

WELCOME TO VIRTUAL CLASS-IX

SUBJECT : (GEOGRAPHY)
CHAPTER NUMBER: 4
CHAPTER NAME : CLIMATE

CHANGING YOUR TOMORROW



3. Advancing Monsoon (The Rainy Season)

The low-pressure area over the Northern plains intensifies by mid-June and attracts the trade winds. These trade winds originate over the warm tropical ocean in the Southern hemisphere. After crossing equator, these blow in the South-West direction entering peninsula as South-West monsoon. They cover the entire subcontinent except extreme North-West in just over one month.

Maximum rainfall due to these winds occurs in North-Eastern India (mainly Meghalaya and Assam) and the windward side of the Western Ghats (Thiruvananthapuram to Mumbai) as these winds bring abundant moisture to the sub-continent at a velocity of 30 kmph.

Rainfall in the Western Ghats and Deccan Plateau

The monsoon winds cover the country in about a month. A total change in weather is brought up in India by the inflow of the South-West monsoon in India. The windward side of the Western Ghats receives very heavy rainfall, more than 250 cm in the early season. In spite of lying in the rain shadow area, the Deccan Plateau and parts of Madhya Pradesh also receive some amount of rainfall.

Areas of Maximum and Least Rainfall

The maximum rainfall of this season is received by the North-Eastern part of the country. The highest average rainfall in the world falls at Mawsynram in the Southern ranges of the Khasi hills in Meghalaya.

In the Northern plains precipitation decreases from East to West, with Western parts of Rajasthan and Northern parts of Gujarat getting the least rainfall.



- **Features of Advancing Monsoon**

Features of advancing monsoon are as follows

Wet and Dry Spells Monsoon in India does not bring continuous rainfall. It has wet and dry spells i.e. 'breaks' in rainfall. These breaks in monsoon are related to the movement of monsoon trough. The axis of the monsoon trough in the Northern plains keeps moving North to South and back, causing periodic breaks in rainfall. Due to this, it has wet and dry spells. The monsoon rains take place only for a few days at a time. They are interspersed as rainless intervals.

- Monsoon Trough :- The trough and its axis keep on moving Northward or Southward which determines the spatial distribution of rainfall. When the axis of the trough lies over the plains, the region gets good rainfall. With the Northward movement of axis, the Himalayan region gets widespread rain which is the catchment area of various rivers. This causes devastating floods in the plains causing heavy damage to life and property.
- Tropical Depression Another phenomenon, which determines amount and Duration of the monsoon, is the frequency and intensity of tropical depression which form at the head of the Bay of Bengal and cross over to mainland. These depressions follow the axis of the 'monsoon trough of low pressure'.

4. Retreating/Post Monsoon Season (The Transition Season)

- The sun starts shifting towards the South during October-November. During this time, the low pressure trough over the Northern plains weakens and is replaced gradually by a high-pressure system. This is followed by the South-West monsoon winds.
- By the beginning of October, the monsoon withdraws from the Northern plains. The months of October-November form a transition period from hot rainy to dry winter conditions.
- Features of Retreating Monsoon
 - The characteristic features of retreating monsoon are
 - The period is marked by clear skies and rise in temperature.
- The day temperatures are high but nights are cool and pleasant.
- Due to the temperature still remaining high and humidity not reducing, the heat is oppressive. This phenomenon is also called October heat.



Cyclonic Depression and Tropical Cyclone

- By early November, cyclonic depressions originate over the Andaman Sea. It causes tropical cyclones on the coastline from Bangladesh to Tamil Nadu as low-pressure conditions get transferred to the Bay of Bengal.
- These cyclones generally cross the Eastern coast of India causing heavy and widespread rain. Often, they cause a lot of destruction. Sometimes, these cyclones arrive at the coasts of Odisha, West Bengal and Bangladesh.
- These cyclones frequently strike the populated deltas of the Godavari, Krishna and Kaveri. The Coromandel coast gets its monsoon rainfall mostly during October and November from the cyclones and due to the retreating monsoon picking up moisture over the Bay of Bengal.

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