



The Future of Earth, 2020 Report

 drishtiias.com/printpdf/the-future-of-earth-2020-report

Why in News

The South Asia Future Earth Regional Office, the Divecha Centre for Climate Change and the Indian Institute of Science have released “The Future of Earth, 2020” report.

The report has been prepared with the aim of **reducing carbon footprint** and **halting global warming below 2 degree Celsius by 2050**.

Key Findings

- **Five Global Risks**
 - Climate change
 - Extreme weather
 - Biodiversity loss
 - Food crisis
 - Water crisis
- **Example of Interrelation between different Global Risks**
 - Extreme heat waves can accelerate global warming by releasing large amounts of stored carbon from affected ecosystems, and at the same time intensify water crises and/ or food scarcity.
 - The loss of biodiversity weakens the capacity of natural and agricultural systems to cope with climate extremes, thus increasing vulnerability to food crises.
 - Strains on food production are expected to increase, as a result of various forces including climate change, biodiversity loss, and a global population on the rise.

- **Greenhouse Gas Emissions**
 - Despite declarations of a climate crisis or climate emergency by the leaders of more than 700 cities, states and governments, the concentration of carbon dioxide in the atmosphere during 2019 reached more than 415 parts per million (ppm).
 - The five years from 2014 to 2018 were the warmest recorded over land and ocean since 1880.
- **Decline in Biodiversity**
 - Humans have significantly altered 75% of the planet's land area. About a quarter of species in assessed plant and animal groups are threatened.
 - In 2018, the world's last male northern **white rhino** died in his Kenyan enclosure, while the Brazilian blue parrot, Spix's Macaw, was declared extinct in the wild.
- **Trends Highlighted**
 - Right-wing populism, a breed of politics that exploits people's fears during times of economic decline and growing inequality, and that focuses on nationalist tendencies to clamp down on borders and reject immigrants, is on the rise around the world. This often leads to a denial of climate change facts or impacts.
 - The digital platforms such as social media, search engines and e-commerce algorithms, tend to favour the spread of information designed to engage with emotion over reason, which can cause the propagation of "fake news", and can lead to social harms like an erosion of trust in vaccines.
- **Suggestions**
 - Reversing the trends of loss of life on the planet will require some new ways of thinking about conservation.
 - Humans are now the main driver behind planetary change, thus human systems should be targeted. This means addressing societal systems including populism, finance, and information transmission, alongside the practices and technologies that emit greenhouse gases, from fossil-fuel burning to food production.
 - Bolstering financial resilience should go hand in hand with increasing the resilience of the communities.
 - Negative impact of migration can be avoided with pragmatic planning that anticipates inevitable demographic change, and accommodates human movements with infrastructure and targeted social inclusion programmes.

South Asia Future Earth Regional Office

- South Asia Future Earth Regional Office is hosted by the Divecha Centre for Climate Change, Bengaluru, India. The office plays a key role in promoting solution-oriented research on environmental sustainability in the south Asian region.
- Future Earth, established in 2015, is an international sustainability research network.

- The Divecha Centre for Climate Change was established at Indian Institute of Science in January 2009. The primary goal of this centre is to understand climate variability and climate change and its impact on the environment.

Source: TH