

7. 2019 was 7th Warmest since 1901

Prelims Level: Climate Change & its Impacts

Mains Level: GS-III Conservation, Environment Pollution and Degradation, Environmental Impact Assessment

Why in News?

- The year 2019 that went by was the 7th warmest since record-keeping commenced in 1901. However, the rise in Average Temperatures over India in 2019 was the lowest since 2016.

Highlights:

- During the year, the annual mean surface air temperature, averaged over the country, was +0.36°C above average.
- The Average is defined as the mean temperature from 1980-2010.
- The Highest Warming observed over India was during 2016 or 0.71°C above the mean. 2018, which was the 6th warmest in India, was 0.41°C, and 2017 was 0.55°C warmer, than the average.
- According to the World Meteorological Organisation, the rise in global mean surface temperature during 2019 (January to October) was +1.10°C.
- The main contributors to the warming this year were temperatures in the pre-monsoon (March-May) and monsoon seasons (June-September).
- 2019 was also characterised by unusually high rainfall, which was 9% over what is normal for a year which was due to monsoon rains (June-September) being 10% over its normal, and the northeast monsoon rains being 9% over its normal.
- During 2019, eight cyclonic storms formed over the Indian seas, with the Arabian Sea contributing five out of these eight cyclones against the normal of one per year. This was a phenomenon not seen in India since 1902.
- This was, meteorologists said, due to a strong Indian Ocean Dipole, or an IOD, which cyclically heats the West Indian Ocean that stimulated cyclone formation over the Arabian Sea.