



# State of the Climate on Latin America and the Caribbean 2020: WMO

## Why in News

Recently, the [World Meteorological Organization \(WMO\)](#) has released a report on the impacts of [climate change](#) and extreme weather in Latin America and the Caribbean.

- 2020 was a year of **unprecedented** [heatwaves](#), [droughts](#), [forest fires](#), [cyclones](#) and **food insecurity** for the region.
- The [Intergovernmental Panel on Climate Change](#) in its sixth assessment report had highlighted the impact of climate change on the Indian Subcontinent.

## World Meteorological Organization

### ▪ About:

- It is an **intergovernmental organization** with a membership of 192 Member States and Territories. **India is a member.**
- It originated from the **International Meteorological Organization (IMO)**, which was established after the 1873 Vienna International Meteorological Congress.

### ▪ Establishment:

- Established by the **ratification of the WMO Convention on 23<sup>rd</sup> March 1950**, WMO became the specialized agency of the [United Nations](#) for meteorology (weather and climate), operational hydrology and related geophysical sciences.

### ▪ Headquarters:

- Geneva, Switzerland.

### ▪ Reports released by WMO:

- [State of the Global Climate](#)
- Greenhouse Gas Bulletin

## Key Points

### ▪ Rise in Temperature:

- **2020 was among the three warmest years** in Central America and the Caribbean and the second warmest year in South America.
- **Sea surface temperature in the Tropical North Atlantic Ocean** was significantly warmer than normal throughout the year.
- **Severe heat waves dominated the region** through most of the year, with temperatures soaring above 40°C several days in a row.

### ▪ Intense Rainfall:

- Intense rainfall resulted in [landslides](#), [floods](#) and [flash floods](#) in the rural as well as urban areas of Central and South America towards the end of 2020.

#### ▪ **Forest Fires and Cyclones:**

- **Deforestation** has only increased in the last four years due to **clearing for cattle pasture and degradation from fires**.
  - Deforestation in the [Amazon River Basin](#), which stretches across nine countries in South America and stores 10% of global carbon, has already led to a decline in its ability to regulate climate.
- The Atlantic basin **recorded as many as 30 cyclones in 2020** — the highest so far in a single year.

#### ▪ **Impact:**

- **Extreme weather events** affected over **8 million people across Central America**, exacerbating food insecurity in countries already crippled by economic shocks, [Covid-19](#) restrictions, and conflict.

#### ▪ **Suggestions:**

- **Hazard-specific monitoring systems such as [FAO's Agricultural Stress Index System \(ASIS\)](#)** is an example of a useful tool to allow governments to issue early warning alerts for specific sectors like agriculture.
- **Develop Early Warning Systems (EWS)** and contingency plans.
  - Early warning systems were underdeveloped in the region, particularly in South America.
- **Planting of the [mangroves](#)**, an ecosystem of which can help sequester three-four times more carbon than most forests.
  - Area under mangrove plantation declined 20% between 2001 and 2018 in the region.
- **Greater political commitment and more financial support** is needed to strengthen EWS and operational weather, climate and hydrological services to support risk management and adaptation.

## Latin America and Caribbean (LAC) Region

#### ▪ **About:**

- Latin America is generally **understood to consist of the entire continent of South America** in addition to **Mexico, Central America, and the islands of the Caribbean**.
- It **encompasses 33 countries**.

#### ▪ **Geographical Features:**

- Amazon River, Caribbean Sea, Gulf of Mexico, Pacific Ocean, Panama Canal, Andes Mountains, Sierra Madre Mountains, and Atacama Desert.

#### ▪ **Major Economic Blocs:**

- **MERCOSUR:** The Southern Common Market consists of five countries in southern Latin America: Argentina, Brazil, Paraguay, Uruguay and Venezuela.
- **CARICOM:** The Caribbean Community consisting of 19 island groups: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.
- **CAN:** The Andean Community consists of four countries: Bolivia, Colombia, Ecuador and Peru.
- **SICA:** The Central American Integration System consisting of seven countries: Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama.

# Physical Features of Latin America



**Source: DTE**

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