

UPSC PRELIMS

Geography

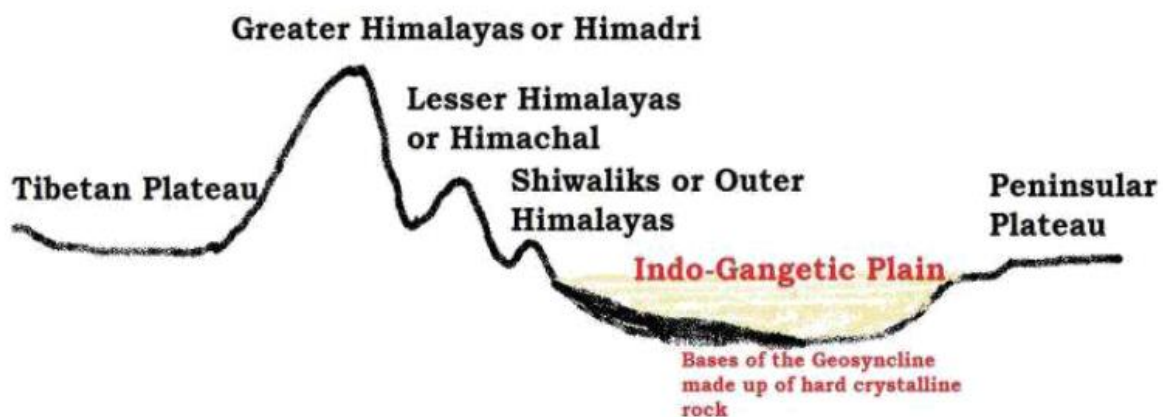
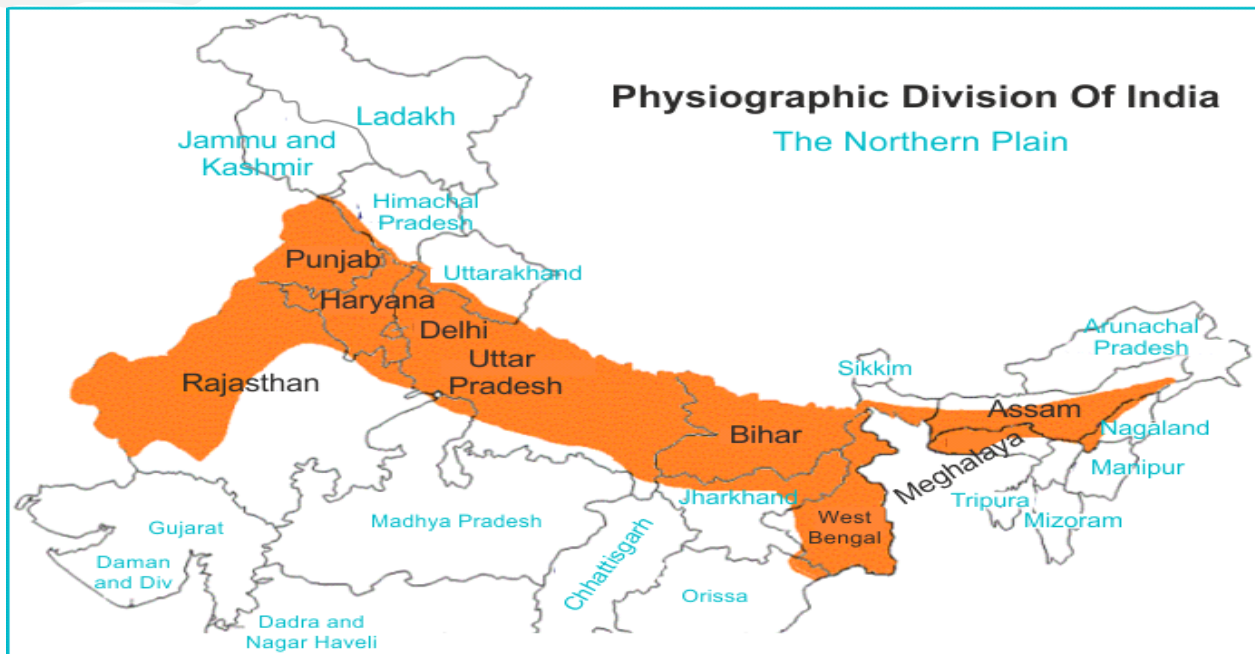


Sample topic · The Northern Plains

Northern Plains

The great Northern Plains of India are an **aggradation surface** of extraordinary degree formed after the Himalayas.

They are relatively of recent origin and are accepted to have formed by the filling up of a depression resulting from the elevation of the Himalayas, by **deposition of silt** brought by swift-flowing Himalayan rivers, started in Himalayas.



Elevation of the major physiographic divisions of India

Northern Plains

Development of Northern Plains

The formation of the Indo-Gangetic plain is firmly identified with the the formation of Himalayas.

