

#### Related News: Global Climate Risk Index

- It was released by Germanwatch.
- Index analyses to what extent **countries and regions have been affected by impacts of weather-related loss events** (storms, floods, heat waves etc.).

#### Key Highlights

- India was the seventh worst-hit country due to extreme weather** events in 2019 (Mozambique is the worst-affected).
- India had a high **number of fatalities (2,267) and the biggest economic loss (68,812 million USD)** in 2019.
- Flooding caused by heavy rain was responsible for 1,800 deaths** and led to the displacement of 1.8 million people.

### 1.1.4. STATE OF THE GLOBAL CLIMATE REPORT

#### Why in news?

Recently, the State of the Global Climate report (Provisional) was released by World Meteorological Organization (WMO).

#### About State of Global climate Report

- Report use **Global Climate Indicators (GCI)** to describe the changing climate & providing a broad view of the climate at a global scale.
  - GCI are used to **monitor the domains most relevant to climate change**, including the composition of the atmosphere, the energy changes that arise from the accumulation of greenhouse gases and other factors, as well as the responses of land, ocean and ice.
- Key findings**
  - Average global temperature in **2020 is set to be about 1.2 °C above the pre-industrial (1850-1900) level.**
  - 2020 is very likely to be **one of the three warmest years on record globally.**
  - Ocean acidification is increasing:** The ocean absorbs around 23% of the annual emissions of anthropogenic CO<sub>2</sub> from the atmosphere, thereby helping to alleviate the impacts of climate change on the planet.
  - Number of **tropical cyclones globally was above average in 2020**
  - Despite the COVID-19 lockdown, atmospheric concentrations of greenhouse gases continued to rise

#### About WMO

- It is an **intergovernmental organization** with a membership of 193 Member States and Territories.
- It is the specialized agency of the United Nations for meteorology (weather and climate), operational hydrology and related geophysical sciences.
- India is its member.**
- Headquarters: **Geneva, Switzerland.**
- It is a member of the United Nations Development Group.
- Its supreme body is the World Meteorological Congress which is composed of all WMO Members.

#### Related news: 2020 State of Climate Services report

- It was released by WMO.
- Report provides a basis for understanding how to **strengthen protection for the most vulnerable, including through mechanisms** such as the Climate Risk and Early Warning Systems (CREWS) initiative.

### 1.1.5. ASSESSMENT OF CLIMATE CHANGE OVER THE INDIAN REGION

#### Why in news?

Ministry of Earth Sciences' (MoES) released a report titled '**Assessment of Climate Change over the Indian Region**'.

#### About Report

- It is a **first ever attempt** to document and assess climate change in different parts of India.
- The report **highlights the observed and projected changes** in various climatic dimensions over the Indian region, their impacts and various policy actions to deal with the regional climate change.

#### Key findings

- Hindu Kush Himalayas experienced temperature rises 1.3°C** during 1951–2014. Projected rise by end of 21st century is 5.2°C.
- Sea surface temperature of tropical Indian Ocean risen by 1°C** on average during 1951–2015 ( greater than global average SST warming 0.7°C).
- Droughts, both the frequency and spatial extent, have increased** significantly during 1951–2016.