

Prelim Bits 09-09-2022 | UPSC Daily Current Affairs

Human Development Index 2021

Recently, the Human Development Index 2021 was released by the United Nations Development Program (UNDP).

- In 1990, Pakistani economist Mahbub -ul-Haq developed the Human Development Index (HDI).
- The HDI released by the UNDP in its Human Development Report.
- It measures average achievement in three basic dimensions of human development,
 1. A long and healthy life,
 2. Access to education and
 3. A decent standard of living.
- It is calculated using the following four indicators
 1. Life expectancy at birth,
 2. Mean years of schooling,
 3. Expected years of schooling, and
 4. Per capita Gross National Income.
- **Findings** - Switzerland, Norway and Iceland topped the HDI 2021.
- India ranked 132nd among 191 countries and territories on the HDI 2021-2022. Last year, the country ranked 131.

Reference

1. <https://www.business-standard.com/article/current-affairs/india-ranks-132nd-out-of-191-in-undp-s-human-development-index-122090801161.html>
2. <https://www.downtoearth.org.in/news/economy/india-slips-a-rank-in-un-human-development-index-2021-22-84813>
3. <https://www.thehindu.com/todays-paper/india-ranks-132-in-hdi-as-score-drops/article65868571.ece>

Climate Tipping Elements

Scientists, who first identified and assessed climate tipping elements and their tipping points in 2008, have reassessed them and found that the number of climate tipping elements has increased from 9 to 16.

- Climate tipping elements are certain **large-scale systems on Earth** that are essential for its sustenance.
- There are certain thresholds of these elements known as 'tipping points', beyond which even a slight change in them can become unstoppable, leading to catastrophic consequences.
- **Findings** - While some of the tipping points may have been crossed or are close to cross at 1.1 degrees Celsius of warming since pre-industrial times, more of them would be crossed as Earth warmed further.
- Of the 16, nine are 'core tipping elements' affecting the climate of the Earth in general.
- The remaining seven were categorized as 'regional tipping elements' that had an impact on

the climate of various regions but could also interact with climate elements from other regions.

- This interaction creates cascading impacts and crossing of tipping points.

The Amazon rainforest is an example of a core tipping element while the west African monsoon is considered to be a regional tipping element.

- **Impacts** - Once a climate-tipping element passes a tipping point, the system would further collapse into oblivion.
- This may take decades to thousands of years in the case of ice sheets, raising sea levels by many metres gradually.
- The change may be rather abrupt in the case of ecosystems and atmospheric phenomena, creating wide scale cascading changes in weather systems, impacting lives.
- According the United States Environmental Protection Agency (US EPA), an estimated 25% of all marine life, including over 4,000 species of fish, are dependent on coral reefs at some point in their life cycle.
- The thawing of permafrost leads to release of carbon into the atmosphere, mainly in the form of methane gas.
- **Way forward** - World countries have to bring down their greenhouse gas emissions and limit warming to less than 1.5°C as agreed under the Paris Agreement 2015.
- If they are not able to do, four of the five tipping points of the elements move from the realm of possibility to becoming likely events and five others become possible, increasing risks for the world populations.

Reference

1. <https://www.downtoearth.org.in/news/climate-change/every-tenth-of-a-degree-counts-scientists-sound-alarm-as-number-of-climate-tipping-elements-rises-84821>
2. <https://www.theguardian.com/environment/2022/sep/08/world-on-brink-five-climate-tipping-points-study-finds>
3. <https://www.pnas.org/doi/10.1073/pnas.0705414105>

