

GEOGRAPHY OF HIMACHAL PRADESH

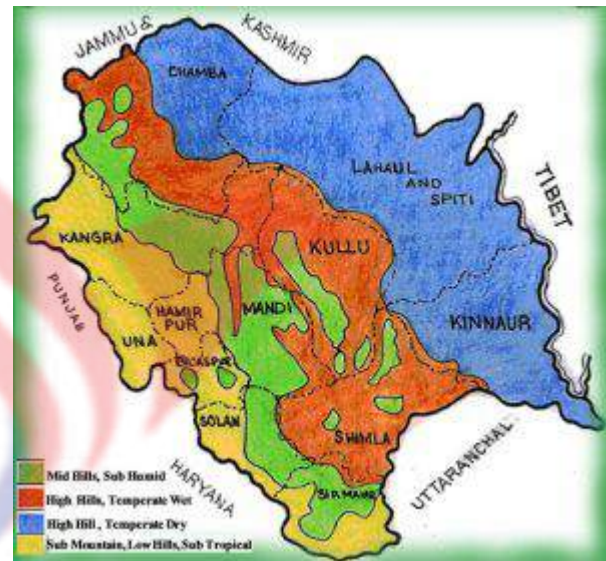




- Himachal Pradesh is situated between 30 degree 22' 40" to 33 degree 12' 20" north latitudes and 75 degree 45' 55" to 79 degree 04' 20" east longitudes.
- Himachal Pradesh is predominantly a mountainous State located in North – West India. It shares an international border with China.
- The altitude in the Pradesh, a wholly mountainous region in the lap of Himalayas, ranges from 350 metres to 6975 metres above mean sea level.
- It is surrounded by Jammu and Kashmir in the north, Tibet on north east, Uttaranchal in the east/south east; Haryana in south and Punjab in south west/west.
- The State has highly dissected mountain ranges interspersed with deep gorges and valleys.
- It is also characterized with diverse climate that varies from semi tropical in lower hills, to semi arctic in the cold deserts areas of Spiti and Kinnaur.
- Altitude ranges from 350 meters to 6975 meters above mean sea level.
- The state is compact in shape and almost wholly mountainous, with altitude varying from 300 m in plains of Kangra and Una to nearly 7,000 m in Central Himalayan range of Lahaul and Spiti.
- It covers a geographical area of 55,673 km² , which is about 1.69 % of India's total area.

Geology and Geomorphology:-

- Himachal Pradesh with its complex geological structures presents a complicated topography with intricate mosaic of mountains ranges, hills and valleys.
- Composed of recent Alluvium, Shiwalik hills are made up of rocks such as sandstone, shale and clay that came into existence during the Eocene, Miocene and Pliocene period.
- The central part that extends from Chamba district in the north to Shimla district in the south is mainly represented by Jatog group of rocks which originated in middle Proterozoic period.
- In the north eastern portion unclassified Granites borders the central part in between Kullu, eastern Shimla, LahaulSpiti and parts of Kinnaur district.
- The eastern greater Himalaya presents the Triassic formation which is found in Kaza tehsil of LahaulSpiti district.
- The oldest rocks are Granites found at Jeori-Wangtu and Bandel near Largi in Kullu district.
- These granites date back to a stage of the crust at a time when India was located 8000 Km southwest of its present position.



CLIMATIC REGIONS OF HIMACHAL PRADESH

Physiographically, the State can be divided into five zones – viz.

