



# Report on Climate Indicators & Sustainable Development: WMO

## Why in News

Recently, the [World Meteorological Organization \(WMO\)](#) has published a new report on **Climate Indicators and Sustainable Development: Demonstrating the Interconnections**.

- WMO **studied seven climate indicators** — carbon dioxide (CO<sub>2</sub>) concentration, temperature, [ocean acidification](#) and heat, sea ice extent, glacier melt and [sea-level rise](#).
- Its release coincides with the [United Nations General Assembly](#) annual session and the opening in September 2021 of the [Sustainable Development Goals \(SDGs\)](#) Action Zone, which is dedicated to accelerating action on the SDGs.



## Key Points

- **Aim:**
  - To **contribute to the sustainable development agenda** and to inspire leaders to take bolder climate action.
- **Importance:**
  - In the face of ongoing [climate change](#), poverty, inequality and environmental degradation, **understanding the connections between climate and international development** is a matter of urgency.
  - Increasing temperatures will result in **global and regional changes, leading to shifts in rainfall patterns and agricultural seasons**. The intensification of [El Niño](#) events is

also generating more droughts and floods.

▪ **Rising CO<sub>2</sub> Concentration:**

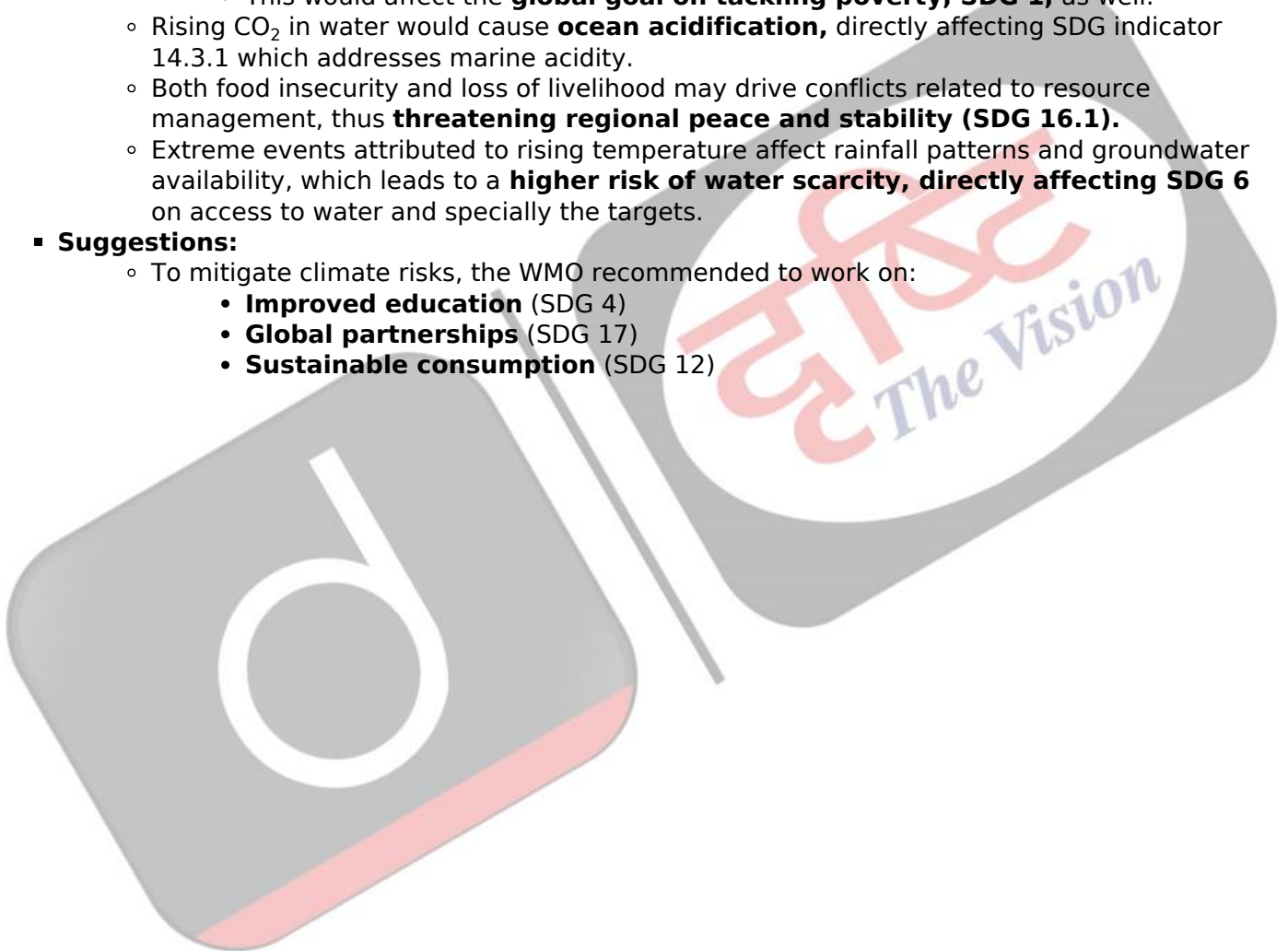
- The rising concentration of CO<sub>2</sub> **will impact all of the 17 United Nations-mandated SDGs.**
- Rising CO<sub>2</sub> concentration **due to human activities** is a key driver of global climate change.

