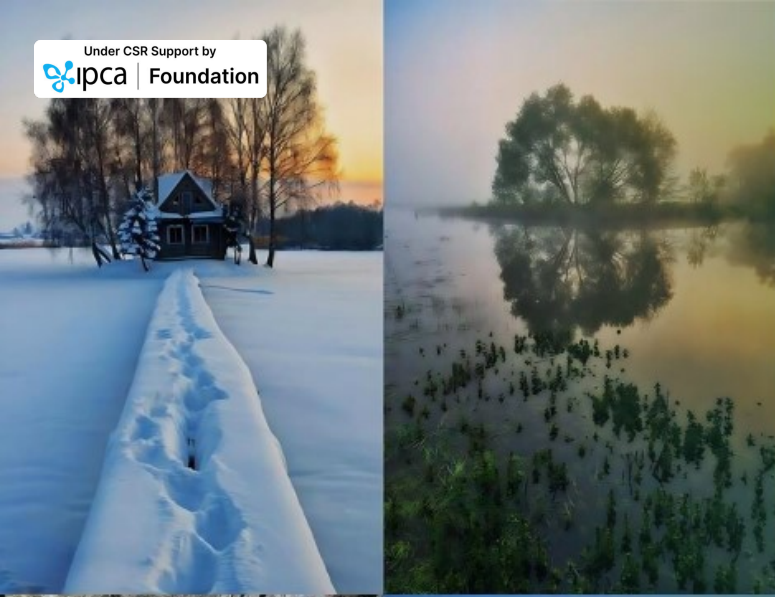




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CLASS – 7

SOCIAL SCIENCE

Exploring Society : India and Beyond

CH –3 : Climates of India

Part – 4

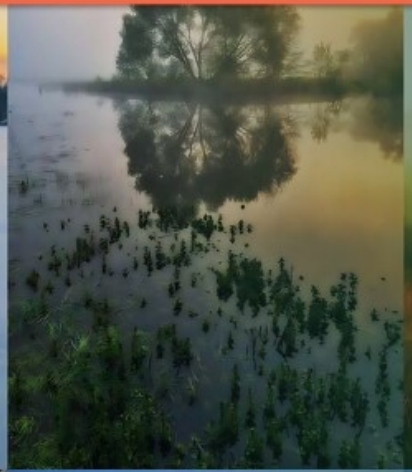
Factors Determining the Climate

Sukhdeep Kaur

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OVERVIEW

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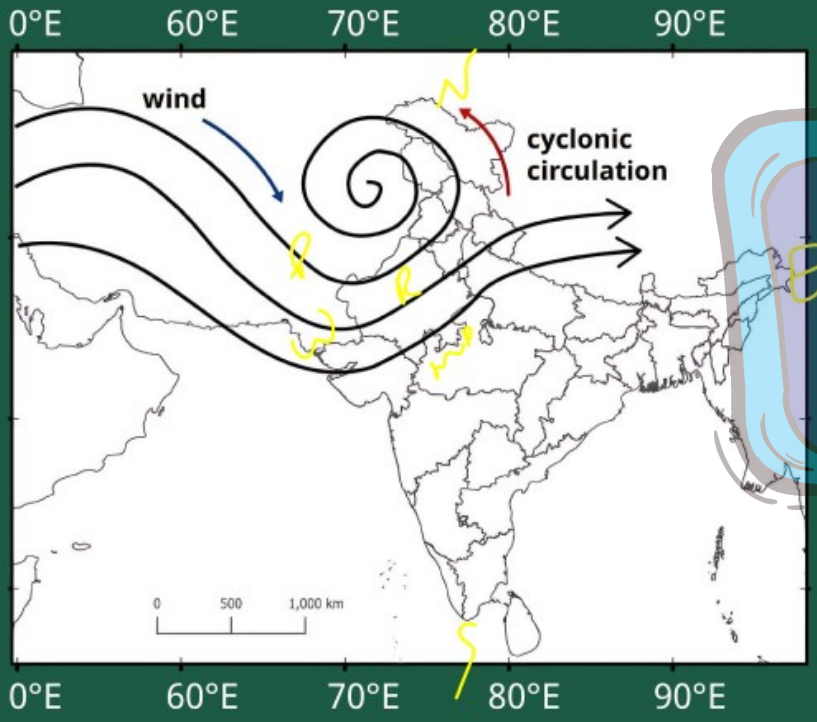