1. Wet Sub-temperate zone
2. Humid Sub-temperate zone
3. Dry temperate-alpine High lands
4. Humid Sub-tropical zone
5. Sub-Humid Sub-tropical zone

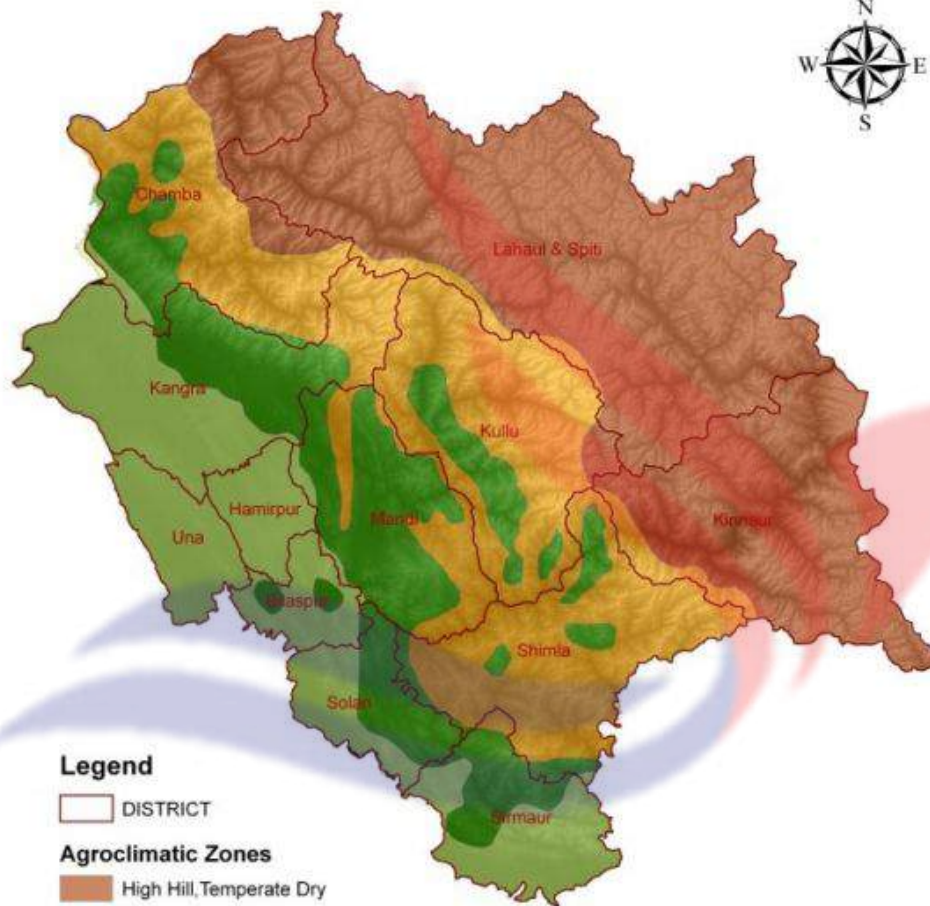
Wet Sub-temperate zone comprises Palampur and Dharamsala of Kangra District, Jogindernagar area of Mandi district and Dalhousie area of Chamba district.

Humid Sub-temperate zone comprises the districts of Kullu, Shimla, parts of Mandi, Solan, Chamba, Kangra, and Sirmour.

Dry temperate-Alpine High lands include major parts of Lahaul-Spiti, Pangi and Kinnaur.

Humid Sub-tropical zone consists of district Sirmour, Bhattiyat valley of district Chamba, Nalagarh area of district Solan, Dehragopipur and Nurpur areas of district Kangra.

Sub-humid tropical zone Sirmour and Indora area of district Kangra.



Legend

 DISTRICT

Agroclimatic Zones

-  High Hill, Temperate Dry
-  High Hills, Temperate Wet
-  Mid Hills, Sub Humid
-  Sub Mountain, Low Hills, Sub Tropical

GLACIERS OF HIMACHAL PRADESH

The local name of Glaciers in Himachal Pradesh is Shigri

A. Bara Shigri-

- largest glacier in Himachal Pradesh

- it feeds the river Chenab

- it is said that glacier formed Chander tal lake by causing a major Havoc in chandra valley in 1936