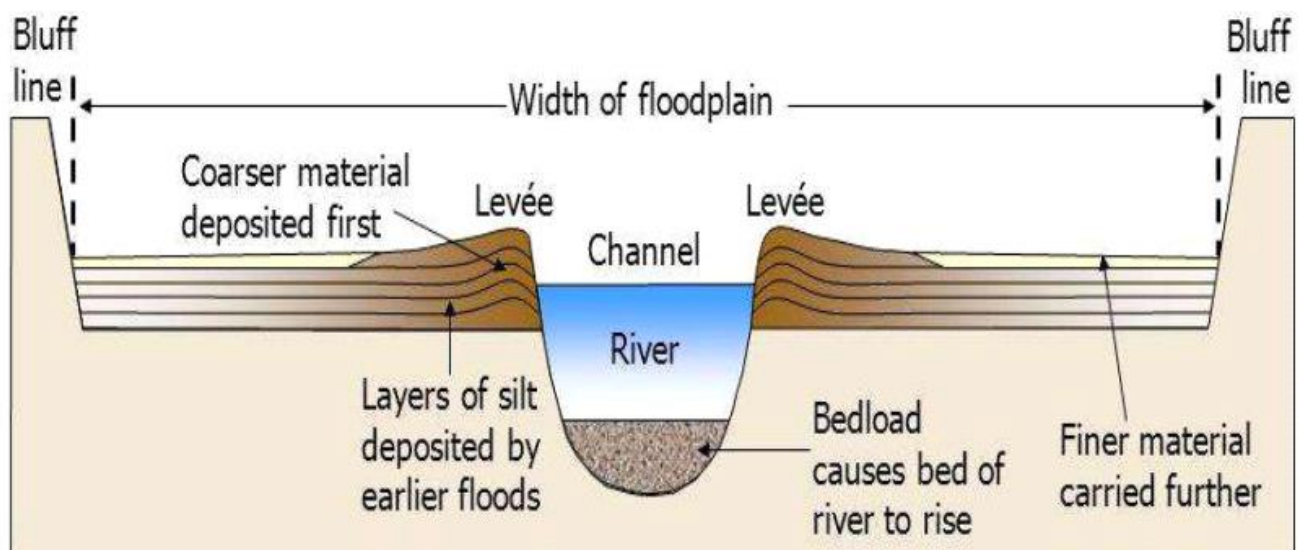
- Due to the uplift of the Himalayas in the Tethys Sea, the northern part of the Indian Peninsula got subsided and formed an enormous basin.
- That basin was loaded up with sediments from the rivers which originated from the mountains in the north and from the peninsula in the south.
- During recent times (since a few million years), depositional work of three major rivers viz., the Indus, the Ganga and the Brahmaputra have become transcendent.
- Consequently, this plain is also known as Indo Gangetic-Brahmaputra Plain

Highlights of Northern Plains

- The northern plain of India is shaped by three river systems, i.e. the Indus, the Ganga and the Brahmaputra; alongside their tributaries.
- Northern Plains are the biggest alluvial tract of the world.
- It extends for around 3,200 km from the mouth of the Indus to the mouth of the Ganga.
- The average width of these plains shifts in the range of 150 and 300 km. In general, the width of the northern plains increments from east to west (90-100km in Assam to about 500km in Punjab).
- The northern boundary is well marked by the Shiwaliks and the southern boundary is a wavy spotadic line along the northern edge of Peninsular India
- The western fringe is set apart by Sulaiman and Kirthar ranges.
- The thickness of the alluvium deposits also varies from place to place.
- The maximum depth of the alluvium up to the basement rocks is about 6,100m

Northern Plains

- Extreme horizontality of this tedious plain is its main feature
- Its normal elevation is about 200 m above mean sea level.
- The dreariness of the physical landscape is broken by the river bluffs, levees etc.
 - **Floodplain:** That part of a river valley, contiguous to the channel, over which a stream flows in times of a flood.
 - **Levee:** A raised bank flanking the channel of the river and remaining above the level of the flood plain.
 - **Bluff:** A river cut cliff or steep slant on the outside of a meander. A line of bluffs often denotes the edge of a previous floodplain.



Physiographic Division of Northern Plain

The Great North Indian plain is divided into following subdivisions on the basis of relief features:

- Bhabar Plains
- Tarai Tract
- Bhangar
- Khadar
- Delta Plains

Northern Plains

Bhabhar Belt

- It is a narrow, permeable, northernmost stretch of Indo-Gangetic plain
- It is around 8-16 km wide running in an east-west direction along the lower regions (alluvial fans) of the Shiwaliks
- They show a striking continuity from the Indus to the Teesta river
- Rivers descending from the Himalayas deposit their load along the lower regions in the form of alluvial fans
- These alluvial pebbly soils have combined to develop the bhabar belt
- The streams vanish once they come to the bhabar region in light of this porosity
- Subsequently, the region is set apart by dry river courses except in the rainy season
- The Bhabar belt is nearly limited in the east and broad in the west

Terai Belt

- Terai is an ill-drained, moist (damp) and thickly forested narrow tract to the south of Bhabar running parallel to it
- The Terai is around 15-30 km in width
- The underground streams of the Bhabar belt reappear in this belt.
- The Terai is more set apart in the eastern part than in the west on the grounds that the eastern parts get comparatively higher measure of precipitation
- The terai soils are silty and rich in nitrogen and organic matter but are inadequate in phosphate

Bhangar Belt

- The Bhangar is the older alluvium along the river beds forming terraces higher than the floodplain
- The terraces are regularly impregnated with calcareous solidifications (beds of lime nodules) known as 'Kankar'
- Bhangar contains fossils of creatures like rhinoceros, hippopotamus, elephants and so forth.
- The soil is of an increasingly clayey sythesis and is generally dark coloured.

Northern Plains

Khadar Belt

- The Khadar is made out of **newer alluvium** and forms the floodplains along the river banks.
- A new layer of alluvium is deposited by river flood every year
- This makes them the **most fertile soils of Ganges Plains**
- They are **sandy clays and loams**, drier and more leached and less calcareous.

