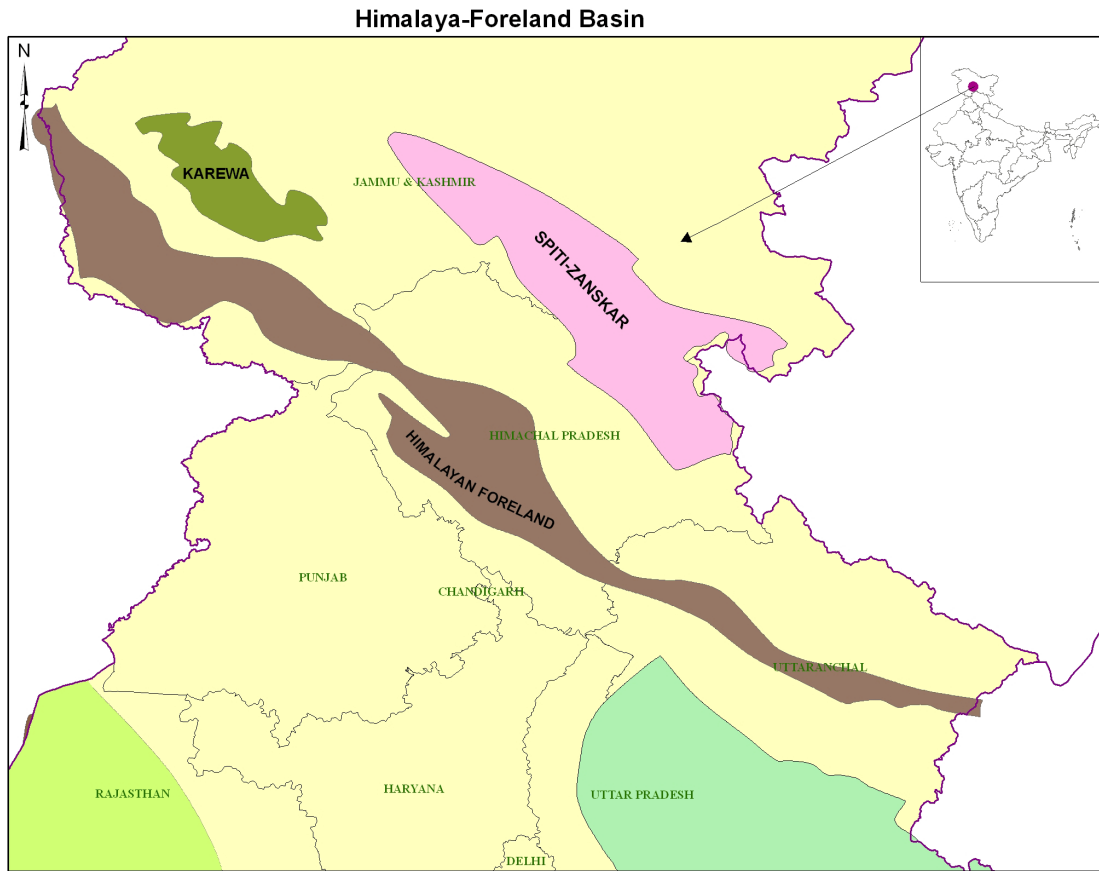
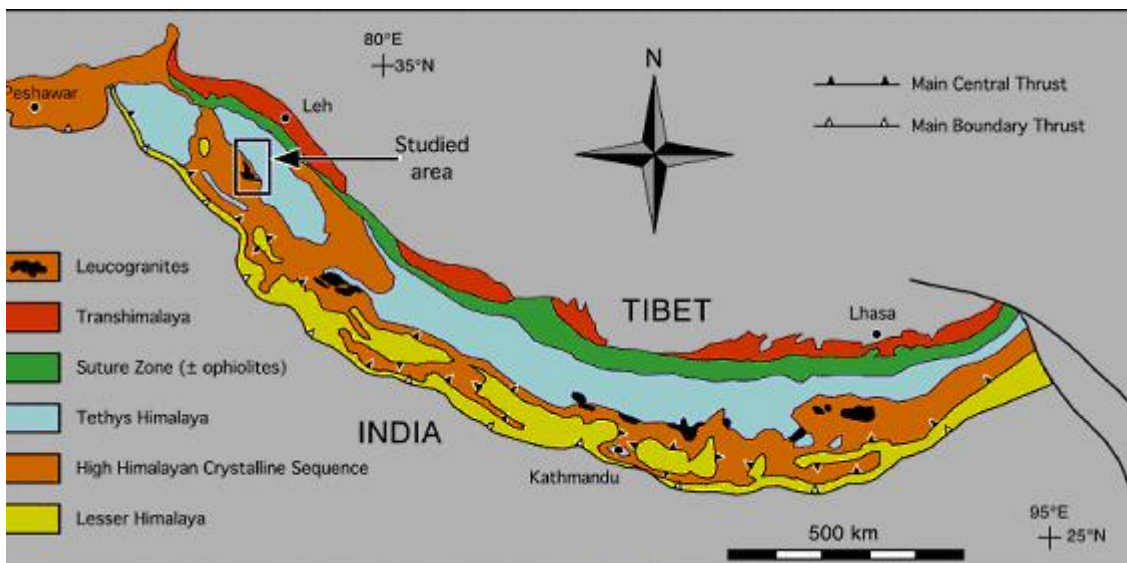