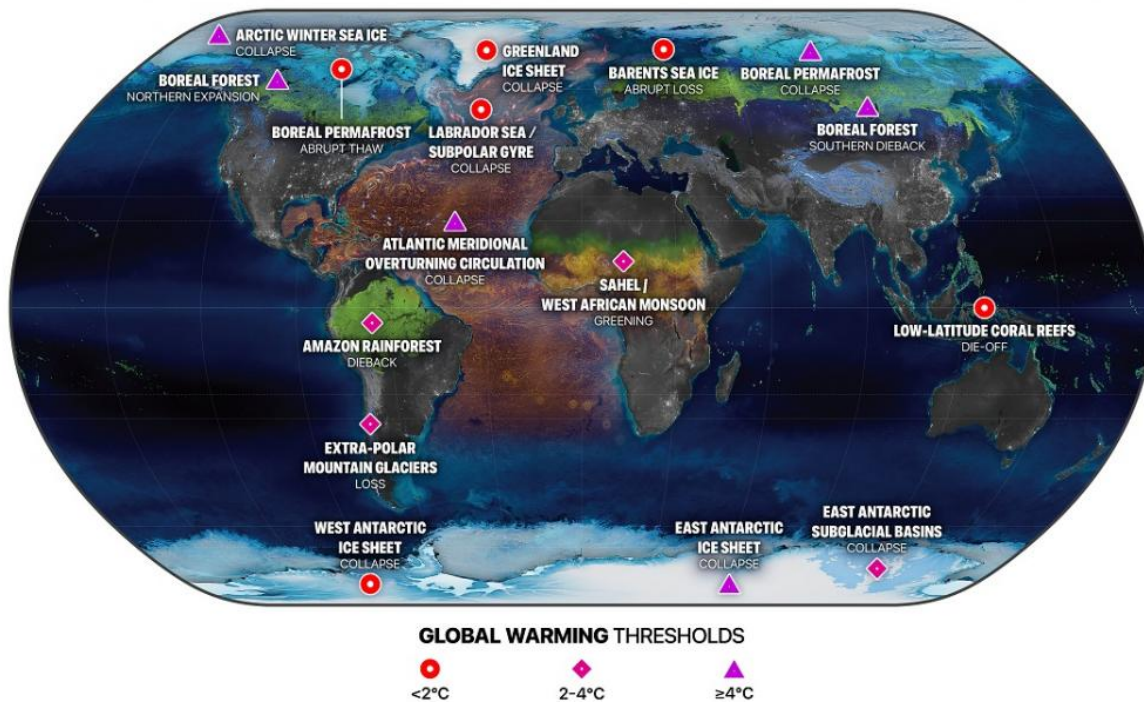
Climate Reparation

Facing the worst flooding disaster, Pakistan is demanding climate reparations from the Global North that is responsible for 92% of excess global carbon emissions.

The Global North means the developed countries, while the Global South means the developing countries.

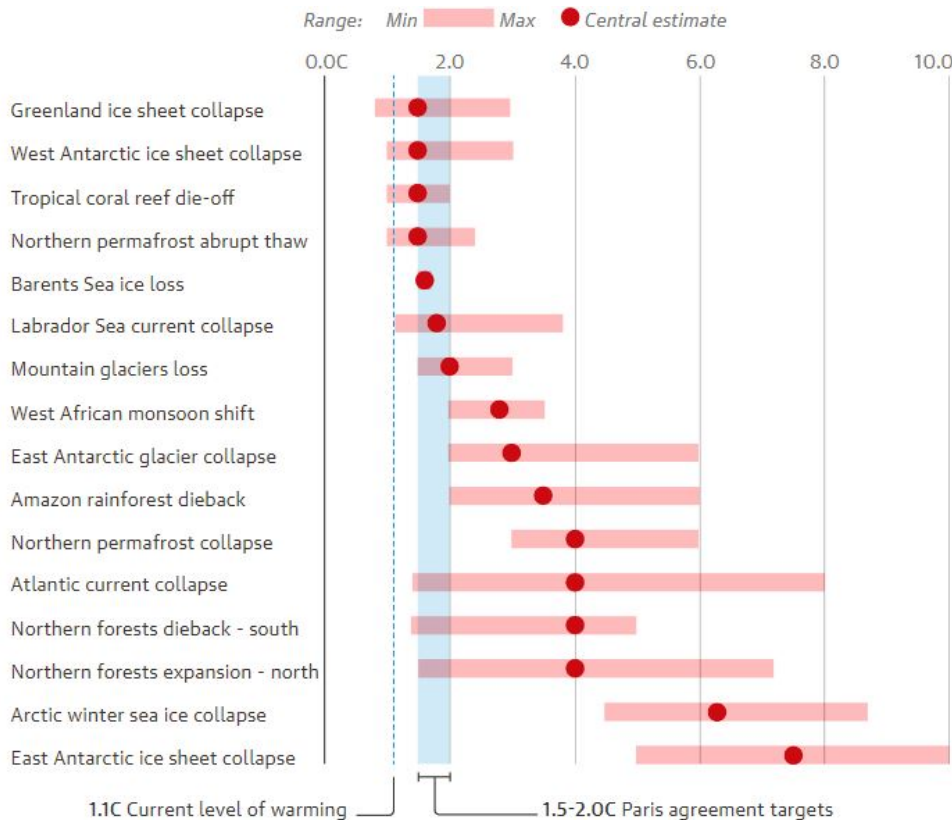
- Climate reparations refer to a **call for money** to be paid by the Global North to Global South as a means to address the historical contributions that the Global North has made (and makes) toward climate change.
- Climate reparations are also about the need for **acknowledgment and accountability** for the loss of land and culture - and how that has affected us in the Global South - as a result of climate change.
- The element of accountability is what differentiates climate reparations from climate aid.

CLIMATE TIPPING ELEMENTS



Climate justice is a framing that places justice and the movement toward an equitable world at the core of climate activism.

