

Physiographic Divisions of India

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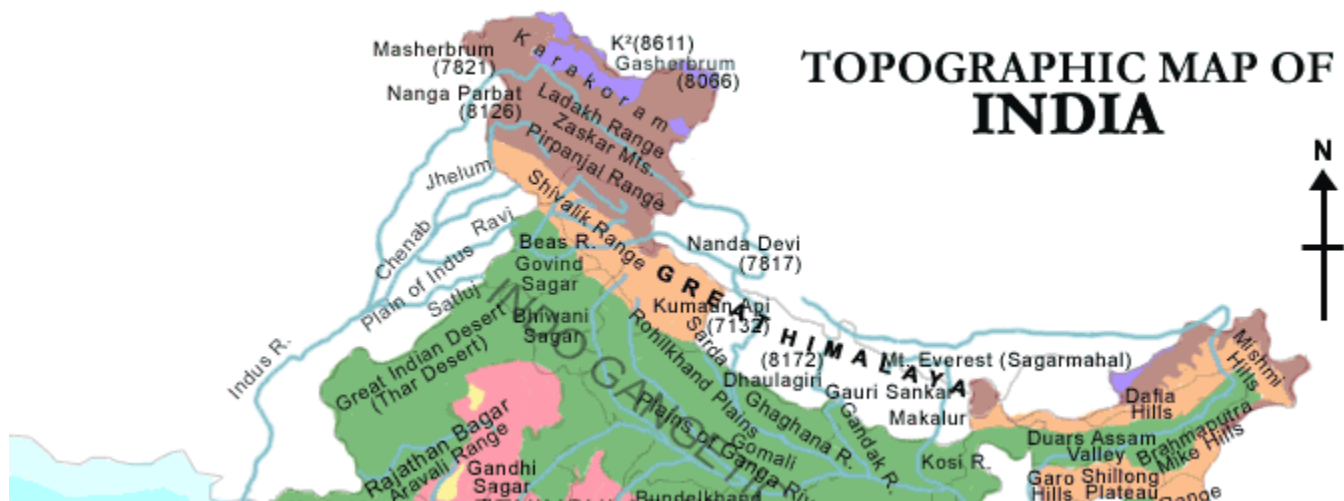


India can be divided into following physical divisions viz.

- The Northern Mountains
- The North Indian Plain
- The Peninsular Plateau

- Great Indian Desert
- The coastal Regions
- Islands

The Northern Mountains / Himalayan Mountains



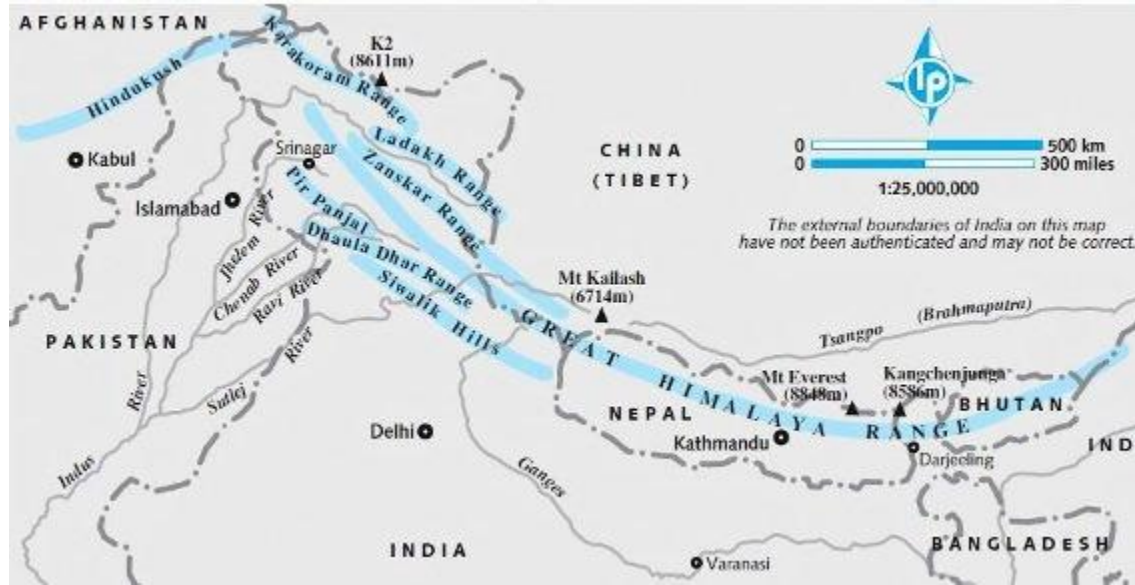
- Young and structurally fold mountains stretch over the northern borders of India
- Run in a west-east direction from the Indus to the Brahmaputra formed by the tectonic collision of the Indian plateau with the Eurasian plateau
- Loftiest and one of the most rugged mountain barriers of the world

