



Indian Meteorological Department

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Why in News?

The [Indian Meteorological Department \(IMD\)](#) recently got a new logo ahead of the commencement of its **150th year of providing weather and climate services to the country.**

- The new logo, in a mix of orange and green colours, depicts numerical 150 embedded with the present logo showing the [Indian monsoon winds](#) crossing over India.



What is the India Meteorological Department?

- **About:**
 - IMD was **established in 1875**. It is the **National Meteorological Service** of the country and the principal government agency in all **matters relating to meteorology and allied subjects**.
 - It works as an **agency of the Ministry of Earth Sciences** of the Government of India.
 - It is headquartered in **New Delhi**.
 - IMD is also one of the **six Regional Specialized Meteorological Centres** of the [World Meteorological Organization](#).
- **Roles and Responsibilities:**
 - To take meteorological observations and to **provide current and forecast**

- meteorological information** for optimum operation of weather-sensitive activities like agriculture, irrigation, shipping, aviation, offshore oil explorations, etc.
- To **warn against severe weather phenomena** like **tropical cyclones**, norwesters, **dust storms**, heavy rains and snow, cold and **heat waves**, etc., which cause destruction of life and property.
 - To provide **meteorological statistics required for agriculture, water resource management, industries, oil exploration** and other nation-building activities.
 - To conduct and promote research in meteorology and allied disciplines.

Note

Meteorology is the **scientific study of the Earth's atmosphere**, focusing on understanding and **forecasting weather patterns, atmospheric phenomena**, and climate.

- It involves **analyzing atmospheric conditions, such as temperature, humidity, air pressure, wind, and precipitation**, to predict weather and study the processes that drive the Earth's atmospheric system.

What are the Major Initiatives Related to Meteorology in India?

- **National Monsoon Mission (NMM)**: Government of India launched NMM in 2012 with a vision to develop a state-of-the-art dynamical prediction system for monsoon rainfall on different time scales.
- **Mausam App**: Tool for dissemination of weather information and warnings in an attractive and user friendly manner.
- **Doppler Weather Radars**: Based on Doppler principle, the **radar is designed to improve precision in long-range weather forecasting and surveillance** using a parabolic dish antenna and a foam sandwich spherical radome.
 - DWR has the equipment to measure **rainfall intensity, wind shear and velocity and locate a storm center** and the direction of a tornado or gust front.

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