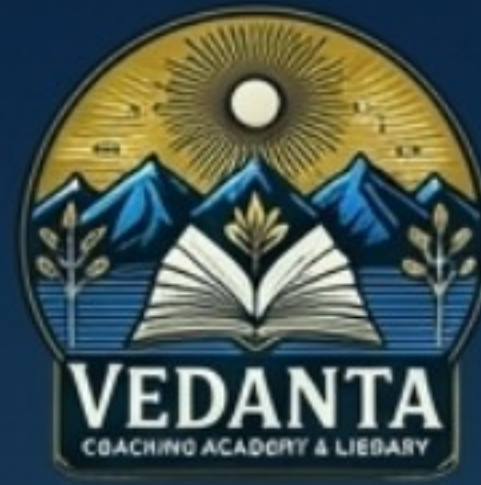
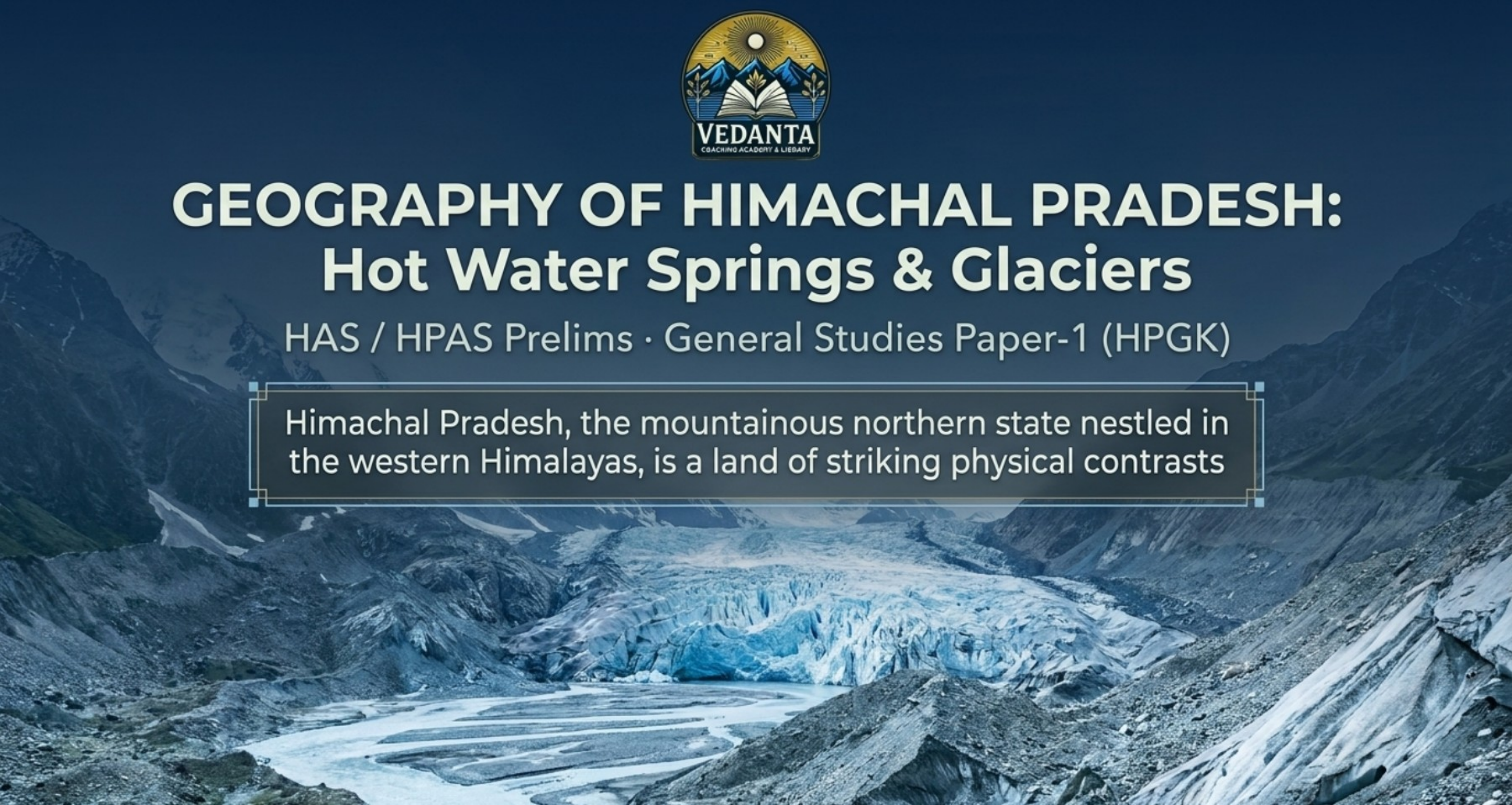


