

## **Climate:**

**seasonal variations in climate;  
mechanism of Indian monsoon;  
climatic regionalization by Koppen**

# Climate and Weather

- **Difference between climate and weather.**
- **Major elements-Rainfall, Temperature, Humidity, Wind, Duration of day etc.**
- **Indian Meteorological Department-1875 Kolkata. (New Delhi)**

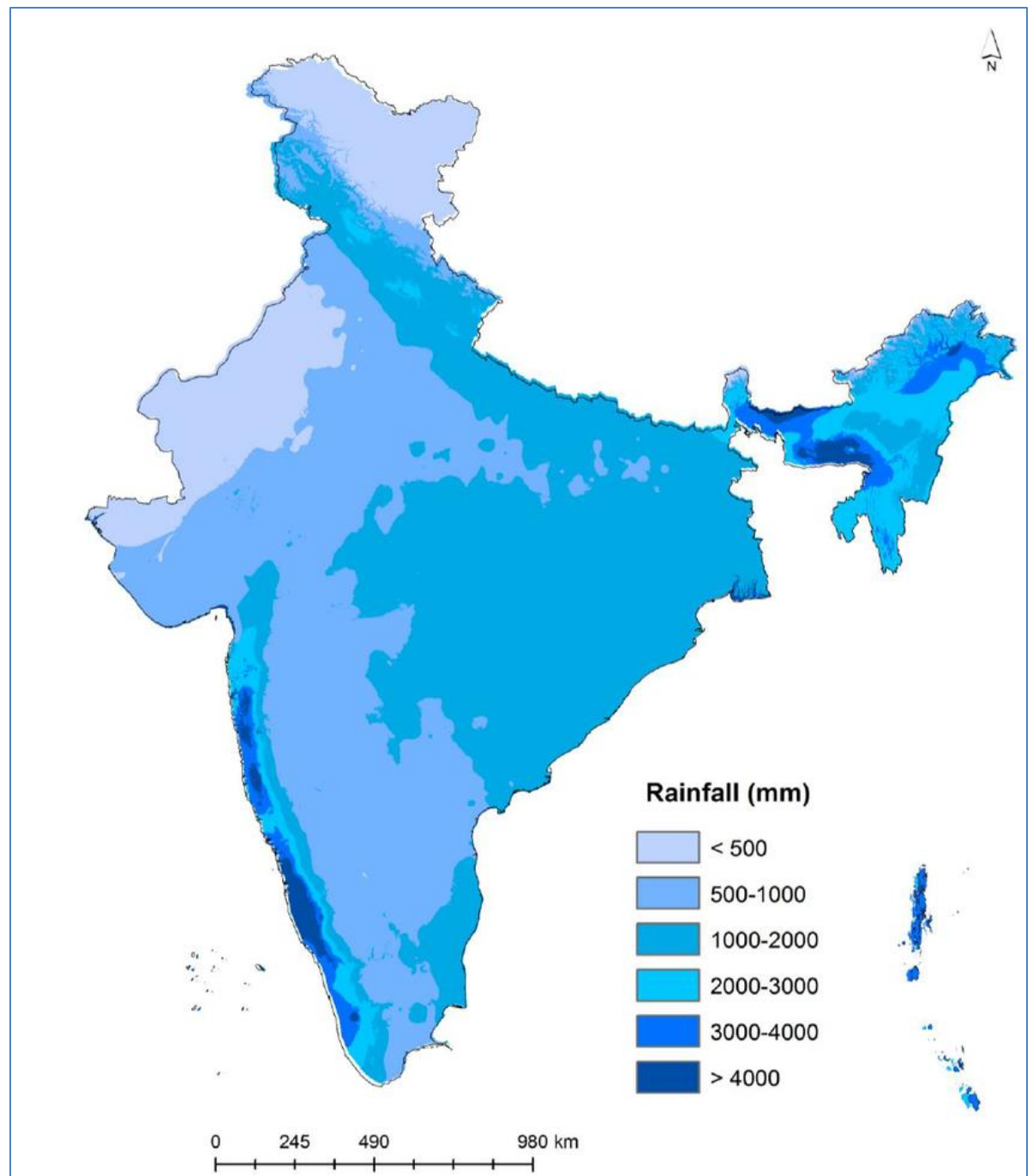
# Factors Effecting Indian Climate

- Location (North-Temperate, South-Tropical)
- *Monsoon-Tropical Monsoonal*
- Distance from equator
- Distance from Sea
- Mountain Location
- Height From MSL
- Direction of Wind
- Belt of Air Pressure
- Jet Stream

# Season of India

- **1. Winter Season-15 Dec. to 15 March**
- **2. Summer Season-15 March to 15 June**
- **3. Rainy Season-15 June to 15 Sept.**
- **4. Cool Season-15 Sept. to 15 Dec.**

# Rainfall Distribution in India



# Concepts of Monsoon Origin

## The Classical Theory

- **1686-Sir Edmund Hailey.**

## Modern Theories

- **ITCZ-H. Flohn**
- **Jet Stream Theory-M.T. Yin**
- **Concept of P. Koteswaram**
- **Concept of O.H.K. Spate**

# Climatic Regions by Wladimir Köppen

- **Aw**—उष्ण कटिबंधीय सवाना जलवायु।
- **Amw**—मानसूनी जलवायु।
- **As**—उष्ण कटिबंधीय अर्द्धशुष्क जलवायु।
- **BShw**— उष्ण कटिबंधीय स्टेपी अर्द्धशुष्क जलवायु।
- **BWhw**— उष्ण मरुस्थलीय शुष्क व गर्म जलवायु।
- **Cwg**—उपोष्ण कटिबंधीय मानसूनी जलवायु।
- **Dfc**—उप अर्कटिक जलवायु।
- **E**—ध्रुवीय जलवायु।
- **ET**—टुण्ड्रा जलवायु।