

Tender Heart High School
Sector: 33B, Chandigarh

Class: 8th

Subject: Geography

Teacher: Pooja Mohwal

Chapter: 9
India: Climate, Flora and Fauna

Brief Introduction of the chapter with student:

Good Morning/ Afternoon students!

Today in this chapter we will learn about climate of India, factors affecting climate of India and About seasons in India. So let's start the chapter.

→ Introduction: Climate means an average of atmospheric condition of any area over the long period of time upto 25 year. Climate of a country is based on the detailed study of its

- Temperature
- Rainfall
- Atmospheric Pressure
- Wind Direction

India climate influence by two factors:

(a) The Tropic of Cancer ($23\frac{1}{2}^{\circ}$ N)

(b) The Great Himalayan range from west to N.E Direction

→ Factors affecting climate of India :-

India experiences great variation in temperature and rainfall due to various factors affecting its climate they are —

- (a) Latitude and topography
- (b) Influence of the Himalayas
- (c) Altitude
- (d) Distance from the sea
- (e) Western Distribution and tropical cyclones
- (f) Upper air currents and jet streams

We will do the discussion of all the factors in the class. in detail.

→ the climatic Contrasts:

- Due to its vast North-South extent, India experience sharp climatic contrast
- (a) The places to the north of the tropic of cancer experience continental type of climate - very hot (Summer)
Very cold (winter)
 - (b) The places along the eastern and western coast experience equatorial or marine type of climate - Mumbai, Chennai
 - (c) Rainfall varies from 1187cm at Mawsynram (highest) in the Asia to 25cm in Rajasthan

→ Change of Seasons in India

On the basis of monsoon variation the year may be divided into 4 main seasons:

- (a) the Hot Dry Season (March to May)
- (b) the Raining Season (June to September)
- (c) Retreating S.W monsoon (October and November)
- (d) the cold season (December to February)

India Season Details

Season

Temperature, Pressure, and characteristics

① Hot Dry
(March to May)

→ During summer solstice the sun shines directly overhead at the tropic of Cancer.

→ the mainland of India experiences intense heat during the months of March to May.

→ Temp: 45°C to 55°C (Rajasthan)
 32°C (Centre)
 26°C (Coastal Areas)

• Pressure: low pressure at N.West part of India

→ wind prevailing from S.W to N.E

• Local wind: • Kal Baisakhi (Assam, W.B.)
• Loo (Northern plains)

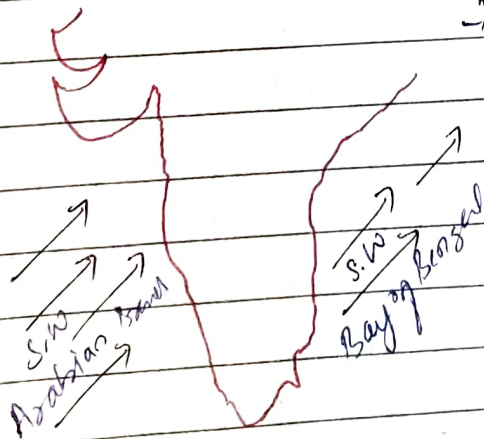
→ temperature Range is very High.

② Rainy Season:
(June to Sept.)

→ Also called southwest monsoon

→ Intense low pressure over the mainland attracts the trade winds (S.W)

→ Southwest monsoon divided its self into two Branches due to tapering topography of peninsular India.



① Arabian Sea Branch

② Bay of Bengal Branch.

(i) the Arabian Sea Branch: strikes the western coast of India
→ Gives heavy Rainfall along the windward side of western Ghats.
→ Deccan Plateau lying in the rain shadow of the western Ghats receives very little rainfall.

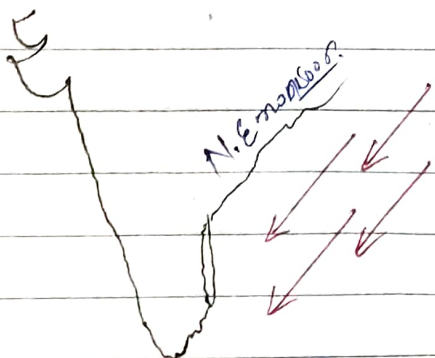
(ii) Bengal Branch:

This branch advances towards Northeast after picking up moisture from Bay of Bengal.

- N. Eastern part of India receives heavy rainfall e.g. Churapet, Mawynsom.
- Rain shadow area - Khasi hills.
- Rainfall goes on decreasing towards the Gangetic plains.

Both the branches merge at the Northern plains area.

(3) Retreating Southwest monsoon: → It is a withdrawal of monsoon from India
(October - November)



- Since southwest monsoon winds are permanent winds they withdraw along the same path.
- withdrawal monsoon picks up the moisture from Bay of Bengal & gives maximum rainfall to Tamil Nadu.

[Retreating Monsoon]

(4) Cold Season or : → it is also called as cold weather
the Season of the season.
N.E Monsoon

(December - February): → temperature in this season are
generally low and decrease from
south towards north.

- Mean temperature — 20°C (North)
- Average " — 21°C to 25°C (South)

→ Rainfall during winter:

(1) Coastal Coast in Tamil Nadu — During winter

(2) → wind blow from high pressure over the land to
low pressure over the sea.

→ they caused heavy rainfall to Andhra Pradesh and
Tamil Nadu.

(3) winter Rainfall in Northwest India:

During winter Punjab and
Haryana received the rainfall

because of westerly depressions originating in Mediterranean.

- this rainfall is good for wheat crop.

→ Good for Rabi crop in northwest India