1. Weather, Seasons and the Climate
2. Types of Climates in India
3. Factors Determining the Climate
4. The Monsoons
5. Climate and our Lives
6. Climates and Disasters
7. Climate Change

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WIND

☛ **Air Mass Movement :** Winds transport warmer or cooler air across regions.

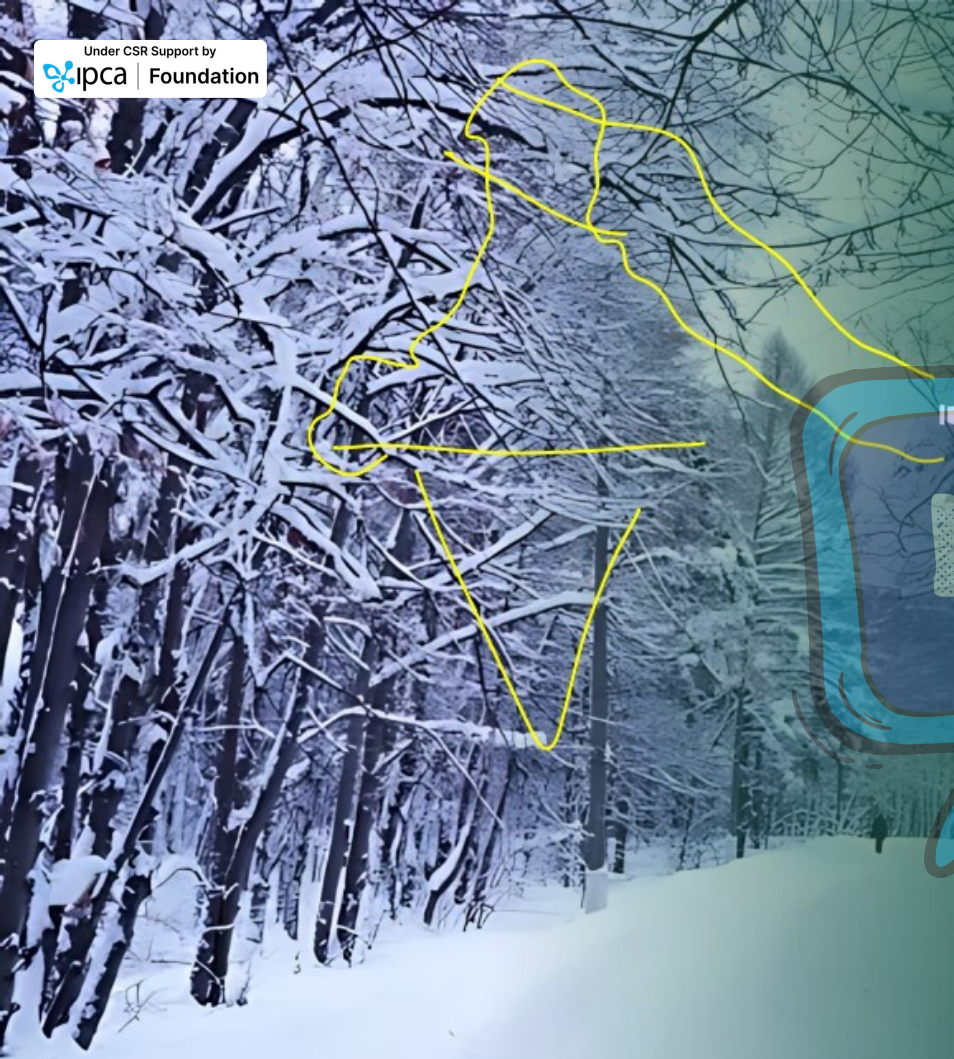
☛ **Western Winds in India:**

✧ States like Punjab, Haryana, Rajasthan, and Madhya Pradesh often receive winds from the west.

