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## **Editorial...**



Global average temperatures in 2024 are warmer than in 2023. For 16 consecutive months (June 2023 to September 2024), global average temperatures are merely higher than previously recorded, According to a combined analysis of WMO (World Meteorological Organization) datasets, meteorologists forecast today. The WMO has again issued a red alert warning that climate change is accelerating due to the continued rise in greenhouse gas emissions in the atmosphere. The study found that the decade from 2015-2024 has seen significant warming, accelerating ice loss from glaciers, sea level rise and ocean warming. Extreme weather variability is wreaking havoc on societies and terribly impacts the economies around the world. "Climate disasters are affecting health, widening inequalities, undermining sustainable development and deflation the foundations of peace. The most vulnerable are significantly suffering," said UN Secretary-General António Guterres. However, it is important to recognize that every part of the warming. Whether below or above 1.5 degrees Celsius, every additional raise in global warming increases climate extremes, impacts and risks," he said. The COP29 report, released on the first day of the UN Climate Change Conference in Baku, Azerbaijan, clearly shows that the objectives of the Paris Agreement are at great risk. The record we have seen in different parts of the world this year, with heavy rains and floods, rapidly intensifying tropical cyclones, deadly heat, persistent droughts and raging wildfires, is a harbinger of our future," said WMO Secretary-General Celeste Salo (First female SG of WMO) . She insisted that the temporary exceedance of 1.5 degrees Celsius in monthly and annual warming that we have failed to meet the Paris Agreement goal of keeping the long-term global average surface temperature increase to 2 degrees Celsius above pre-industrial levels. It is essential to improvise efforts to limit warming to 1.5 degrees Celsius, especially at pre-industrial levels.

We need to reduce greenhouse gas emissions rapidly and strengthen our monitoring and understanding of the changing climate with scientific and technological support. It is also necessary to increase the means of communicating climate change through climate information services and early warnings to all through modern research. The current warming of about 1.3°C compared to the years 1850-1900 is also considered to be an early sign of long-term global warming. The estimated global average surface air temperature from January to September 2024 was 1.54°C. According to an analysis of six international datasets, WMO found the warming was increased by the El Niño event. Natural disasters such as heavy rainfall, floods and tropical cyclones have led to loss of lives and damages. El Niño has also caused prolonged drought in several areas. Millions of people around the world are facing food insecurity and shortages, health problems, and infectious diseases, which are leading to wide human migration.

The concentration of carbon dioxide (CO<sub>2</sub>) in the atmosphere has risen by 51%, i.e. 278 ppm in 1750 to 420 ppm in 2023 that traps heat and increases temperatures. In the past five years, advanced scientific and technological services have been used to detect climate change and prevent loss of lives and properties. WMO has called for further improvements in life-saving early warning systems by 2027 to ensure the inclusive protection from hazardous weather. It is expected that most of the universities, research institutes and colleges will conduct research in the upcoming years to reduce and control disaster damage caused by climate change. Only when government inducts programs that focus on biodiversity, water conservation, natural resource management, and soil conservation combined with public cooperation we can achieve complete success in combating climate change.

**Editor, IJONS**

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