- form an arc, which covers a distance of about 2,400 Km in length with varying width from 400 Km in Kashmir to 160 Km Arunachal Pradesh
- The altitudinal variations are greater in the eastern part than in the western

The Trans Himalayas

- Himalayan Ranges immediately to the north of the The Great Himalayan Range are called the Trans Himalayas.
- Most of the part of this Himalayan range lies in the Tibet and hence also called *Tibetan Himalaya*
- The Zaskar, K2 (Godwin austin), the Ladakh, the Kailash and the Karakoram are the main ranges of the trans Himalayan system

Greater or Inner Himalayas / Himadri



- Most continuous range consisting of the loftiest peaks with an average height of 6,000 metres
- Contains all the prominent Himalayan peaks with core of this part of Himalayas is composed of granite
- Perennially snow bound, and a number of glaciers descend from this range
- Prominent Ranges include Mt. Everest, Kamet, Kanchenjunga, Nanga Parbat, Annapurna

The Lesser Himalaya or Himachal

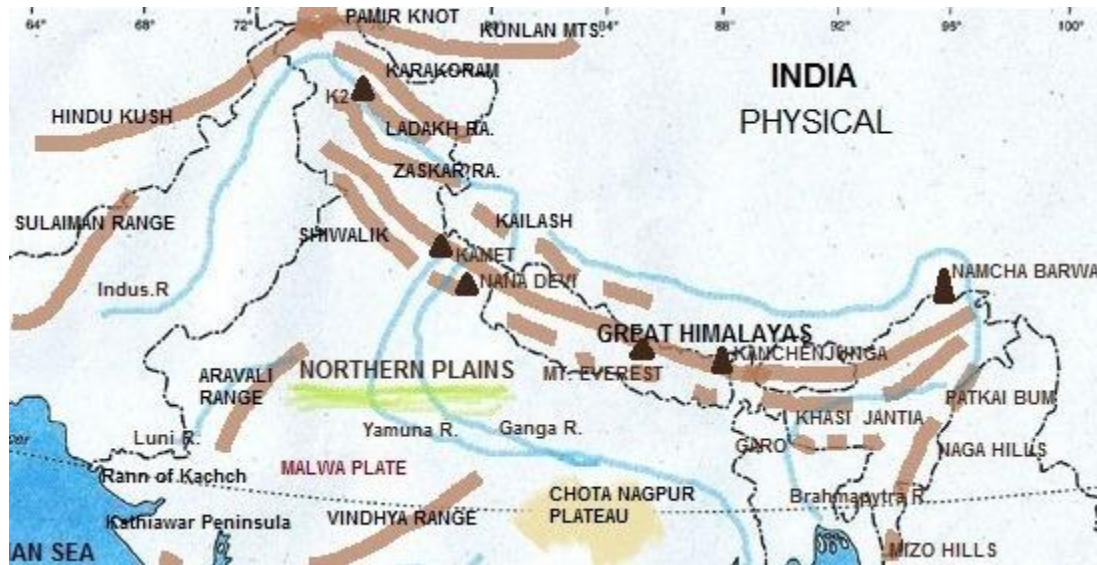
- Altitude varies between 3,700 to 4,500 metres and the average width is of 50 Km
- While the Pir Panjal range forms the longest and the most important range, the Dhauladhar & the Mahabharat ranges are also prominent ones
- Consists of the famous valley of Kashmir and the Kangra & Kullu Valley in Himachal Pradesh (Majority of hill stations lies in this range)

