India: Geographical Features

Introduction

India is a land of remarkable geographical diversity, often called a "subcontinent" due to its vast size and distinct physical features. Located in South Asia between 8°4' N to 37°6' N latitude and 68°7' E to 97°25' E longitude, it covers 3.28 million sq km - the 7th largest country by area. This chapter explores India's majestic mountains, fertile plains, rugged plateaus, and coastal regions that shape its climate, resources, and human settlements.

A[Geographical Diversity] --> B[6 Physical Divisions]
A --> C[7 Climate Zones]
A --> D[12 Major River Systems]

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1. Physical Divisions

A. The Great Himalayan Range

- **Three parallel ranges**:
  1. **Himadri** (Greater Himalayas) - Mt. Everest (8849m)
  2. **Himachal** (Lesser Himalayas) - Hill stations like Shimla
  3. **Shiwalik** - Youngest and outermost range

Ecological Importance:

- "Water tower of Asia" (Ganges, Indus, Brahmaputra originate here)
- Blocks cold Central Asian winds

B. Northern Plains

Section	Rivers	Fertility Level
Punjab Plains	Satluj, Beas	Highly fertile (Alluvial soil)
Ganga Plains	Ganges, Yamuna	Most agriculturally productive
Brahmaputra Valley	Brahmaputra	Prone to floods

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2. Peninsular India

Deccan Plateau Features:

- Rich in black soil (ideal for cotton)
- Bordered by Western & Eastern Ghats
- Contains mineral wealth (iron, bauxite)

Coastal Comparison:

West Coast	East Coast
Narrow, steep	Wide, deltas
Fewer ports	Major ports (Chennai, Kolkata)

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3. River Systems

Himalayan vs Peninsular Rivers:

Feature	Himalayan	Peninsular
Origin	Glaciers	Rainfall
Flow	Perennial	Seasonal
Example	Ganges	Godavari

Importance:

- Irrigation (60% agriculture dependent)
- Hydropower (Bhakra Nangal, Tehri dams)
- Cultural significance (Ganges is sacred)

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4. Climate & Vegetation

Seasonal Cycle:

Annual Seasons

"Winter (Dec-Feb)" : 20
"Summer (Mar-May)" : 25
"Monsoon (Jun-Sep)" : 50
"Post-Monsoon (Oct-Nov)" : 5

Natural Vegetation Types:

1. Tropical Evergreen (Western Ghats)
2. Deciduous (Central India)
3. Desert (Thar)
4. Mangrove (Sundarbans)

Case Study: Thar Desert

Unique Features:

- World's most densely populated desert
- Contains India's largest saltwater lake (Sambhar)

Adaptations:
Camel breeding
Drought-resistant crops (millet)

Chapter Summary

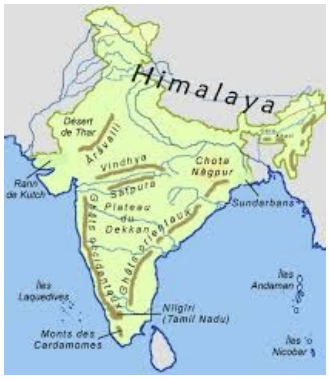
✔ **6 Physical Divisions** shape India's landscape
✔ **Rivers** are lifelines for agriculture and culture
✔ **Monsoon** dominates climate patterns
✔ **Resource distribution** varies regionally

Activities

1. **Map Work**:
    - Mark: Highest peak in each zone
    - Shade: Major soil types
2. **Project**:

    Create a "Rainfall Diary" comparing your region with Cherrapunji

Visuals to Add:



Did You Know?
The Deccan Traps were formed by volcanic eruptions lasting 30,000 years!