



## 1. The Intergovernmental Panel on Climate Change (IPCC)

Topic: Polity and Governance



**In News:** The Intergovernmental Panel on Climate Change (IPCC) has just launched AR6 Synthesis Report: Climate Change 2023.

### More on the Topic:

- The AR6 Synthesis Report: Climate Change 2023 summarizes five years of reports on global temperature rises, fossil fuel emissions and climate impacts.
- Highlights of the reports are the following,
- **Human-caused climate change is already affecting many weather and climate extremes** in every region across the globe – with widespread loss and damage to both nature and people.
- GHG emissions will **lead to increasing global warming in the near term**, and it's likely this will reach 1.5°C between 2030 and 2035.
- We are currently at around 1.1°C of warming and current climate policies are projected to increase global warming by 3.2°C by 2100.
- The IPCC has "**very high confidence**" that the risks and adverse impacts from climate change will escalate with increasing global warming.
- To keep within the 1.5°C limit, **emissions need to be reduced by at least 43% by 2030 compared to 2019 levels**, and at least 60% by 2035. This is the decisive decade to make that happen.
- **Losses and damages will disproportionately affect the poorest and most vulnerable populations**, particularly those in Africa and least-developed countries, creating more poverty.



- Prioritizing equity, social justice, inclusion and just transition processes would enable ambitious climate mitigation actions and climate-resilient development.
- Tracked climate finance for mitigation falls short of the levels needed to limit warming to below 2°C or to 1.5°C across all sectors and regions.
- Public and private finance flows for fossil fuels are still greater than those for climate adaptation and mitigation.
- **Implications of the report for India:** Increased frequency and intensity of extreme weather events – could have dire consequences for agriculture, the economy and public health.

#### **Suggested Mitigation Measures:**

- Among other measures to ensure energy systems are net-zero CO2 emitters, we need a
- substantial reduction in overall fossil fuel use,
- minimal use of unabated fossil fuels, and use of carbon capture and storage in the remaining fossil fuel systems;
- energy conservation and efficiency;
- and greater integration across the energy system".

#### **About IPCC:**

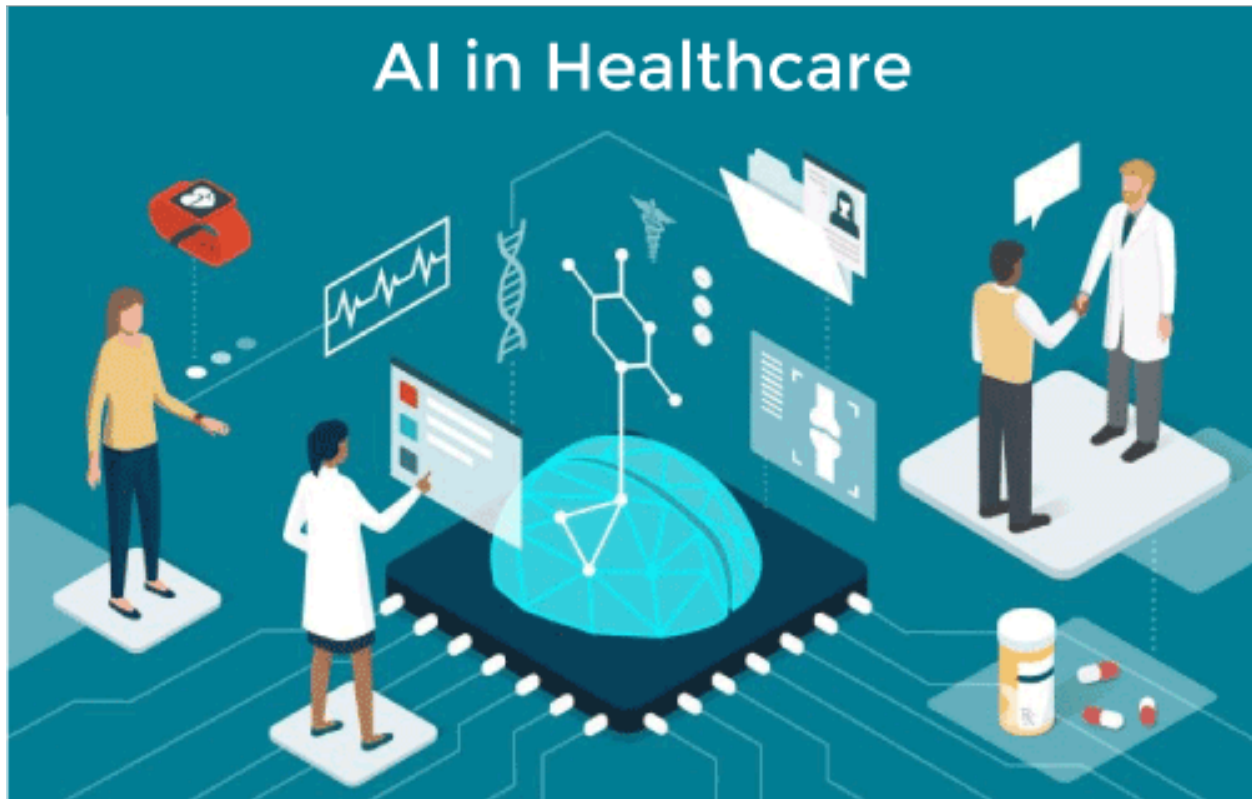
- The Intergovernmental Panel on Climate Change is **an intergovernmental body of the United Nations** charged with advancing scientific knowledge about anthropogenic climate change.
- It was set up in 1988 by **the World Meteorological Organisation (WMO) and United Nations Environment Programme (UNEP)** to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.
- IPCC assessments provide a scientific basis for governments at all levels to develop climate related policies, and they underlie negotiations at the UN Climate Conference – the United Nations Framework Convention on Climate Change (UNFCCC).