- **Significance of climate reparations for climate justice** - The call for climate reparations is one of the key elements within demands for climate justice.
- Climate reparations directly benefit those affected by systems of oppression, such as colonialism and racism i.e., those who are also the most affected by the climate crisis.
- Reparations are a way of understanding our political context through the framework of decolonisation.
- Climate reparations are better understood as one key part of a system of wider measures to achieve climate justice globally.
- Climate reparations can be a starting point for radically reorienting our world toward climate justice.



Reference

1. <https://indianexpress.com/article/explained/explained-climate/the-idea-of-climate-reparation-8135293/>
2. <https://euobserver.com/opinion/155961>
3. <https://www.yesmagazine.org/environment/2021/11/29/climate-reparations>

India's Sex Ratio Improves

- Over nine million girls have gone 'missing' to female foeticide over the last two decades in India, even as the country has gradually moved toward a balanced sex ratio.
- An analysis of the 5th National Family Health Survey 2019-2021 (NFHS-5) showed that the sex ratio is **108 boys per 100 girls**.
- This is an improvement from 111 boys in 2011, where it had been for two decades.
- However, the study prepared by the Pew Research Centre has revealed that there is still some room for improvement as the ratio was 105 boys per 100 girls in 1950.
- India's sex ratio has been skewed since the opening of prenatal diagnostic technology in the 1970s, facilitating sex-selective abortions.
- The betterment followed years of government-initiated efforts, like the Beti Bachao, Beti Padhao (BBBP) scheme, to bring down sex-selective abortions and promote having a girl child.

India has the sixth most skewed sex ratio at birth in this century, succeeded only by Azerbaijan, China, Armenia, Vietnam and Albania.

- Between 2000 and 2019, some 9 million girls went "missing" to sex-selective abortion.
- **Religion-wise break up** - Hindus - who also make up 80% of India's population - accounted for the missing girls, at 7.8 million or 86.7%
- Sikhs have reported the steepest drop in a bias towards having a boy.

- In 1998-1999, 30% Sikh women wanted a son. This has now come down to 9% in 2019-2021.
- A similar trend has been recorded among other religious groups as well in the same time period.
- Some 34% Hindu and Muslim women each wanted a son, which has come down to 15% and 19%, respectively.
- Only 20% Christian women wanted a son, which has come down to 12%.
- **Factors - Wealth, education and fertility** are the key factors behind this, including the decision to conduct sex-selective abortions.
- NFHS-5 data revealed that wealthier and more educated women are less likely to favour having a son.
- In India, undergoing such a test during pregnancy is correlated with a higher probability of giving birth to a son.
- Caste also plays an active role here not just because it is an important indicator of socioeconomic status, but also because caste entails cultural norms that may limit women's autonomy in different ways.

Reference

1. <https://www.downtoearth.org.in/news/health/india-s-sex-ratio-improves-but-9-million-girls-went-missing-in-last-2-decades-to-foeticide-84811>
2. <https://www.india.com/business/indias-sex-ratio-stands-at-1020-females-per-1000-males-economic-survey-5216253/>
3. https://www.business-standard.com/article/current-affairs/india-now-has-more-women-than-men-but-sex-ratio-at-birth-still-low-121112501539_1.html

World Dairy Summit 2022

India will host the International Dairy Federation's World Dairy Summit 2022 in Greater Noida, National Capital Region (Delhi - NCR).

- The IDF World Dairy Summit 2022 will be happening in India after the last World Dairy Summit was organised in 1974 in New Delhi.
- The IDF World Dairy Summit is an **annual meeting of the global dairy sector**, bringing together approximately 1500 participants from all over the world.
- It will provide a forum to industry experts to share knowledge and ideas on how the sector can contribute to nourish the world with safe and sustainable dairying.

India's Dairy Sector

- India has the largest milk producer in the world, contributing 23 % of global milk production.
- Milk production in the country has grown at a compound annual growth rate of about 6.2 % to reach 209.96 mn tonnes in 2020-21 from 146.31 mn tonnes in 2014-15 .
- The top 3 milk-producing states are: Uttar Pradesh (14.9%, 31.4 MMT), Rajasthan and Madhya Pradesh.
- Operation Flood, initiated in 1970, transformed India into one of the largest milk producers.
- The per capita availability of milk in 2018-19 was 394 grams per day as against the world average of 302 grams per day.

Reference

1. <https://indianexpress.com/article/cities/delhi/sept-12-to-15-in-greater-noida-world-dairy-summit-2022-to-be-held-in-india-after-48-years-8069170/>

2. <https://idfws202com/index#idfws>
3. <https://www.investindia.gov.in/sector/food-processing/dairy>