B. Chota shigri-east of Rohtang pass

C. Gye Phang–

- known as Manimahesh of Lahaul

- its shape looks like that of Matterhorn of Switzerland

D. Chandra glacier-

-in lahaul spiti

-it has been separated from Bara Shigri glacier

-it is source of Chandra tal lake from which Chandra river originates

-this lake(2.5km) is also known as lake of moon

E. Kulti-near koksar

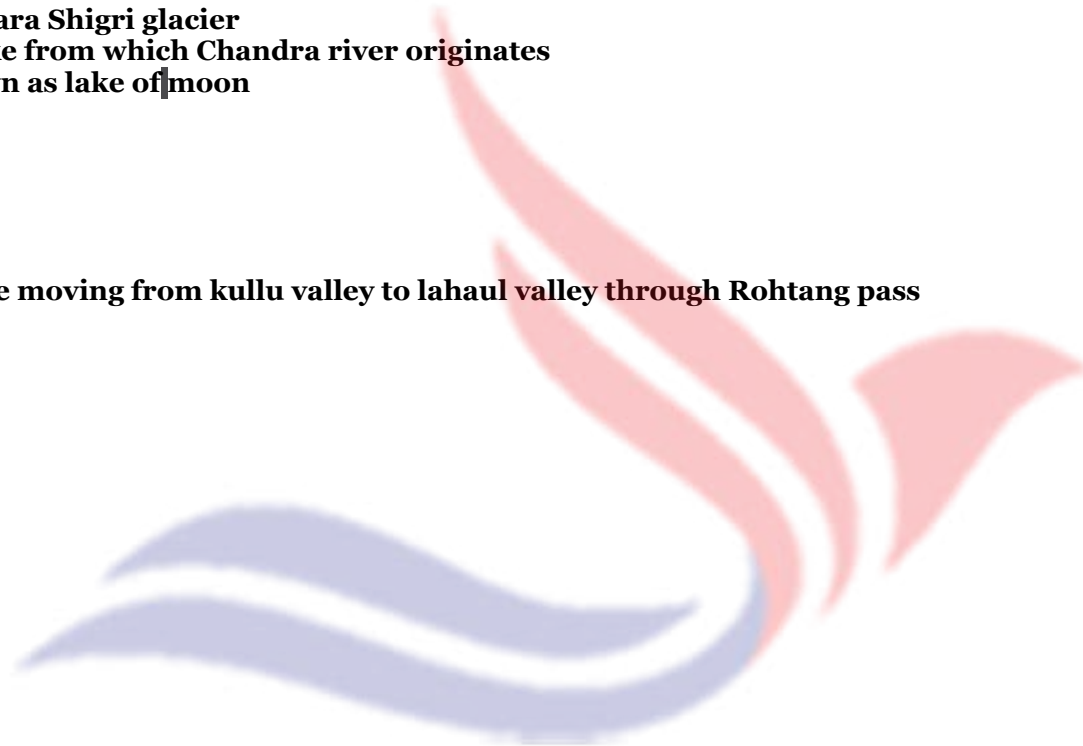
-first sight of the visitors while moving from kullu valley to lahaul valley through Rohtang pass

F. Milang glacier-lahaul spiti

G. Gangtang

-in western border of Lahal

-drains into Shahsha nullah



H. Bhaga glacier-

-on the slopes of Great himalyan ranges in Himachal pradesh -source of Bhaga river.

