

Climate of West Bengal

Tropic of Cancer divides the state of West Bengal into two parts. The area lying north of Tropic of Cancer known as North Temperature Zone and southern portion lies within the Torried or Equatorial Zone. Climate of West Bengal is generally tropical, hot, humid, monsoon type (except in northern mountaneous region of Darjiling and Jalpaiguri district). The temperature of the Himalayan district varies from well below freezing point in winter to over 80° F (26°C) in summer. Presence of the Bay of Bengal, river network system, canals, tank etc does not allow the extreme climatic conditions of the Torried zone. Important feature of the state is the periodic wind known as the monsoon that blows across it. The Indian Meteorological Department has recognized four types of climates in West Bengal which are

1. The hot season
2. The monsoon season
3. The retreat monsoon
4. The cold season.

1. The Hot Season

This season covers the period between 1st March and 10th June. This season is usually dry and sunny; temperature starts increasing from the month of March and during the day it may raise upto 38°C. The highest temperature in each year is usually recorded about 40°C in the first or the second week of April and highest temperature is increasing year by year (may be due to Global warming!). Sometimes the plateau region records the highest temperature of the state as high as 45°C. Asansol is the hottest place of West Bengal. The heat is slightly lesser in northern plain. In Bengal the thunder storm (i.e. Norwester) are locally known as 'Kal Baisakhi' that occurs in April and May.

2. The Monsoon Season

Around 15th June, the whole of West Bengal comes under the influence of South-West Monsoon which carries heavy moisture from Bay of Bengal resulting heavy rains all over the state. The Monsoon always brings joyous moments for the farmers in the state as their agricultural crops, foods and prosperity depend solely on it. The average rainfall in the hill state is about 175 cm, the plateau fringe has a rainfall less than 140 cm. Bankura is the driest district having a rainfall of 118 cm. Late monsoon sometimes results destructive storms called 'Ashwine Jhor'. The fig. 3.3 shows the distribution of rainfall. The average rainfall in the state is about 70 inches (175 cm) of which over 125 cm precipitate during June to September usually called monsoon month. The Himalayan region experiences the highest rainfall, ranging from 250 cm to 500 cm, while plain district receives on an average 125 cm.

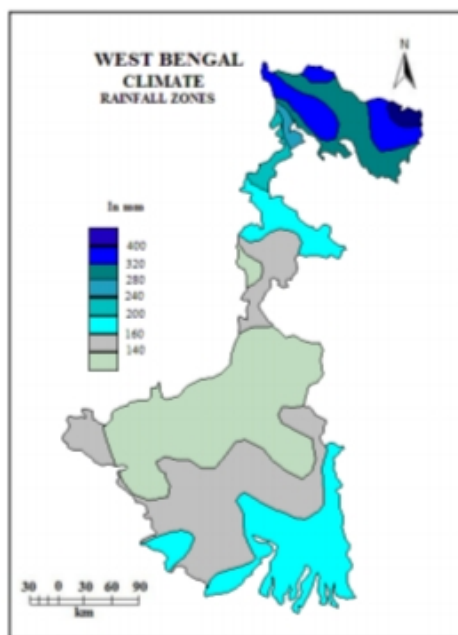
3. The Retreat Monsoon Season

The monsoon starts retreating from northern India during the last week of September and by the middle of October, After the September and the intensity of the low pressure over the north-western part of India decreases. As a result the south monsoon winds start moving back towards sea. This is called retreating of the monsoon winds. Cool and dry winds blow out from the land to sea during this time. Depressions and cyclones starts from this time in the southern part of the Bay of Bengal. The retreat of the south-west monsoon over West Bengal is completed by the end of November.

4. The Cold Season

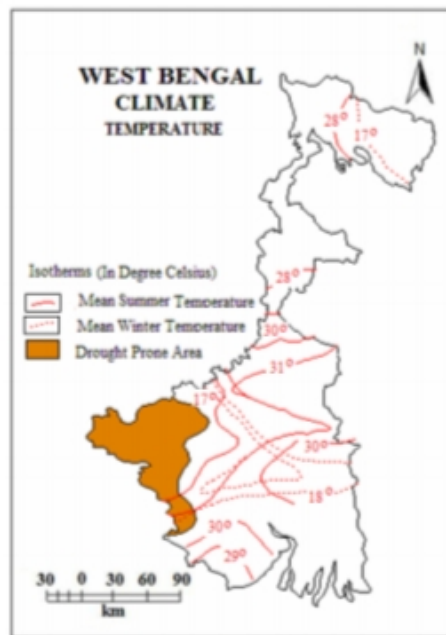
From December to February West Bengal is under the influence of the north-east trade winds. There is no rainfall in this season because wind is offshore and has no moisture. A cold and dry northern wind blows in the winter, substantially lowering the humidity level. The climate is cool and sunny; temperature ranging between 17°C to 21°C and increasing southward. The minimum temperature at night always remains below 15°C. Morning fog is very frequent even over the plains. Average daily temperature in the hill areas is about 5.2°C. Darjiling receives moderate snowfall in winter months.

Rainfall zones and temperature zones of West Bengal



Source: NATMO Maps, DST, 2010.

Fig 3.3



Source: NATMO Maps, DST, 2010

Fig 3.4