▪ **Impact on SDGs:**

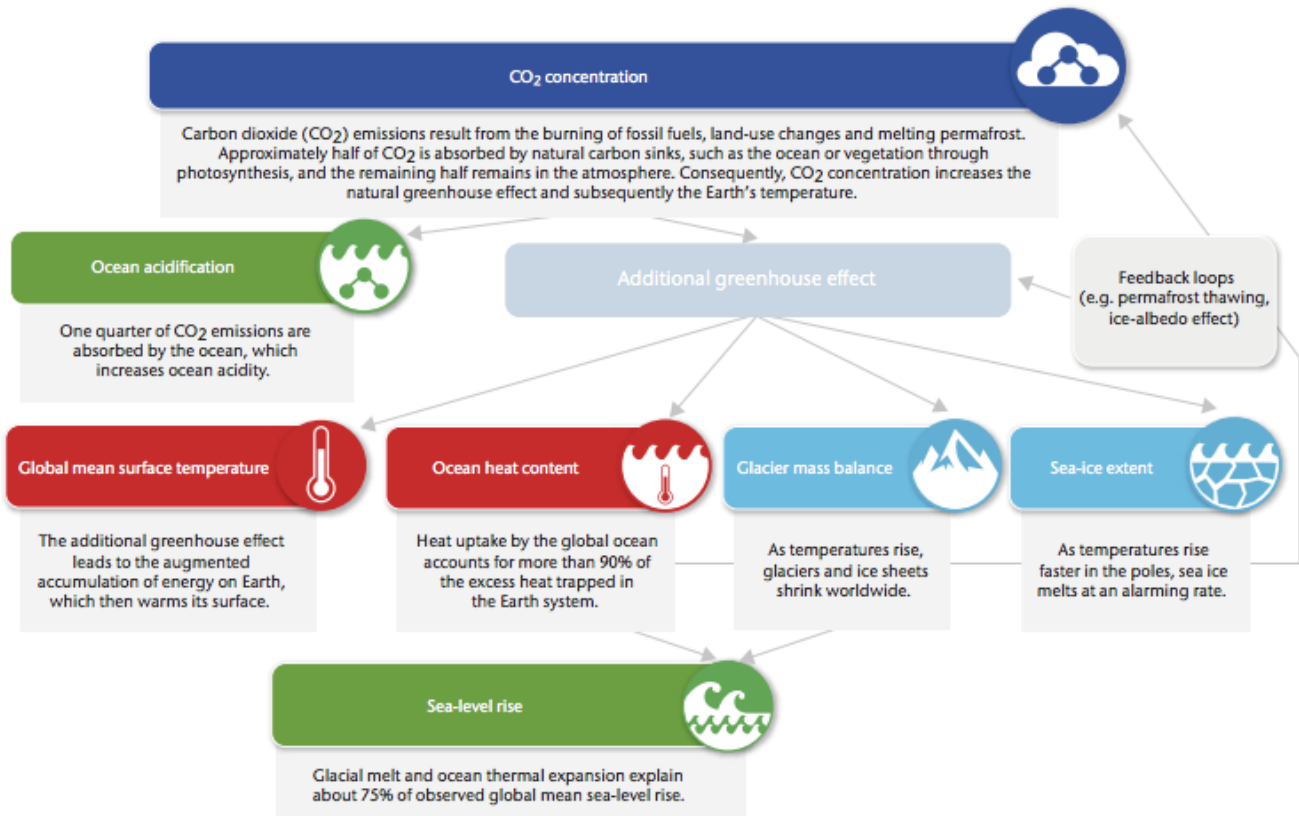
- Rising CO<sub>2</sub> concentration and increasing global temperatures, if left unchecked, would **negatively impact efforts to combat climate change** under the SDG 13.
  - This, in turn, would pose a **significant threat to the achievement of the 16 SDGs other than SDG 13, by 2030.**
- This would happen because uncontrolled rising CO<sub>2</sub> emissions would be **indirectly responsible for risks related to the remaining six climate indicators, namely** temperature, ocean acidification and heat, sea ice extent, glacier melt and sea-level rise.
- For instance, rising concentrations of CO<sub>2</sub> in the atmosphere will **lead to reductions in nutrient content, affecting food security** or the SDG indicator 2.1.2.
  - This would affect the **global goal on tackling poverty, SDG 1**, as well.
- Rising CO<sub>2</sub> in water would cause **ocean acidification**, directly affecting SDG indicator 14.3.1 which addresses marine acidity.
- Both food insecurity and loss of livelihood may drive conflicts related to resource management, thus **threatening regional peace and stability (SDG 16.1).**
- Extreme events attributed to rising temperature affect rainfall patterns and groundwater availability, which leads to a **higher risk of water scarcity, directly affecting SDG 6** on access to water and specially the targets.

▪ **Suggestions:**

- To mitigate climate risks, the WMO recommended to work on:
  - **Improved education** (SDG 4)
  - **Global partnerships** (SDG 17)
  - **Sustainable consumption** (SDG 12)



## Interconnections between the WMO climate indicators



Source: DTE

PDF Reference URL: <https://www.drishtiias.com/printpdf/report-on-climate-indicators-sustainable-development-wmo>