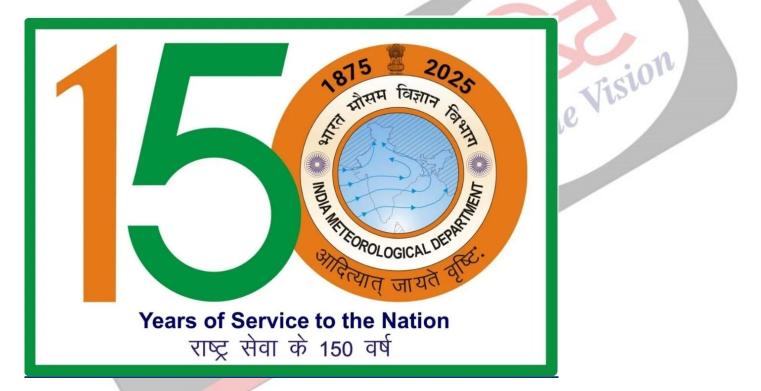
# **Indian Meteorological Department**

#### Source: IE

## Why in News?

The Indian Meteorological Department (IMD) recently got a new logo ahead of the commencement of its 150<sup>th</sup> 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 <u>Indian monsoon winds</u> 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** <u>Meteorological Organization.</u>
- Roles and Responsibilities:
  - $\circ~$  To take meteorological observations and to  $\ensuremath{\text{provide current}}$  and  $\ensuremath{\text{forecast}}$

**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 <u>tropical cyclones</u>, norwesters, <u>dust</u> storms, heavy rains and snow, cold and <u>heat waves</u>, 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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