Introduction:



The Himalayan Mountain Chain extending over a distance of more than 2000 km is traditionally subdivided into the following

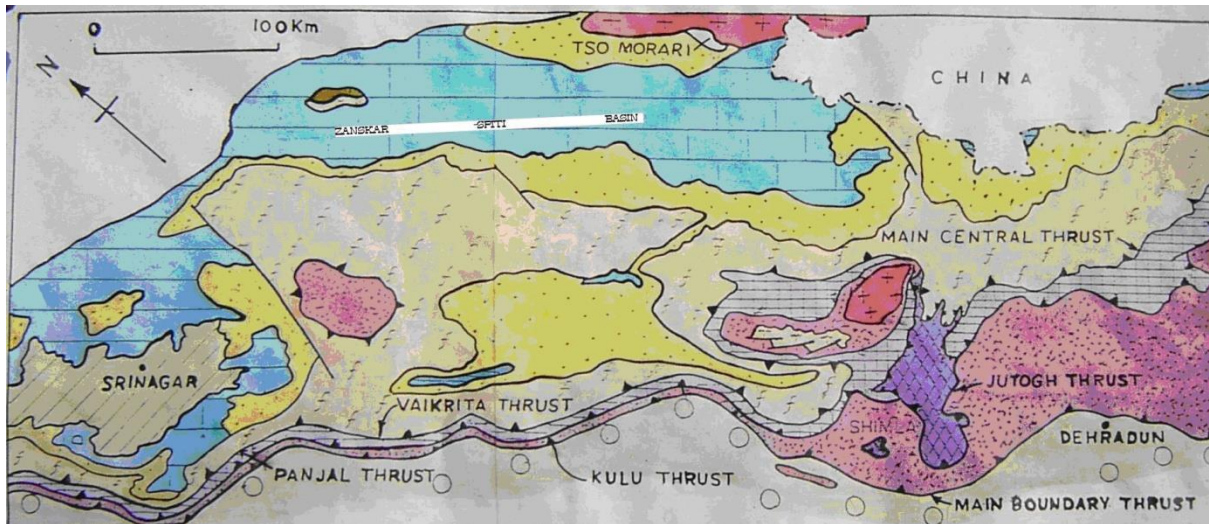


1. The Siwalik Foothills of the Sub-Himalaya constituted of the Neogene–Quaternary molassic deposits of the Siwalik Group.
2. The Lesser Himalaya exposing from the outer to the inner parts
 - the Palaeogene sediments juxtaposed against the Siwalik Group in south along the Main Boundary Fault and against the Proterozoic rocks in north along the Main Boundary Thrust,
 - isolated Early Cambrian, Early Permian and Late Cretaceous outliers over the Proterozoic rocks,
 - crystalline thrust sheets and
 - windows of Proterozoic/ Palaeogene rocks within the crystalline/Proterozoic rocks along the antiformal valleys.
3. The Higher Himalaya consisting of the crystalline thrust sheets with the Vaikrita Thrust Sheet (=Main Central Thrust, Bhargava and Bassi, 1994) occupying the highest tectonic level. The Vaikrita Thrust Sheet known by different names (e.g. Salkhala in Kashmir, Thimphu in Bhutan) extends through out the Himalaya.
4. The Tethyan Himalaya made up of the Neoproterozoic–Eocene succession resting as detached synclinoria over the Vaikrita Crystalline or its strike equivalents, commonly and loosely termed as Central Crystallines. The main synclinoria often referred to as basins, from west to east are:
 - Kashmir,
 - Chamba–Bhadarwah–Tandi,
 - Spiti–Zaskar,
 - Kinnaur–Kumaon,
 - Nepal,
 - Sikkim–Bhutan and
 - Arunachal.
5. The Indus–Tsangpo Suture Zone representing rocks associated with the Suture between the Indian and Asian plates.

Synclinorium:.

The Spiti Valley, located north of the Pir Panjal Range, exposes an excellent section of Neoproterozoic–Cretaceous rocks in the Tethyan Himalaya of Himachal Pradesh. The Spiti Tethyan rocks towards NW through the Lahaul Valley extend into the Zaskar area where Paleocene–Eocene sequences are also preserved. The Spiti–Zaskar synclinorium approximately occupies an area of 22,000 sq km.

[Location of the Spiti–Zaskar Basin with respect to other belts](#)



The principal aim of the present study is to assess the hydrocarbon potential of the Paleozoic and Mesozoic sequences preserved in the Spiti-Zaskar Synclinorium. To achieve this objective the lithostratigraphy, litho- and bio-facies, age, environment of deposition and structure of these rocks have been synthesized and reconstructed with the help of published and some unpublished data.