Red Alert in Parts of Madhya Pradesh | Madhya Pradesh | 31 May 2024

Why in News?

The Indian Meteorological Department issued a red alert for severe heatwave conditions prevailing over **some parts of Madhya Pradesh.**

Key Points

- The meteorologist at **IMD Bhopal** has warned for a **severe heatwave** in **Gwalior, Bhind, Datia, Morena**, and **Niwari districts.**
- A red alert has been issued in these areas and the temperature will be around 46-47°C.
    - Similarly, heatwave will prevail in Vidisha, Raisen, Sehore, Rajgarh, Bhopal, Khandwa, Khargone, Shajapur, Agar Malwa, Guna, Ashoknagar, Shivpuri, Sheopur, Singrauli, Sidhi, Rewa, Mauganj, Satna, Maihar, Anuppur, Shahdol, Umaria, Katni, Panna, Damoh, Sagar, Chhatarpur and Tikamgarh.

Heat Waves

- **About:**
    - Heatwaves are **prolonged periods of excessively hot weather** that can cause adverse impacts on **human health, the environment, and the economy.**
        - India, being a tropical country, is **particularly vulnerable to heatwaves,** which have become more frequent and intense in recent years.
- **Criteria for Declaring Heat Wave in India:**
    - **Plains and Hilly Regions:**
        - Heat wave is considered if the **maximum temperature of a station reaches at least 40°C or more for Plains** and at least 30°C or more for Hilly regions.
        - **Normal Heat Wave**: Departure from normal is **4.50°C to 6.40°C.**
        - **Severe Heat Wave:** Departure from normal is >6.40°C.
    - **Based on Actual Maximum Temperature Heat** Wave: When actual maximum temperature ≥45°C.
        - **Severe Heat Wave:** When actual maximum temperature ≥47°C.
    - If the above criteria are met in at least 2 stations in a Meteorological subdivision for at least two consecutive days, it is declared so on the second day.
    - **Coastal Areas:**
        - When the maximum temperature departure is **4.50°C or more from normal,** a heat wave may be described provided the actual **maximum temperature is 37°C or more.**