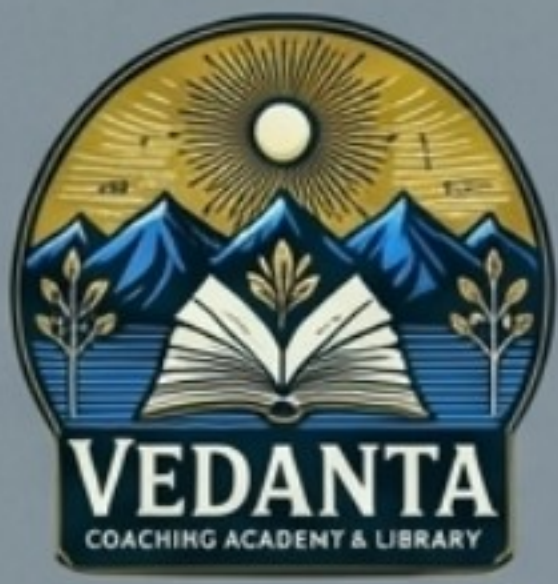


GEOGRAPHY OF HIMACHAL PRADESH: Hot Water Springs & Glaciers

HAS / HPAS Prelims · General Studies Paper-1 (HPGK)

Himachal Pradesh, the mountainous northern state nestled in the western Himalayas, is a land of striking physical contrasts



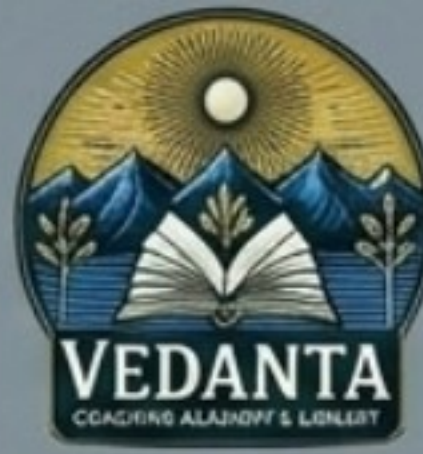


Introduction to Natural Springs

Himachal is rich in natural springs – ordinary, mineral and thermal – with hot springs especially valued for their medicinal properties.

Tattapani: A sulphur spring in Mandi with reputed healing qualities (partly submerged by the Kol Dam project); 51 km from Shimla and 29 km from Naldera, on the right bank of the Satluj at 656 m.





Hot Springs of Kullu & Parbati Valley



Manikaran

Many springs over 1.3 km along the Parbati in Kullu (45 km from Kullu), with very high temperatures and natural radioactivity – hot enough to cook food – reputedly curing pneumonia, gout, bronchitis, rheumatism and muscular pains.



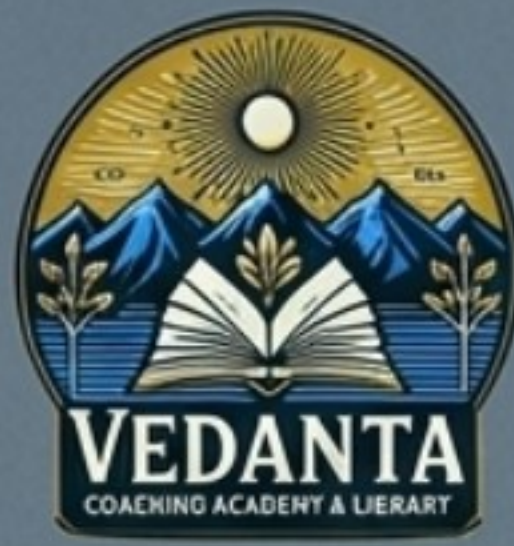
Kasol

1 km upstream of Manikaran and 32 km from Bhunter (site of Himachal's first airport); cooler than Manikaran, opposite Nikhhan village, 42 km from Kullu on the Parbati's bank.



