

# GEOGRAPHY OF UTTAR PRADESH

PRESENTED BY- ANJALI KUSHWAHA



सत्यमेव जयते

## UPPSC

Uttar Pradesh Public Service Commission

# Climate of Uttar Pradesh:

- The **climate of Uttar Pradesh** (U.P.) is primarily defined as *humid subtropical with dry winter* (CWa) type with parts of Western U.P. as *semi-arid* (BS) type.
- Alternatively, some authors refer to it as **tropical monsoon**. Variations do exist in different parts of the large state, however the uniformity of the vast Indo-Gangetic Plain forming bulk of the state gives a predominantly single climatic pattern to the state with minor regional variations.
- U.P. has a climate of extremes. With temperatures fluctuating anywhere from 0 °C to 50 °C in several parts of the state and cyclical droughts and floods due to unpredictable rains, the summers are extremely hot, winters cold and rainy season can be either very wet or very dry.

# CLASSIFICATION OF UTTAR PRADESH CLIMATE:

- The climate of Uttar Pradesh is generally defined to be *tropical monsoon type*. However based on the Köppen climate classification, it can be classified mostly as *Humid Subtropical with dry winter (Cwa) type* with parts of Western U.P. as *Semi-Arid (BS) type*
- Based on IMD classification, UP has the following three predominant seasons:
  1. Winter Season - November to February
  2. Summer season - March, April and May
  3. South-west Monsoon - June, July, August, September and October
- Retreating Monsoon season, has a very negligible effect in Uttar Pradesh and only occasional mild showers are experienced in winter. Some of these showers are not even due to the Monsoon but due to western disturbances.

# WIND:

- In summers, hot winds called loo blow all across U.P.
- They are dust-laden and quite damaging.
- In winters, dry and rainless winds blow across the state.
- Fog may also form in parts of U.P.

# TEMPERATURE:

Temperature varies from 0 to 46 °Cs.] High temperatures of around 50 °C have been recorded in Gonda district of U.P. Given such a wide range of temperature fluctuations in most parts of the state, it can lead to either cold waves or heat waves both resulting in substantial loss of life and economy.

## Heat wave

In 2007, Banda with 45.5 °C temperature was the leader in terms of hot districts of U.P. for several days. At least 62, people were reportedly dead during the heat wave that year. In June 2009, 30 people died of heatstroke in U.P. Highest temperatures reached 49 °C in Bundelkhand district of northern U.P. In June 2010, Jhansi recorded the highest temperature of 46.7 °C, the hottest for U.P. for that year.

# TEMPERATURE:

## Cold wave

- In recent years, winters at the end of 2007 and beginning of year 2008 caused a string of cold-wave related deaths in U.P. with temperatures as low as  $2.8^{\circ}\text{C}$  in the city of Meerut, U.P.
- Simultaneously it also led to a loss of crops and agricultural produce. Similarly last part of 2009, saw the mercury-dipping to lows of  $2.9^{\circ}\text{C}$  in Meerut again causing loss of human life.
- End of 2010 and starting of 2011 was no different with winters bringing news of cold-wave related deaths. This time Churk town in Sonabhadra district ranked coldest with  $1.4^{\circ}\text{C}$ .

# PRECIPITATION:

- It rains over most of U.P. with very few arid or semi-arid patches. Snowfall doesn't occur but hail-storms, frost and dew occur often in U.P. The type of rainfall that U.P. receives is orographic, cyclonic and convictional.
- Primarily a summer phenomenon, the Bay of Bengal branch of the Indian Monsoon is the major bearer of rain in most parts of U.P.
- It is the South-West Monsoon which brings most of the rain here, although rain due to the western disturbances and North-East Monsoon also contribute small quantities towards the overall precipitation of the state.
- The rain in U.P. can vary from an annual average of 170 cm in hilly areas to 84 cm in Western U.P. Given the concentration of most of this rainfall in the 4 months of Monsoon period, excess rain can lead to floods and shortage to droughts.
- As such these two phenomena of floods and droughts are a common recurrence in the state.

# PRECIPITATION:



