

# CLASS-5



7

## India: The Land of Diversities





# India Climate



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# The factors influencing the climate of India

- Latitude
- Physiography
- Nearness to sea
- Altitude
- Mountains
- Winds

# The seasons in India

The seasons in India can be generally classified into four.

- Cold weather season (Winter)
- Hot weather season (Summer)
- South west monsoon season
- Retreating monsoon season.



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**These are some of the winter scenes of North India.**

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# Cold weather season In India (Winter)

- India experiences winter when the position of the sun is over the southern hemisphere.
- Most places in India experience intense fog and snowfall occurs in the valleys of the Himalayas during this season.
- The months of December, January, and February experienced cold weather in India.
- During the cold weather season days are generally warm and nights are severely cold in North India.
- Snowfall is a common phenomenon in the hill stations like Manali and Shimla.



# What is Western Disturbance

-The cyclones originating in the Mediterranean Sea during winter, gradually shifts towards the east and reaches India.

**-This causes winter rainfall in the northern plains, especially in the Punjab region.**

-The phenomenon is called western disturbance.

**-This rain is much beneficial for the winter crops.**

-Jet streams, the strong upper air currents in the troposphere have a significant role in bringing the western disturbance to India.



**Why does the temperature decrease from south to north?**

**-Because of the position of Sun is in the Southern Hemisphere.**

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**The coastal regions experience comparatively high temperature. Why?**

**-Because of the position of Sun is in the Southern Hemisphere.**

**-The warm breeze blows into the coastline from the sea.**

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Mukesh Mathrani



# Hot weather season (Summer)





# Hot weather season (Summer)

**-India experiences hot weather when the sun is over the northern hemisphere.**

**-It is in Barmer in western Rajasthan that the highest temperature of summer is felt.**

**-March, April and May are the months India experienced summer.**

**-Loo, mango showers, etc. are some local winds experienced in India during this season.**

# Kalbaisakhi

Kalbaisakhi is the phenomenon of heavy showers with thunder occurring in the West Bengal region during the hot weather season. Roaring winds and hailstones are the characteristics of this rain.



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# South west monsoon season

**-When the sun is over the northern hemisphere, North Indian regions experience intense low pressure.**

**-In the months of June, July, August and September India experience south west monsoon season.**

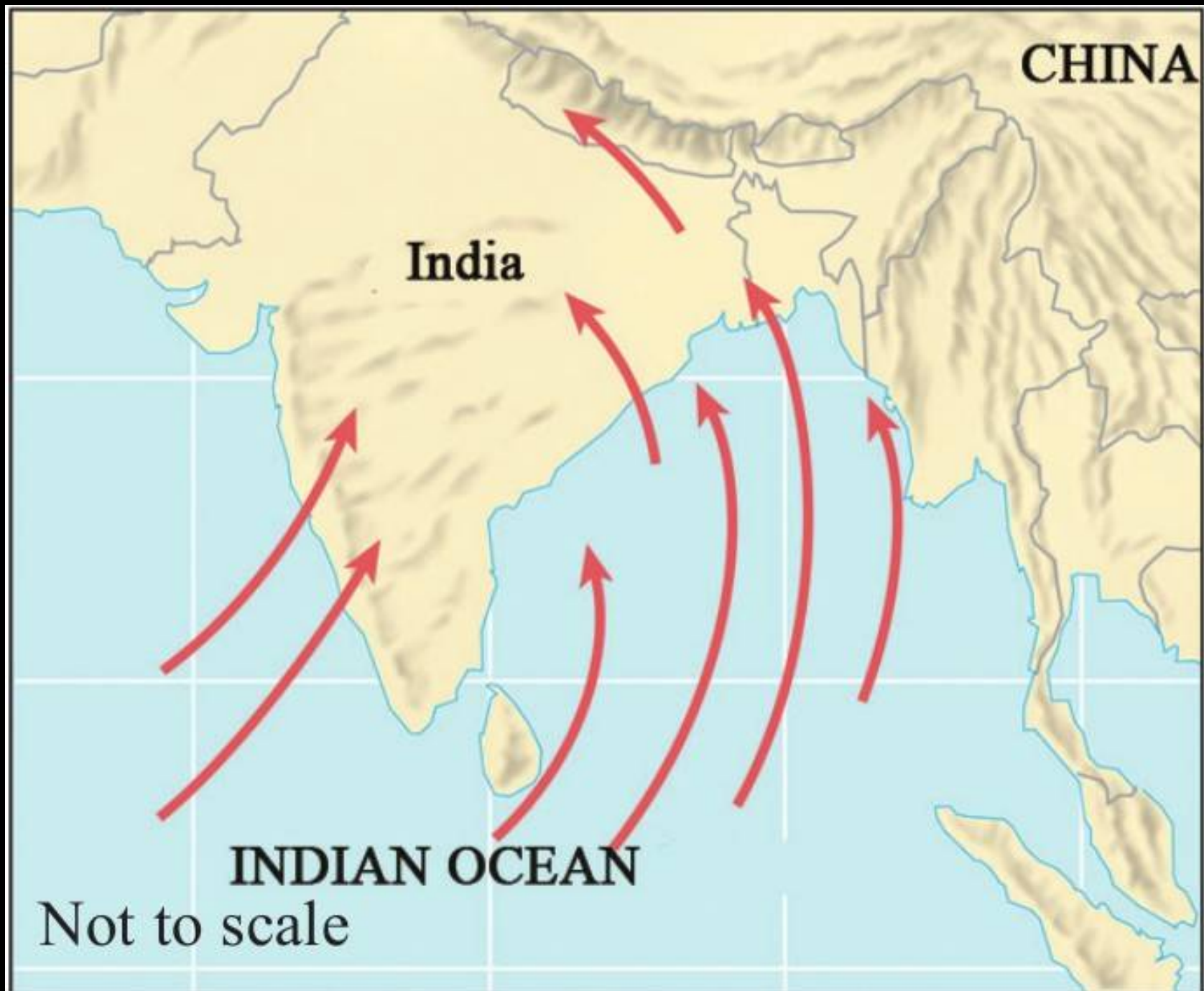
**-Owing to the high pressure over the oceans, wind blows from high pressure to low pressure regions, that is, from the Indian Ocean to the Indian sub- continent.**

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**-As the winds deflect towards right due to coriolis effect, they reach India as southwest monsoon winds.**

**-Because of the peculiar shape of the Indian peninsula, the southwest monsoon winds bifurcate into two branches on entering the land.**

- Arabian Sea branch**
- Bay of Bengal branch**




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# Arabian Sea branch

**-The Arabian Sea branch of south west monsoon that reaches the coast of Kerala by early June causes heavy rainfall here.**

**-Then it advances to the states of Karnataka, Goa, Maharashtra, and Gujarat and causes rainfall in the western parts.**

**-Rainfall is scarce in the Rajasthan region because the monsoon branch entering through Gujarat blows parallel to the Aravalli mountain ranges.**



# **Rainfall is comparatively less along the eastern slopes of the Western Ghats. Why?**

- The western part of the Western Ghats receives a good amount of rain.**
- As a result of Western Ghats blocking the Arabian Sea branch of the south-west monsoon wind.**
- The south west monsoon winds will not be blowing to the east side of the Western Ghats.**
- So the rainfall is comparatively less along the eastern slopes of the Western Ghats.**

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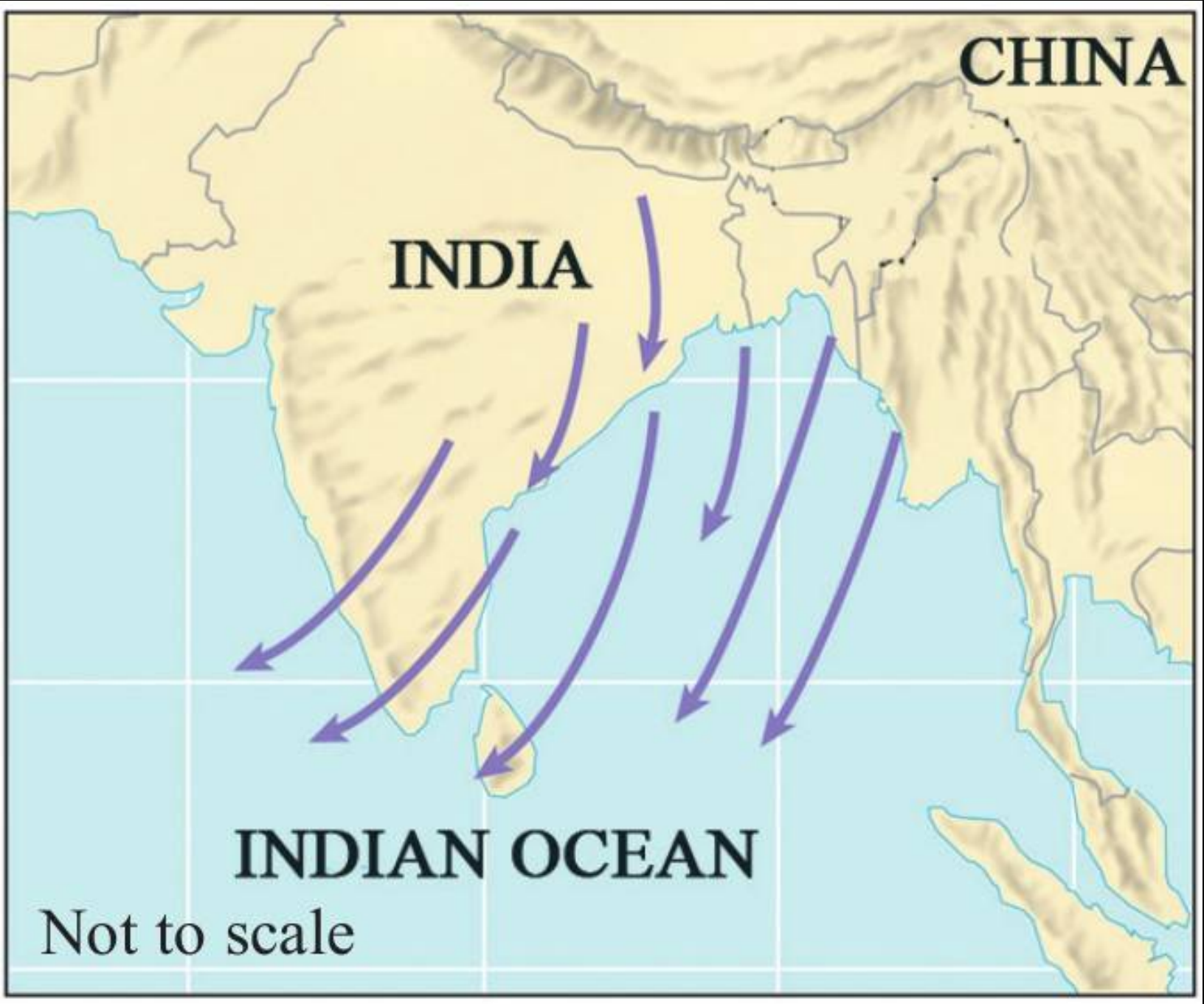
**By what name is the south-west monsoon rain known in Kerala?**

**-Edavappaathi**

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# The Bay of Bengal branch