The Shiwaliks

- The altitude varies between 900 to 1100 m and the width varies between 10 to 50 km
- The longitudinal valleys lying between the Himachal and Shiwaliks are called 'Dun' for ex. Dehra Dun, Kotli Dun and Patli Dun

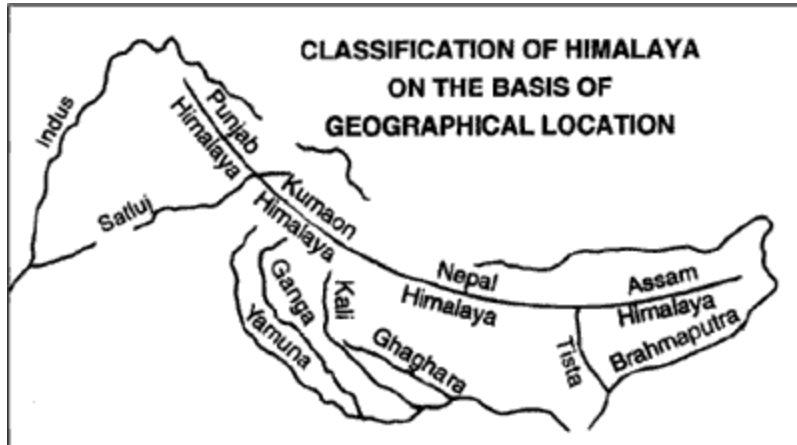
Eastern hills and mountains

- The Brahmaputra marks the eastern border of the Himalayas. Beyond the Dihang gorge, the Himalayas bend sharply towards south and form the Eastern hills or Purvanchal.



- These hills run through the north eastern states of India & are mostly composed of sandstones for ex. Patkai Hills, Naga Hills, Manipuri Hills and Mizo Hills