Khirganga

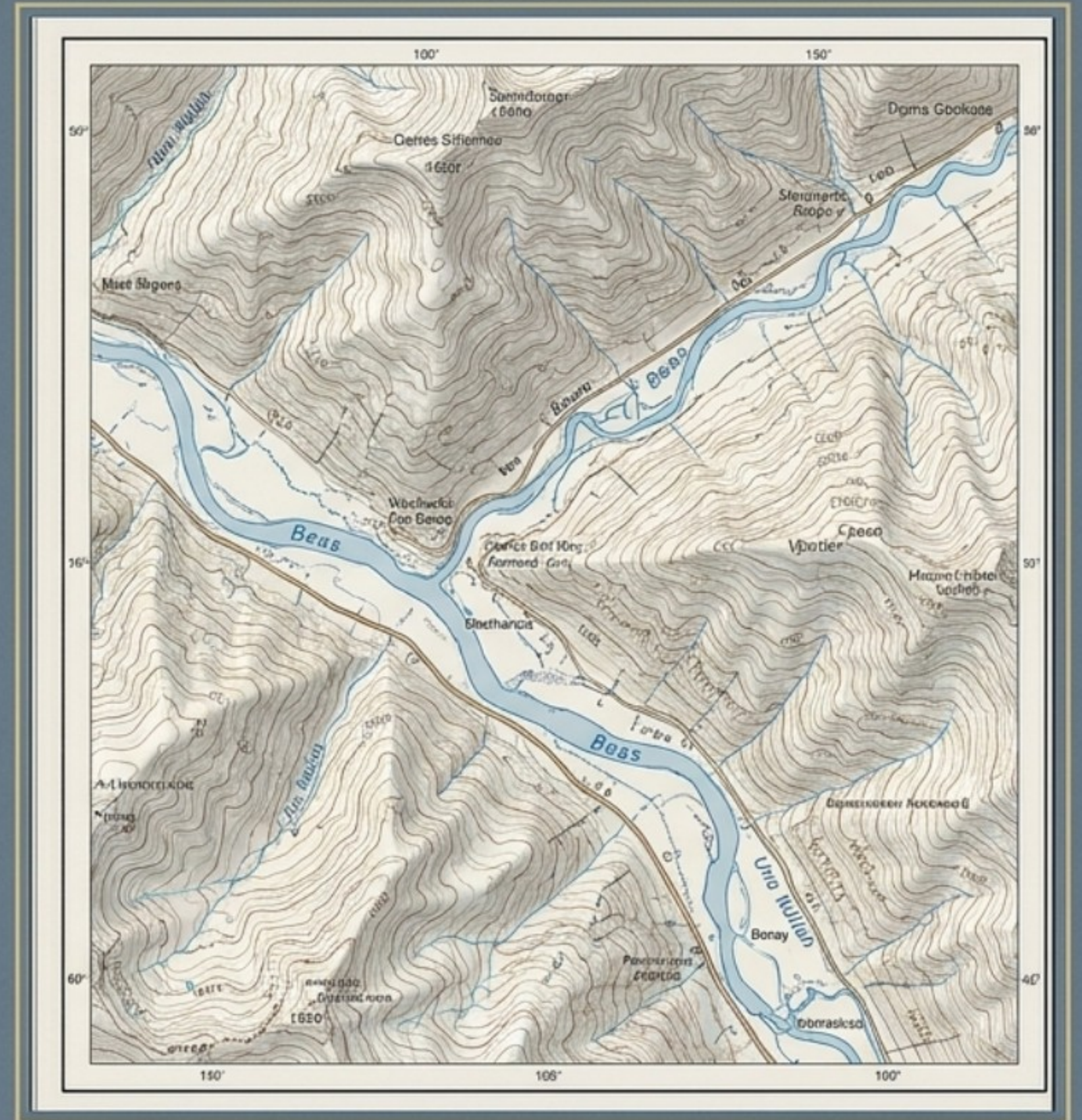
26 km from Kullu and 10 km from Pulga; hot springs, cooler than Manikaran.