- The Bay of Bengal branch of the monsoon advances northward by absorbing more moisture from the Bay of Bengal.
- On reaching West Bengal, crossing the Sundarban delta, it bifurcates into two branches.
- One branch reaches the northeastern states through the Brahmaputra plains and causes heavy rainfall there.
- The other branch enters the Ganga plains and causes rainfall in West Bengal, Bihar, Uttar Pradesh, etc.
- This branch merging with the Arabian Sea branch in the Punjab plains advances north further and causes heavy rainfall along the foothills of the Himalayas.



# Retreating monsoon season(North East Monsoon)

**-Experienced in October and November**

**-By the end of September, as the sun apparently shifts towards the southern hemisphere, intense high pressure develops over the northern plains.**

**-Comparatively low pressure over the Indian Ocean causes wind to blow from the northern part of India towards the Indian Ocean.**

**-These winds known as north-east monsoon winds are dry winds that do not generally cause any rain in India.**

**-This season is termed as north east monsoon .**

**-This season is actually a transition period between the rainy season and the forth coming winter.**

**-This season experienced during the months of October and November.**

**-The winds blowing from land to sea due to the attraction of low pressure over the Bay of Bengal takes from north-east to south-west direction.**

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**-It absorbs moisture from the Bay of Bengal and causes rainfall along the coromandal coast, especially the Tamilnadu coast.**

