



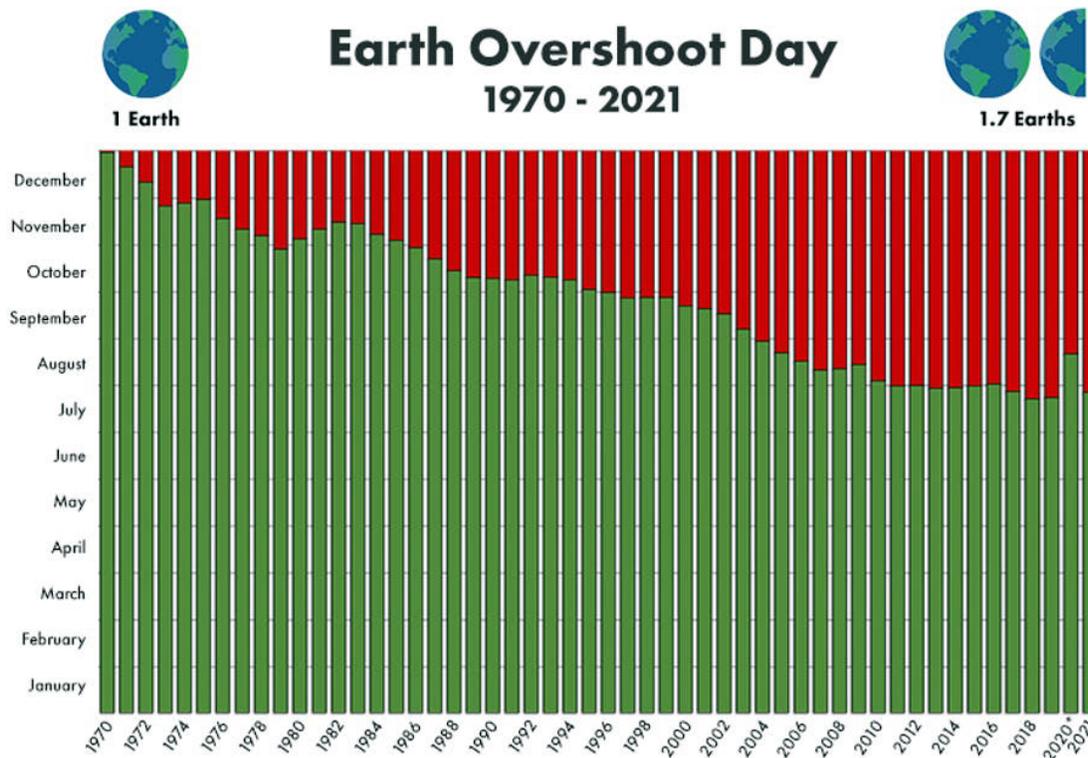
Earth Overshoot Day, 2021

 drishtias.com/printpdf/earth-overshoot-day-2021

Why in News

According to the World Wide Fund for Nature (WWF), humanity has again **used up all biological resources that our planet regenerates** during the entire year by **29th July, 2021**.

- **Humanity currently uses 74% more** than what the planet's ecosystems can **regenerate** — or 1.7 Earths.
- From Earth Overshoot Day until the end of the year, **humanity operates on ecological deficit spending**.



Key Points

- **About:**

- The day marks the date when **humanity's demand for ecological resources (fish and forests, for instance) and services** in a given year exceeds what the Earth can regenerate in that year.
- The **concept of Earth Overshoot Day** was first conceived by **Andrew Simms of the UK think tank New Economics Foundation**, which partnered with Global Footprint Network in 2006 to launch the first global Earth Overshoot Day campaign.
 - **Global Footprint Network** is an **international non profit organization** founded in the year 2003. It's key strategy has been to make **available robust Ecological Footprint data**.
 - The Ecological Footprint is a metric that comprehensively **compares human demand on nature against nature's capacity to regenerate**.
- Earth Overshoot Day is **computed by** dividing the planet's biocapacity (the amount of ecological resources Earth is able to generate that year), by humanity's Ecological Footprint (humanity's demand for that year), and multiplying by 365, the number of days in a year:
$$(\text{Earth's Biocapacity} / \text{Humanity's Ecological Footprint}) \times 365 = \text{Earth Overshoot Day}$$

- **Causes:**

- The prime driver was the **6.6% increase in the global carbon footprint** in 2020. According to the **World Health Organization (WHO)**, a carbon footprint is a measure of the **impact people's activities** have on the amount of **carbon dioxide (CO₂) produced through the burning of fossil fuels** and is expressed as a weight of CO₂ emissions produced in tonnes.
- There was also a **0.5% decrease** in '**global forest biocapacity**' due to a rise in **deforestation of the Amazon's rainforests**.
Some **1.1 million hectares of rainforest were lost in Brazil alone**, which is home to the largest swathe of Amazonian rainforest.

- **Predictions:**

- Even worse, there would be a **43% year-over-year increase in deforestation in 2021**.
- The **carbon footprint of transportation** will be **lower this year** than pre-pandemic levels.
 - CO₂ emissions **from road transport and domestic air travel** will be 5% below 2019 levels.
 - CO₂ emissions due to **international aviation** will be 33% below 2019 levels.
- But **global energy-related CO₂ emissions** will **increase 4.8% from last year** as economies try to recover from the **impact of Covid-19**.
- **Global coal use** is estimated to constitute **40% of the total carbon footprint**.

- **Suggestions:**
 - A business-as-usual scenario will simply not work if the date for World Overshoot Day is to be pushed behind.
 - A number of measures can be taken such as **cutting down on food wastage, commercial technologies for buildings, industrial processes and electricity production and cutting down on transportation.**
- **Related Global Initiatives:**
 - **The Conference of the Parties (COPs):**
 - For nearly three decades the **United Nations (UN)** has been bringing together almost **every country on earth for global climate summits** called COPs.
 - In that time **climate change** has gone from being a fringe issue to a **global priority.**
 - This year will be the **26th annual summit** – giving it the name **COP26** will take place in **Glasgow, UK.**
 - **Paris Agreement:**
 - It is a legally binding **international treaty on climate change.** It was adopted by 196 Parties at COP 21 in Paris in December 2015 and entered into force in November 2016.
 - Its goal is to limit **global warming to well below 2, preferably to 1.5 degrees Celsius**, compared to pre-industrial levels.
- **Some Indian Initiatives:**
 - **National Clean Air Programme (NCAP)**
 - **Bharat Stage-VI (BS-VI) emission norms**
 - **UJALA scheme**
 - **National Action Plan on Climate Change (NAPCC)**

Source: DTE