✧ These winds travel over the deserts of Arabia and Afghanistan.

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- They bring dry and hot air, causing severe heat waves in summer.

Winter Winds

- Cold winds from across the Himalayas enter the Himalayan foothills.
- These winds cause cold waves in winter.

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☛ Effect on Temperature & Humidity

Winds influence not just temperature but also humidity.

☛ Dry winds (from deserts) reduce moisture, leading to dry weather.

☛ Moist winds (from the sea) carry moisture inland, possibly causing rainfall.

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TOPOGRAPHY

☛ Topography as a Climate Factor

The physical features of a region (mountains, plains, deserts) significantly influence its climate.

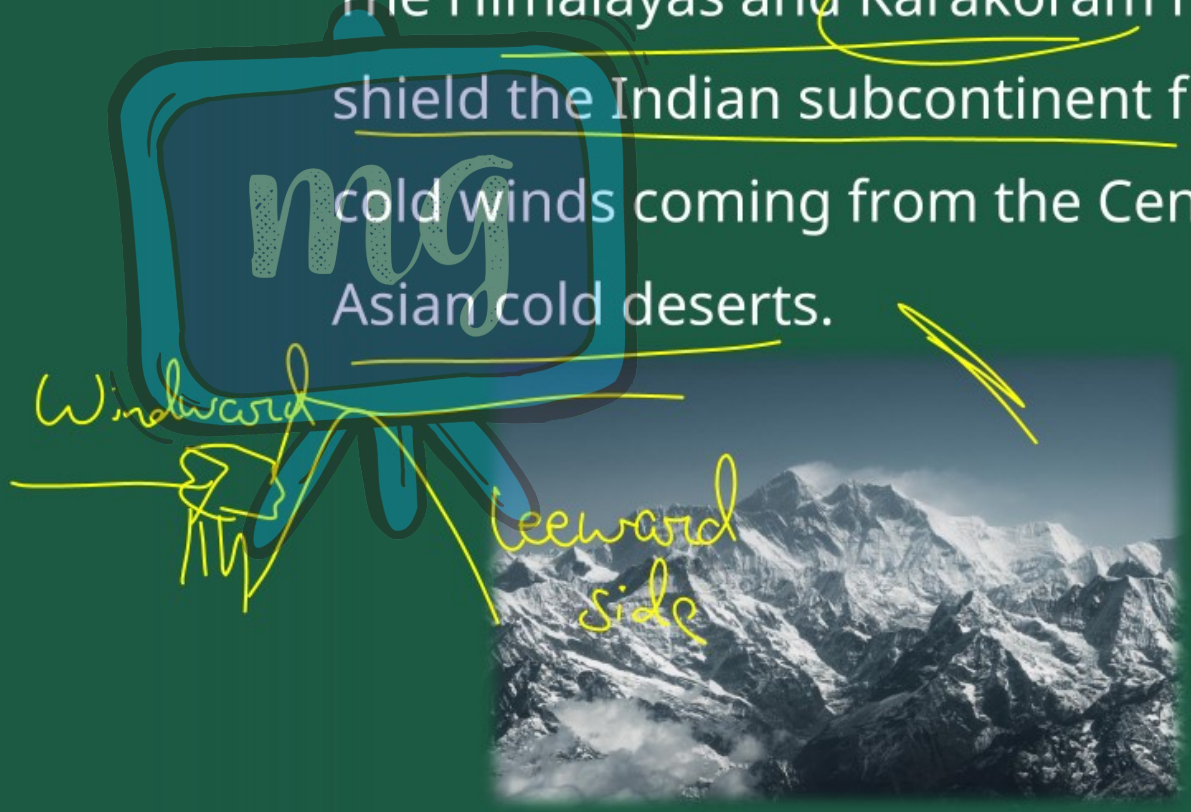


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☛ Protective Role of Mountains

The Himalayas and Karakoram ranges shield the Indian subcontinent from cold winds coming from the Central Asian cold deserts.



