

## **Thirst Waves**

**Source: TH** 

<u>Global warming</u> is making the air **thirstier**, causing higher **evaporative demand** that dries out **land** and **plants**—a phenomenon called **thirst waves**.

## **Thirst Waves**

- About: Thirstwave, a term coined by researchers Meetpal Kukal and Mike Hobbins, refers to a period of three or more consecutive days with extreme atmospheric evaporative demand—reflecting how "thirsty" the air is for moisture.
- Causes: Thirst waves are influenced by temperature, humidity, solar radiation, and wind speed, unlike <u>heatwaves</u>, which are mainly driven by temperature and wind.
- Measurement: It is measured through Short-crop evapotranspiration that measures water loss from a well-watered 12-cm grass surface.
  - Rising evapotranspiration indicates higher temperatures, lower humidity, and increased wind speed and solar radiation.
- Impact: Stronger thirst waves lead to faster soil moisture loss, greater irrigation requirements, and a higher risk of crop stress and yield reduction.
- Thirstwaves & India: Studies show that evaporative demand is increasing in parts of India, including Northern India and the Western/Eastern Himalayas, driven by agricultural expansion and vegetation growth.
  - While in the past, higher humidity helped offset the impact of rising temperatures, future warming is expected to further raise evaporative demand.

Read More: <u>Heatwaves as a Notified Disaster</u>

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