**Source: Indian Express**

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## 2. ICMR Guidelines for Artificial Intelligence Use in the Health Sector

Topic: Science and Technology



**In News:** Recognising importance of AI in health care Indian Council of Medical Research (ICMR) has released Ethical Guidelines for AI in Healthcare and Biomedical Research to “guide effective yet safe development, deployment and adoption of AI-based technologies”.

### More on the Topic:

- It outlined 10 key patient-centric ethical principles for AI application in the health sector for all stakeholders involved.
- These are **accountability and liability, autonomy, data privacy, collaboration, risk minimisation and safety, accessibility and equity, optimisation of data quality, non-discrimination and fairness, validity and trustworthiness.**

### Importance of the Guidelines:

- **The autonomy principle ensures human oversight of the functioning and performance of the AI system.**
- Before initiating any process, it is also **critical to attain consent of the patient who must also be informed of the physical, psychological and social risks involved.**
- **The safety and risk minimisation principle is aimed at preventing “unintended or deliberate misuse”,** anonymised data delinked from global technology to avoid cyber

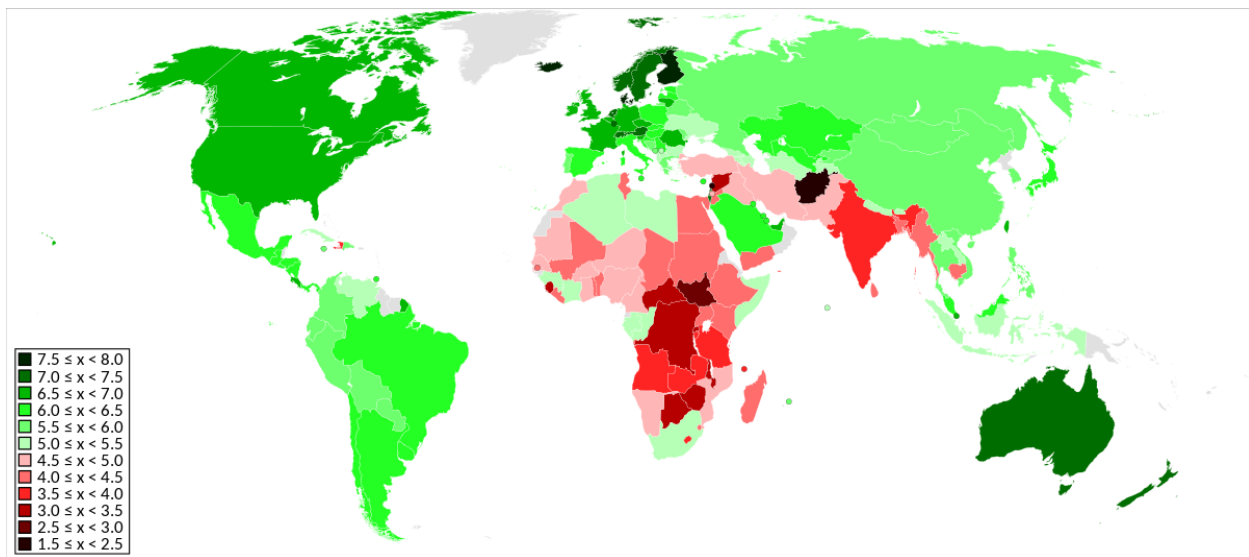
attacks, and a favourable benefit-risk assessment by an ethical committee among a host of other areas.