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☛ Effect of Flat Terrain

The Thar Desert has a flat topography and lacks natural barriers, making it exposed to hot and dry winds.



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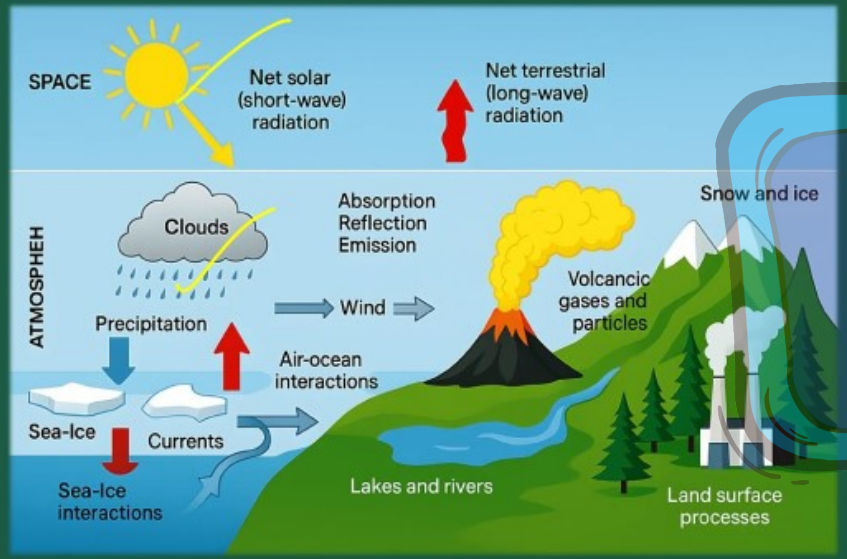
☛ Role of Western Ghats (Preview)

The Western Ghats play an important role in the southwest monsoon.



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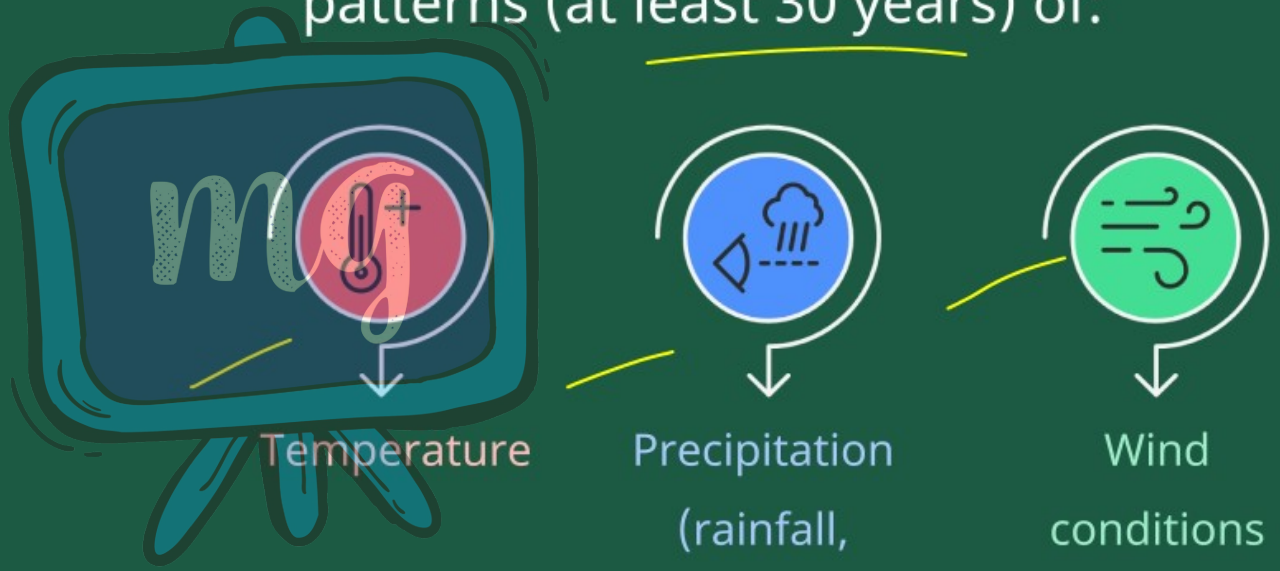
☛ Comprehensive Climate Understanding

- ✧ Climate is influenced by multiple interconnected factors (winds, topography, temperature, and precipitation).

