GERMANY

Places in News



Slovenia (Capital: Ljubljana)

Slovenia becomes latest European country to recognize a Palestinian state.

Political Features

- Slovenia is a country in central Europe.
- Land boundaries: Austria (North), Hungary (far Northeast), Croatia (East, Southeast, and South), and Italy (West and South west).
- It has an important coastline along the Gulf of Venice (northern arm of the Adriatic Sea).

Geographical Features

- Outside the coastal area, its terrain consists largely of karstic plateaus and ridges, magnificently precipitous Alpine peaks, etc.
- Two-fifths of Slovenia is covered by the Alpine region.
- Major Rivers: The Sava (a tributary of the Danube), Dravinija, etc.
- Highest point: Mount Triglay.





BENGALURU



BHOPAL







DELHI



GUWAHATI



HYDERABAD











BOSNIA AND



POLAND

SLOVAKIA

HUNGARY

CZECH

REPUBLIC

AUSTRIA

SLOVENIA

CROATIA

®LJUBLJANA

