

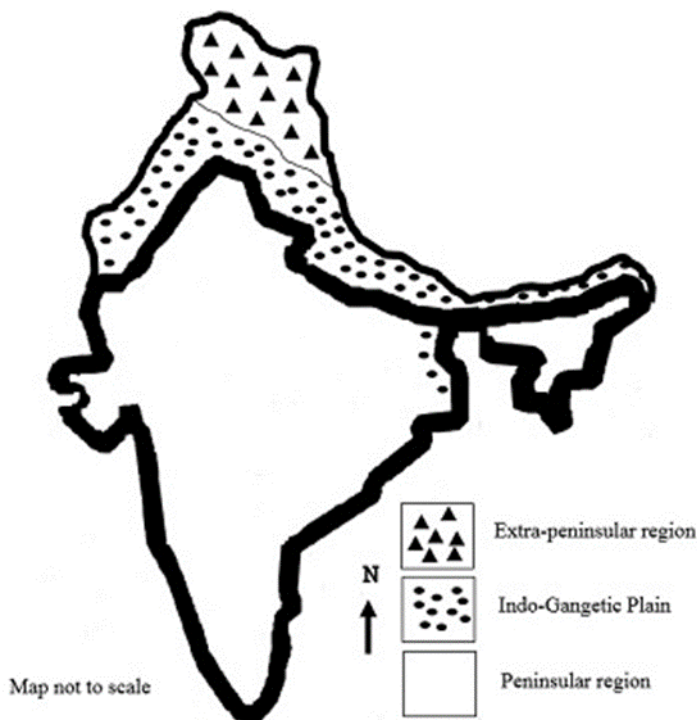
GEOLOGICAL REGIONS OF INDIA

Compiled by

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Geologically, India is divided into three regions –

1. The peninsular region- Meghalaya plateau in the north-east and the Kuchchh-Kathiawar region in the west. It is one of the oldest land masses of the earth and is dominated by open senile topography.
2. The extra peninsular region- the Himalayas and their eastern extensions including Andaman and Nicobar Islands. It presents the most youthful relief of the earth in the form of the Himalayas.
3. The Indo-Gangetic plain- between peninsular and extra-peninsular region. The alluvial filled Indo-Gangetic plain presents flat, featureless and monotonous topography.



Peninsular plateau:

- The south- Indian craton comprises the ancient portion of India.

- The cratonic area consists of a pre- cambrian shield and a sedimentary cover.
- The shield area consists of a 10-12 km thick succession of rocks, formed more than 2700 million years ago.
- The continuity of peninsular plateau is broken only by the great fault Rajmahal-garo gap formed by down warping in which the ganges and its associated tributaries have deposited enormous thickness of sediment.

Extra peninsular plateau:

- In the extra-peninsular region the various sections of lesser himalaya and tethyan zones contain pre-cambrian rocks.

Formation of Indian geological units:

- During all these geological period the Indian shield was nowhere near where it is today. It formed part of a single supercontinent with Antarctica, Australia, Africa and South America as the southern portion, the Gondwanaland and the northern portion named as Angaraland, separated by Tethys sea.
- The rivers of Angaraland had brought enough sediment in the geosyncline. So, when the Deccan shield collided against it, it folded the sediments to form one of the loftiest mountain chains of the world.
- In palaeozoic era, the first upheaval took place, which folded the Aravallis.
- A great volcanic eruption spread over about 5 lakh sq. km. having a thickness of 600-1500 m. This came to be known as Deccan traps.

The Plains:

- The great plains of India occupy the intervening portion between the northern mountain chains and the Deccan shield region.
- The plain was formed as a result of filling of marine depression by detrital material.
- In this trough or foredeep the youthful rivers brought enormous alluvium to fill it gradually.

D.R. Khullar, India A Comprehensive Geography