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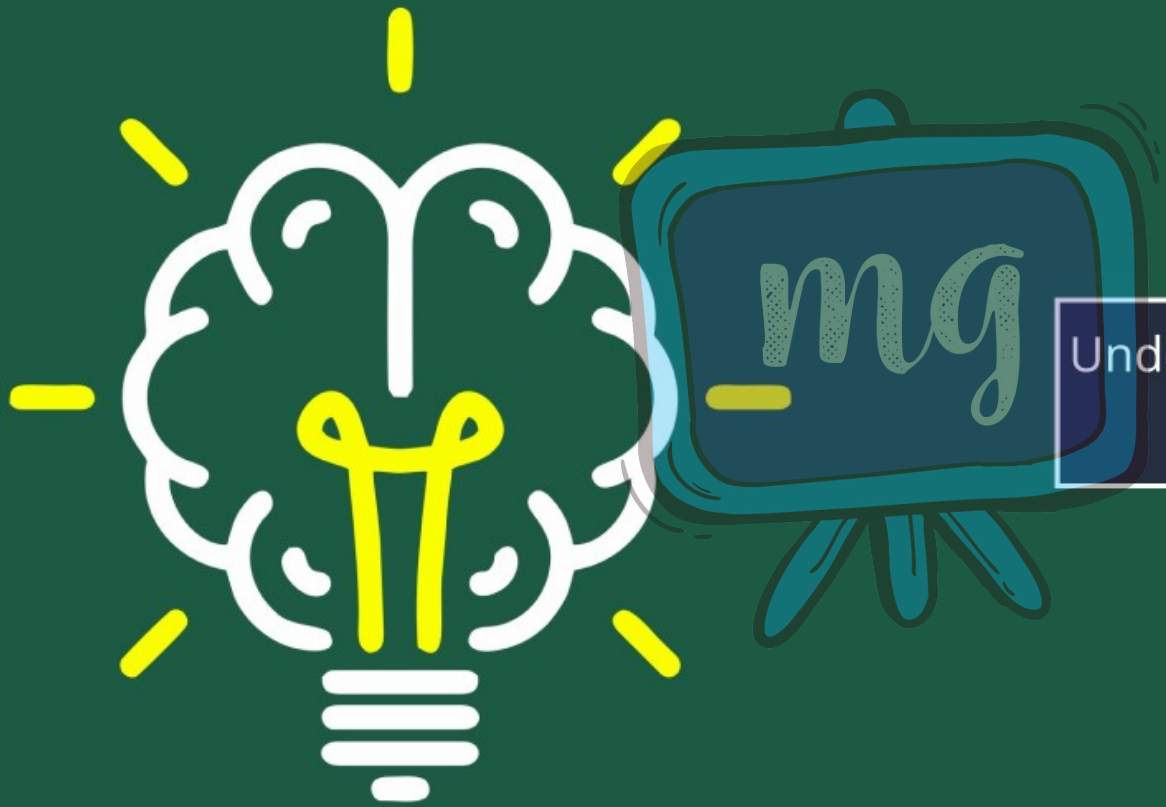
✧ It is described based on long-term patterns (at least 30 years) of:



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LEARNING OUTCOME

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Understanding the factors that determine climate

ASSESSMENT



1 What kind of winds cause severe heat waves in parts of India during summer?

A Winds from the Bay of Bengal

B Western winds from deserts

C Cold winds from the Himalayas

D Coastal sea breezes



2 Which mountain range plays a key role in the southwest monsoon?

A Aravalli Range

B Eastern Ghats

C Vindhya Range

D Western Ghats