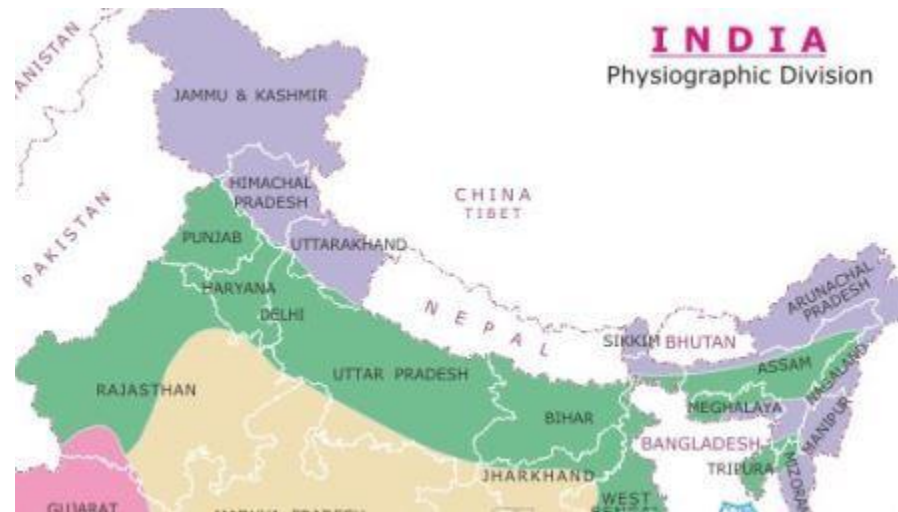
Himalayan Regions from East to West



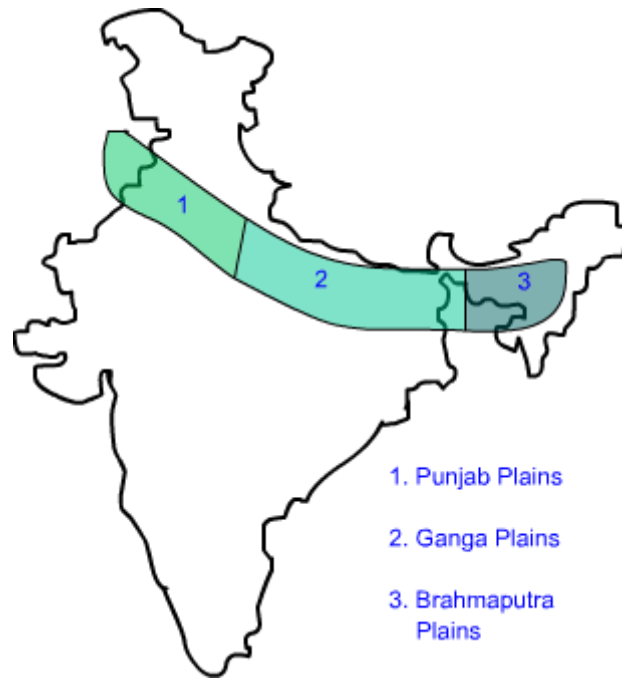
<p>Punjab Himalayas</p>	<ul style="list-style-type: none"> ▪ This part lies between the Indus and Sutlej – 560 km ▪ From west to east, this is also known as Kashmir Himalaya and Himachal Himalaya; respectively. ▪ Karakoram, Ladakh, Pir Panjal, Zaskar and Dhaola Dhar are the main ranges of this section
<p>Kumaon Himalayas</p>	<ul style="list-style-type: none"> ▪ This part lies between Sutlej and Kali rivers – 320 km ▪ Its western part is called Garhwal Himalaya while the eastern part is known as Kumaon Himalaya

	<ul style="list-style-type: none"> ▪ The general elevation is higher as compared to Panjab Himalayas ▪ Nanda Devi, Kamet, Trisul, Badrinath, Kedamath, Gangotri are important peaks. ▪ The sources of sacred rivers like the Ganga and the Yamuna are located in the Kumaon Himalayas ▪ Nainital and Bhimtal are important lakes
Nepal Himalayas	<ul style="list-style-type: none"> ▪ This part lies between the Kali and Tista rivers – 800 km ▪ This is the tallest section of the Himalayas and is crowned by several peaks of perpetual snow ▪ Important peaks include Mount Everest, Kanchenjunga, Lhotse I, Makalu, Dhaulagiri and Annapurna ▪ Kathmandu is a famous valley in this region
Assam Himalayas	<ul style="list-style-type: none"> ▪ This part lies between the Tista and Dihang rivers – 750 km ▪ Has elevation much lesser than that of the Nepal Himalayas ▪ The southern slopes are very steep but the northern slopes are gentle ▪ Important peaks of this region are Namcha Barwa, Kula Kangri and Chomo Lhari

The Northern Plain



- Formed by the interplay of the three major river systems, namely– the Indus, the Ganga and the Brahmaputra along with their tributaries
- Composed of alluvial soil which has been deposited over millions of years, about 2400 km long and about 240 to 320 km broad.
- With a rich soil cover combined with adequate water supply and favourable climate it is agriculturally a very productive part of India
- Divided into three sections, viz. the Punjab Plain, the Ganga Plain and the Brahmaputra Plain.