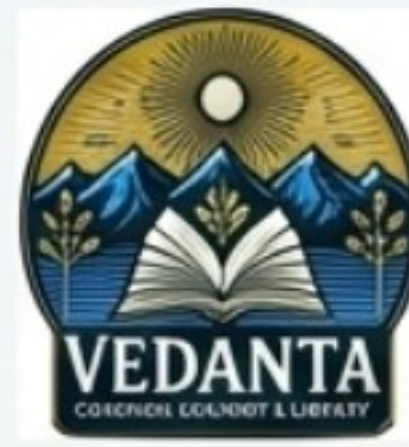


Thermal Springs of Beas & Kinnaur

Vashisht: 3 km from Manali on the left bank of the Beas; springs emerge through granitic gneisses; famous for the temples of Vashisht Rishi and Lord Rama.

Jeori: Hot springs in Kinnaur, on the right bank of the Unu Nallah beyond Rampur-Bushahr on the Hindustan-Tibet Road.



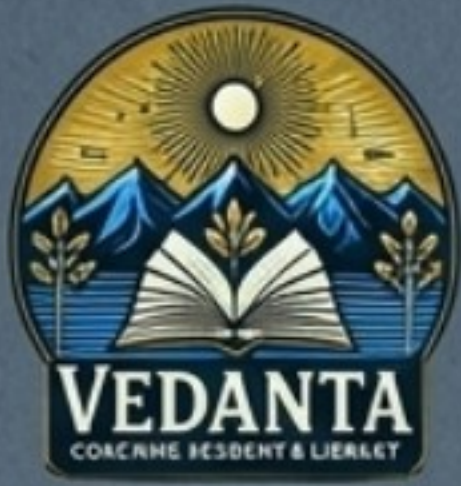


Other Notable Kunds, Falls & Cold Springs

Other notable kunds and falls include those of the Kangra Valley (Kopra, Jawalamukhi, Lunani, Salol) and the Satdhara spring near Panjpulla; the waterfalls Rahla (Kullu), Dhanchho (Chamba), Chadwick (Shimla) and Bhagsunag (Kangra); and Kalika Kund in Chamba. The Kopra and Jawalamukhi springs were discovered in 1854, and the Salol spring was identified by Captain A. Colman.

Cold Springs

Satdhara – Chamba (near Panjkula); Kopra – Hamirpur; Salol – Kangra (discovered by Captain A. Colman); Luhand – Bilaspur.



Glaciers ('Shigri') – Concentration Zones

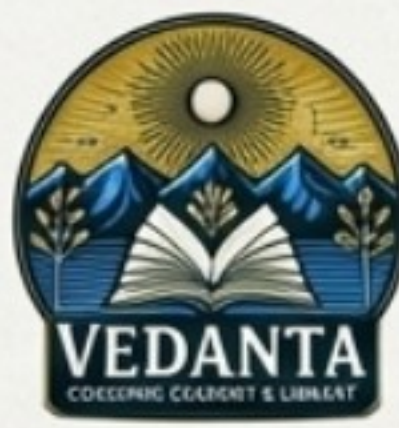
In the local dialect, glaciers are called 'Shigri'. There are four major glacier concentration zones:

(1) the Bara Bhangal region – at the meeting of the Kullu, Kangra, Chamba and Lahaul valleys – feeding the Ravi;

(2) the tri-junction of Kullu, Spiti and Kinnaur, supplying tributaries of both the Beas and Satluj;

(3) the Lahaul, Spiti and Kullu valleys, feeding the Beas system;

and (4) the Chandra Valley of Lahaul, which hosts the Bara Shigri Glacier – the largest in the state (~3 km wide, ~25 km long) – feeding the Chenab.



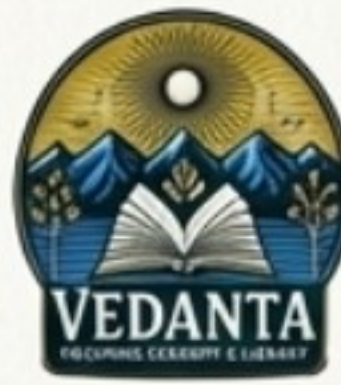
Major Glaciers: Bara Shigri & Bhadal



Bara Shigri Glacier: The largest glacier in Himachal (Chandra Valley). In 1936 it flooded the Chandra Valley, forming a lake (associated with Chandertal). First traversed by an all-women team in 1956, then Stephenson (1958) and (1958) and Major Baljit Singh (1970); studied by the GSI in 1957 (G.N. Dutt and F. Ahmed).



