



Forest Fires a Concern for India

Why in News?

Forest patches in Uttarakhand and Himachal Pradesh **burned due to rising temperatures** from April, causing **damage to properties, loss of [wildlife](#)**, and prolonged smoke in tourist areas.

Key Points

- According to data collected by the **MODIS (Moderate Resolution Imaging Spectroradiometer)** sensor fitted onto [NASA's \(National Aeronautics and Space Administration\) Aqua and Terra satellites](#), **Uttarakhand was the hardest hit** by forest fires this season (November 2023 to June 2024).
 - **Odisha ranked second** with 1,866 fire incidents, **Andhra Pradesh came third** with 1,788 fires, Maharashtra had 1,493, and Chhattisgarh reported 1,330 fires in forest areas.
- In Uttarakhand, the highest number and most intense fires were noted in **Nainital, Champawat, and Udham Singh Nagar districts** in the southwestern part.
 - The **Uttarakhand Forest Department** had **suffered revenue losses** worth more than Rs 25 lakh due to the blaze.
 - The state government has announced plans to file cases against persons found setting the grazing area in forests ablaze.
- As per the [Forest Survey of India](#), 54.4% of India's forests are exposed to occasional fires, 7.4% to moderately frequent fires, and 2.4% to high incidence levels.

Moderate Resolution Imaging Spectroradiometer (MODIS)

- Moderate Resolution Imaging Spectroradiometer is a key instrument aboard the **Terra (originally known as EOS AM-1) and Aqua (originally known as EOS PM-1) satellites**.
 - Terra's orbit around the Earth is timed so that it passes from north to south across the equator in the morning, while Aqua passes south to north over the equator in the afternoon.
- Terra MODIS and Aqua MODIS are **viewing the entire Earth's surface every 1 to 2 days**, acquiring data in 36 spectral bands, or groups of wavelengths.
- These data will improve our understanding of global dynamics and processes occurring on the land, in the oceans, and in the lower atmosphere.
- The primary goal of the Moderate Resolution Imaging Spectroradiometer is to gather information about the Earth's climate and environment, including measurements of various atmospheric, land surface, and oceanic parameters.