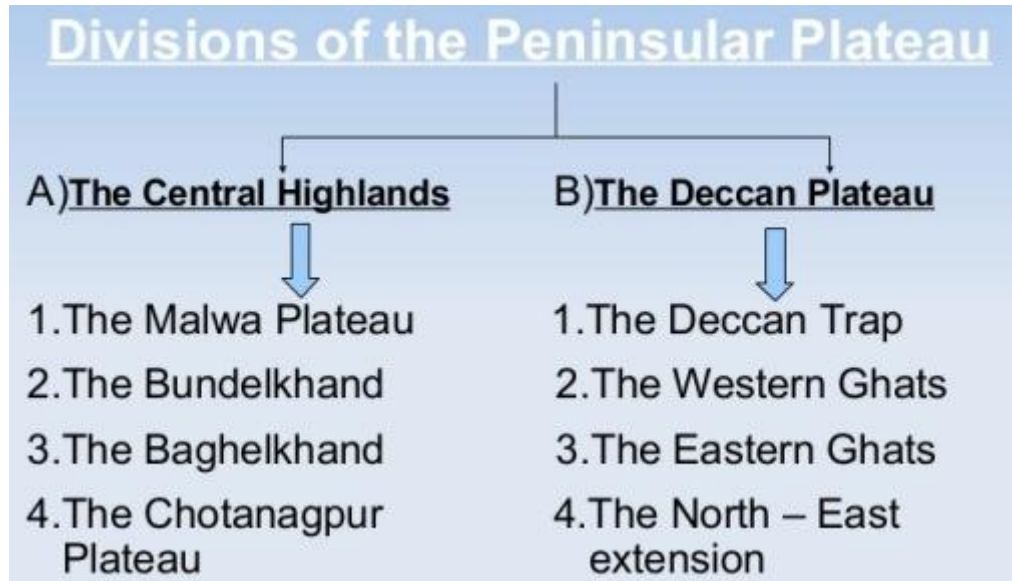


Punjab Plains	Form the western part of the northern plain & formed by the Indus and its tributaries with major portion of this plains in Pakistan
Ganga Plains	Extends between Ghaggar and Tista rivers. The northern states, Haryana, Delhi, UP, Bihar, part of Jharkhand and West Bengal lie in the Ganga plains.
Brahmaputra Plains	This plain forms the eastern part of the northern plain and lies in Assam

Based on the relief features; the northern plain can be divided into four regions, viz. bhabar, terai, bhangar and khadar.

Bhabar	<ul style="list-style-type: none"> ▪ After descending from the mountains, the rivers deposit pebbles in a narrow belt. ▪ The width of this belt is about 8 to 16 km; lies parallel to the Shiwaliks. ▪ All the streams disappear in this region
Terai	<ul style="list-style-type: none"> ▪ The terai region lies towards south of the bhabar belt. ▪ In this region, the streams reappear and make a wet, swampy and marshy region
Bhangar	<ul style="list-style-type: none"> ▪ Bhangar is the largest part of the northern plain and is composed of the oldest alluvial soil. ▪ They lie above the flood plains & resemble terraces. ▪ The soil of this region is locally known as kankar and is composed of calcareous deposits
Khadar	<ul style="list-style-type: none"> ▪ The floodplains formed by younger alluvium are called khadar. ▪ The soil in this region is renewed every year and is thus highly fertile.

The Peninsular Plateau



- The peninsular plateau is triangular in shape & surrounded by hills, composed of the oldest rocks as it was formed from the drifted part of the Gondwana land
- Broad & shallow valleys and rounded hills are the characteristic features of this plateau.
- The plateau can be broadly divided into two regions, viz. the Central Highlands and the Deccan Plateau.

The Central Highlands

- The Central Highlands lies to the north of the Narmada River & covers the major portion of the Malwa plateau.
- The rivers in this region flow from southwest to northeast; which indicates the slope of this region.
- It is wider in the west and narrower in the east.
- Bundelkhand and Baghelkhand mark the eastward extension of this plateau.
- The plateau further extends eastwards into the Chhotanagpur plateau

The Deccan Plateau

- Largest plateau in India, making up most of the southern part of the country, lies to the south of the Narmada River & shaped as downward-pointing triangle.
- It is located between two mountain ranges, the Western Ghats and the Eastern Ghats.
- Each rises from its respective nearby coastal plain almost meet at the southern tip of India.
- The average elevation of Western Ghats is 900 – 1600 metres; compared to 600 metres in case of Eastern Ghats.
- It is separated from the Gangetic plain to the north by the Satpura and Vindhya Ranges, which form its northern boundary
- Home of thick dark soil (called regur), suitable for cotton cultivation

The Indian Desert

- The Indian desert lies towards the western margins of the Aravali Hills.
- This region gets scanty rainfall which is less than 150 mm in a year, Hence they climate is arid and vegetation is scanty.
- Luni is the only prominent river but some streams appear during rainy season.