Bhadal Glacier: On the south-western Pir Panjal slopes in the Bara Bhangal region of Kangra; source of the Bhadal River, a major tributary of the Ravi.



Major Glaciers: Chandra, Bhaga & Chandra Nahan



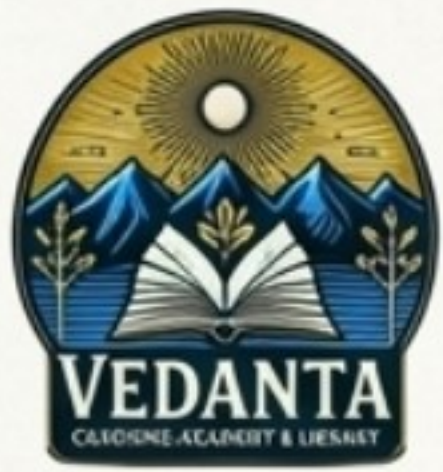
Chandra Glacier: On the main Himalayan slopes in Lahaul-Spiti; forms Chanderlal lake; originally separated from Bara Shigri; feeds the Chandra.



Bhaga Glacier: On the main Himalayan range in Lahaul; the Bhaga river rises here – a principal headwater of the Chenab.



Chandra Nahan Glacier: On the south-eastern main Himalayan slopes north-west of Rohru; the primary source of the Pabbar (a Tons tributary, Yamuna system).



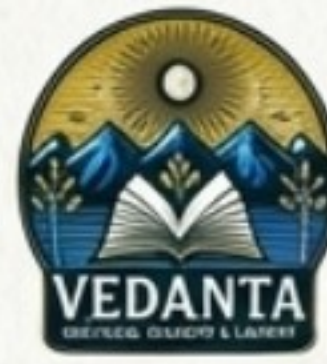
Major Glaciers: The Lady of Keylong & Gora



The Lady of Keylong Glacier: At ~6,061 m, visible from Keylong (HQ of Lahaul); resembles a sleeping lady in snow; named over a century ago by Lady Elashainghday during the British Raj.



Gora Glacier: On the south-facing main Himalayan slopes; shows clear recession from a negative mass balance – a sign of climate change.



Major Glaciers: Mukkila & Sonapani

Mukkila Glacier: In the Bhaga Valley at ~6,478 m; one of the highest glaciers in the state, part of the Lahaul high-altitude glacial system.



Sonapani Glacier: About 5.5 km from the Kulti Nala confluence; surveyed in 1906 (Walker and Pascoe) and 1957 (Kurion and Munshi, GSI); visible from Rohtang pass.



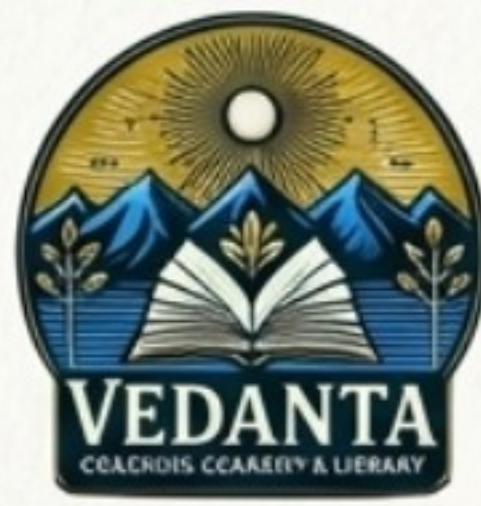


Major Glaciers: Dudhoh, Parbati & Perad

Dudhoh & Parbati Glacier: Prominent Kullu glaciers, each ~15 km long; major feeders of the Parvati River (a Beas tributary); among the longest in the state.

Perad Glacier: A small, accessible glacier near Putiruni ('broken rock'); noted for a naturally formed cave nearby.





Major Glaciers: Miyar & Beas Kund



Miyar Glacier: In the Lahaul region, ~12 km long; the primary source of the Miyar River, in the north-west Lahaul Valley near the Indo-Tibetan border; in the Miyar 'Valley of Flowers of Lahaul'.

Beas Kund Glacier: A glacial source of the Beas on the southern Pir Panjal slopes near Rohtang; this glacier-fed lake is the primary origin of the Beas.