**-This is the main rainy season of Tamil Nadu.**

**-Kerala and some parts of Karnataka also receive northeast monsoon rains.**

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# October heat

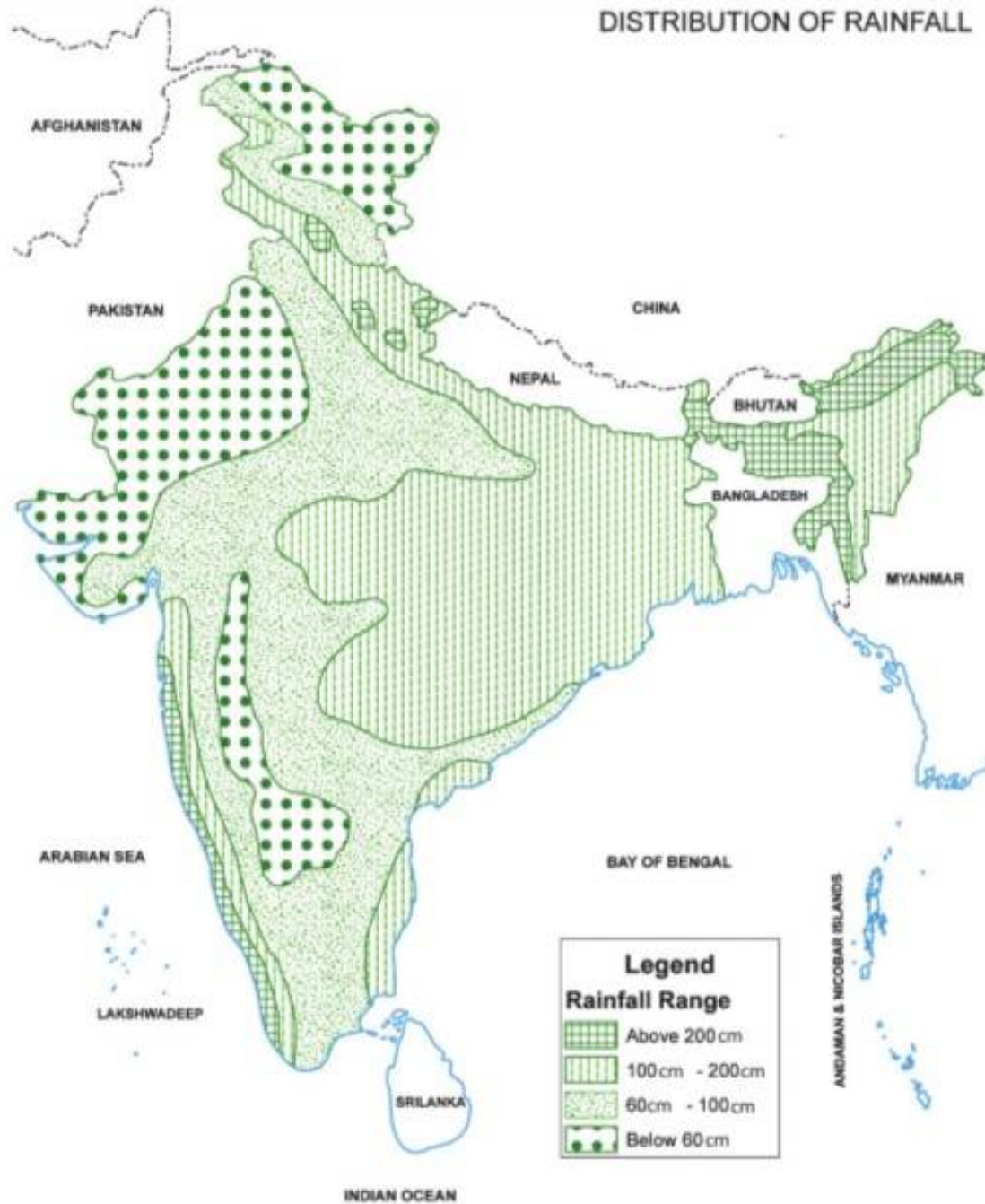
-The days in October and November unbearable due to high temperature and humidity.

-This phenomenon is known as October heat.

**By what name is the north-east monsoon rain known in Kerala?**

-Thulaavarsham.

## DISTRIBUTION OF RAINFALL





*This map is prepared based on the amount of rainfall received in India. Analyse the map and find answers to the following questions.*

- Places receiving more than 200 cm rainfall
  - Kerala
  - **MEGHALAYA, TRIPURA, ASSAM**
- Places receiving less than 60 cm rainfall
  - Rajasthan
  - **KASHMIR, GUJARATH, MAHARASHTRA, KARNADAKA**
- Reasons for these imbalances in the distribution of rainfall
  - Physiography
  - **NEARNESS TO SEA AND MOUNTAINS**

**Why do we call India  
'The land of diversities.'?**

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