The Coastal Plains

The Peninsular plateau is flanked by stretch of narrow coastal strips which run along the Arabian Sea on the west and along the Bay of Bengal on the east.

Western Coastal Plains

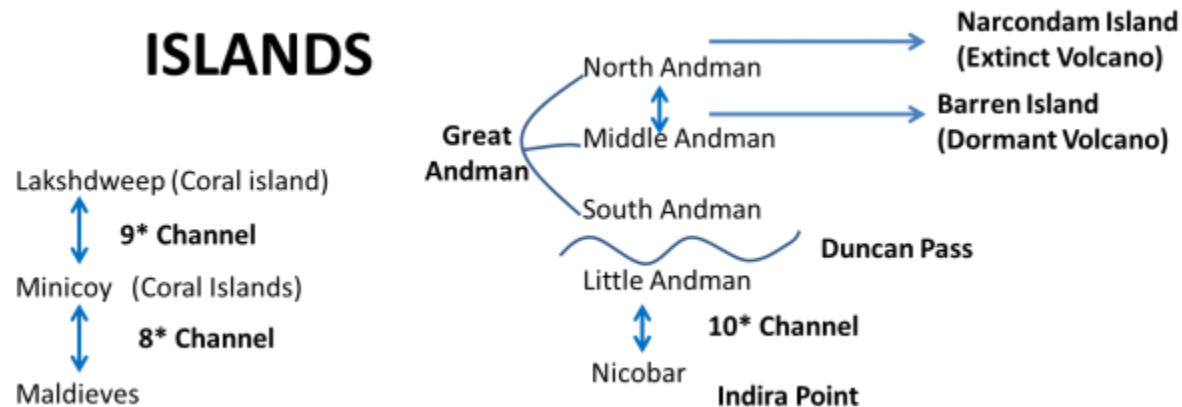
- The *Western Coastal Plains* is a thin strip of coastal plain 50 kilometres in width, much less than its eastern counterpart, between the west coast of India and the Western Ghats hills, which starts near the south of river Tapi
- The plains begin at Gujarat in the north and end at Kerala in the south including the states of Maharashtra, Goa and Karnataka
- The Gulf of Kutch and the Gulf of Khambat lie on the northern part
- Western coastal plane is mainly divided into following sections
 - Kathiawar Coast → Kutch to Daman (Tapti, Narmada, Sabarmati & Mahi river deposit huge load of sediments in the Gulf of Cambay & form estuaries)
 - Konkan Coast → Between Daman & Goa
 - Kannada Coast → Between Goa to Cannanore
 - Kanyakumari Coast → Between Cannanore to Cape Camorin
 - Malabar coast → Kannada Coast + Kanyakumari Coast



Eastern Coastal Plains

- Refer to a wide stretch of landmass of India, lying between the Eastern Ghats and the Bay of Bengal.
- These plains are wider and level as compared to the western coastal plains.
- It stretches from Tamil Nadu in the south to West Bengal in the north.
- Eastern coastal plane is mainly divided into following sections
 - Utkal coast → Deltaic plains of Ganga to Mahanadi delta (Famous Chilka lake is located in this plain)
 - Andhra Coast → Utkal plains to Pulicat lake (Contains deltas of Godavari & Krishna Rivers, & famous Kolleru lake)
 - Northern Circars → Utkal Coast + Andhra Coast (Between Mahanadi & Krishna)
 - Coromandal Coast → Between Krishna & Kanyakumari (Consist of Kaveri Delta)

The Islands



- Total 247 islands in India → 204 islands in Bay of Bengal and 43 in the Arabian Sea
- Few coral islands in the Gulf of Mannar also
- Andaman and Nicobar Islands in Bay of Bengal consist of hard volcanic rocks
- The middle Andaman and Nicobar Islands are the largest islands of India
- Lakshadweep islands in the Arabian Sea are formed by corals
- The southern – most point of India is in Nicobar Island, known as Indira Point
- Formerly Indira point was called Pygmalion Point, it is submerged now, after 2004 Tsunami