- **The accountability and liability principle underlines the importance of regular internal and external audits** to ensure optimum functioning of AI systems which must be made available to the public. The accessibility, equity and inclusiveness principle acknowledges that the deployment of AI technology assumes widespread availability of appropriate infrastructure and thus aims to bridge the digital divide.

Source: AIR

### 3. World Happiness Report

Topic: Reports and Indices



**In News:** UN Sustainable Development Solutions Network has released World Happiness Report.

**More on the Topic:**

- The reports measure global happiness on several standards which include national and international aspects.
- The report speaks for countries' level of happiness based on the responses of a nationally representative sample of people about the levels of satisfaction in life these days.
- The countries are ranked on the basis of healthy life expectancy, GDP per capita, social support, low corruption, generosity in a community where people look after each other, and freedom to make key life decisions.

**Highlights from the Report:**

- **Finland tops the ranking** for the sixth year in a row with a score of 7.8 and other Norwegian countries like Denmark, Iceland are ranked second and third.



- In the list of top 10, other countries are **Israel, Netherlands, Sweden, Norway, Switzerland, Luxembourg and New Zealand.**
- Despite improvement in India's ranking in the report is still very low and many small neighbours of India are ranked above.
- **India has been ranked at the 126th place among 146 countries.**
- **India ranked below neighbours China, Nepal, Sri Lanka and Bangladesh.**
- Out of the 137 countries, **Taliban-ruled Afghanistan has ranked last and is most unhappy according to the report.**
- Other regions at the bottom of the list include Lebanon, Zimbabwe, the Democratic Republic of Congo, etc.
- The report adds that these countries have high-level of corruption and low life expectancy.

#### **UN Sustainable Development Solutions Network:**

- It was launched in 2012 under UN Secretary General, it **mobilizes global scientific and technological expertise to promote practical solutions for sustainable development**, including implementation of Sustainable Development Goals (SDGs) and Paris Climate Agreement.

Source: Hindu

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## **4. TReDS Platform**

**Topic: Economy**



**In News:** RBI Governor have recently said that TReDS platform financed around 35000 factoring units (FU) monthly.



**More on the Topic:**

- An FU is a standard nomenclature used in TReDS for invoices or bills of exchange containing details related to the sale of goods or services by an MSME seller to the buyer including a corporate, government department or a public sector unit.
- TReDS platforms have **enabled factoring of MSME receivables in a transparent and competitive manner**, thereby improving the liquidity position of MSMEs.

**About TReDS:**

- TReDS is an **electronic platform for facilitating the financing / discounting of trade receivables of Micro, Small and Medium Enterprises (MSMEs)** through multiple financiers.
- These receivables can be due from corporates and other buyers, including Government Departments and Public Sector Undertakings (PSUs).
- TReDS is a payment system authorised under the PSS Act.
- Only MSMEs can participate as sellers in TReDS.
- Corporates, Government Departments, PSU and Others can participate as buyers.
- Banks, NBFC can participate as financiers.

**Source: Indian Express**

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## 5. Keibul Lamjao park

**Topic: Environment and Ecology**



**In News:** Environment Ministry has advised the Manipur government to take up necessary steps for the conservation and protection of Loktak Lake and Keibul Lamjao National Park.

**More on the Topic:**

- The Keibul Lamjao National Park is a national park in the Bishnupur district of the state of Manipur in Northeast India.



