

Weather Patterns and Pollution

Posted On: 03 AUG 2022 12:20PM by PIB Delhi

A number of studies confirm strong correlation between changing local weather patterns and pollution in Urban and Rural areas of the country.

Local weather plays an important role on pollution. Stagnant weather conditions (calm wind and lower mixing height) are unfavourable for dispersion of the pollution. Air pollution is causing the global weather to change, and weather pattern causes the air quality to change. Because of global warming, more extreme weather such as extreme rainfall events, heat waves etc. are increasing, which can impact air quality. Heat waves cause an increase in ground-level ozone pollution because the chemical reactions that create ozone in the atmosphere occur more in hot temperatures. In winter, the pollution levels are very high due to low temperatures and stable atmospheric conditions.

The extreme weather conditions especially during winter season such as low temperature, calm wind, low mixing height and low ventilation coefficient cause significant increase in level of pollution in India specially in the Indo-Gangetic plains. During severe heatwave conditions, significant increase in ground-level ozone pollution has been observed. Dry, hazy air during summer season increases particulate pollution.

This information was given by the Minister of State (I/C) for M/o Earth Sciences and M/o Science & Technology, Dr. Jitendra Singh in a written reply in Lok Sabha today.

SNC / RR

(Release ID: 1847740)