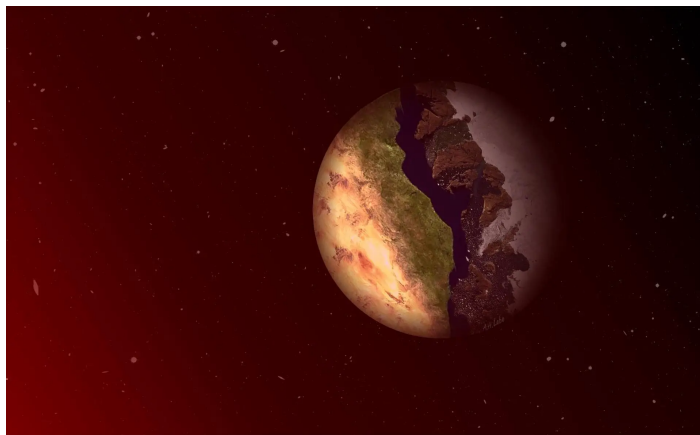
- It is the only floating national park in the world, and an integral part of Loktak Lake.
- The national park is **characterized by floating decomposed plant material locally called phumdi.**
- It was created in 1966 as a wildlife sanctuary to preserve the natural habitat of the endangered Sangai/Brow antlered deer/Dancing Deer.
- In 1977, it was gazetted as national park
- It is the **last natural habitat of the 'Sangai'** (Rucervus eldii eldii), the dancing deer of Manipur.
- This is the last natural habitat of the **brow-antlered deer (Sangai) the dancing deer of Manipur.**

Source: Business Standard

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## 6. Terminator Zone

Topic: Science and Technology



**In News:** Scientists have opinions that extra-terrestrial life may exist on far-off exoplanets within a special region known as “terminator zone”.

**More on the Topic:**

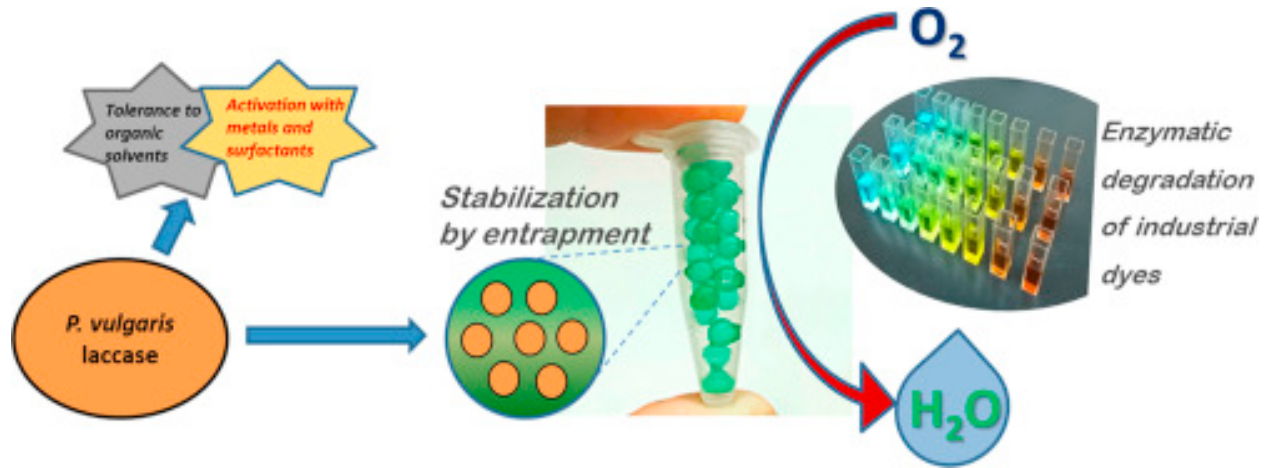
- Terminator zones is a **ring on planets that have one side that is always facing its star and one side that is always dark.**
- These zones are areas that are **not too hot or too cold, and are therefore more likely to harbor liquid water,** a key ingredient for life as we know it.
- Terminator is the dividing line between day and night sides of planet.

Source: Business Standard

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## 7. Enzyme Laccase

Topic: Science and Technology



**In News:** Fungi generated enzyme Laccase shows potential in degrading industrial dye effluents.

### More on the Topic:

- An enzyme called laccase generated by a group of fungi has been found capable of **degrading a variety of hazardous organic dye molecules** that are regularly drained into waterbodies after dyeing clothes in the textile industry.
- This observed characteristic which the scientists termed substrate promiscuity can have deep implication in designing enzyme-coated cassettes for treating heavily dye-polluted water through a natural solution to make the environment greener.

**Source: Business Standard**