I. Lady of keylong-

-name was given by Lady Elashainghday about a century ago during british ruling

J. Sonapani-

-surveyed by walker and pascoe in 1906 and kurion and munshi in 1957

K. perad-

-within 1 km of putiruni

-perad in local dialect means broken rock

L. Mukkila and miyar

M. Dudhon and parvati–

-impart water of parvati river in kullu Beas kund-near Rohtang in manali

-vyas rishi performed meditation here during Mahabharata

N. Malana glacier-kullu

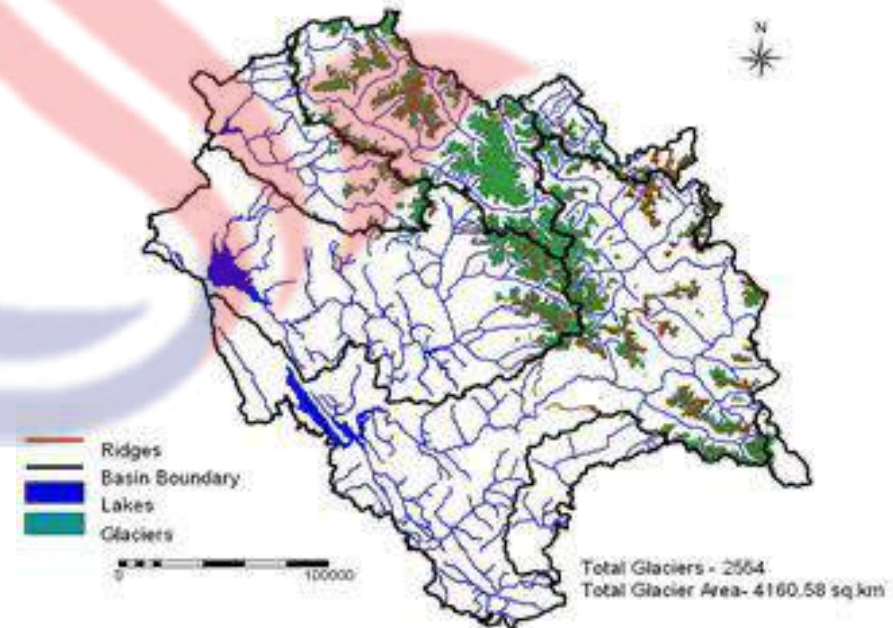
-south of indrasan and deotibba peak

-this valley is referred to as the Shangri la


O. Bhadal Glacier-

-south west of pir pnjal in bara banghal of kangra

-it feeds the river Bhadal(tributary of ravi)



OTHER GLACIERS



Glaciers in Lahaul-Spiti: Bara Shigri, Chhota Shigri, Pacha, Kulti, Shipting, Ding Karmo, Tapn, Gyephang (also known as Manimahesh of Lahaul), Shili, Shamundri, Bolunag, Taragiri, Chandra, Bhaga, Kugti, Lainghar, Doksha, Nilkanth, Milang, Mukkila or Mukkiya, Miyar, Lady of Keylong, Gangtang, Perad, Sonapani, Gora, Takdung, Manthora, Karpat, Ulthampu and Tharong.

Glaciers in Kangra: Bhadal

Glaciers in Kullu: Parvati, Dudhon and Beas Kund

Glaciers in Shimla: Chandra Nahan



PASSES OF HIMACHAL PRADESH

1.Jalori Pass

Jalori Pass is a high mountain pass connecting Banjar with Anni in Kullu district of Himachal Pradesh

2.Baralacha La –

It is known the “pass with cross roads on summit” and the roads from Zaskar, Ladakh, Spiti and Lahaul meet on the top of it.

-It connect Lahul and Spiti with Ladakh of Jammu and Kashmir on Manali-Leh national highway. This pass is once consider one of the most high altitude motorable pass in the world.

3. Hamta Pass –

Hamta Pass lies at an altitude of 4270 meters on the Pir Panjal range in the Himalayas. This pass connect Kullu and Lahul. During descending one meets the historic cave ‘Arjun Gufa’ at Bhanara

4.Borasu Pass –

-Borasu Pass at an altitude of 5450 meters is a high mountain pass in the Himalaya Mountains connecting Uttarakhand and Himachal Pradesh.

5.Rupin Pass –

Rupin Pass is a famous trekking pass connecting Sangla Valley of Himachal Pradesh with Dhaula in Uttrakhand at an altitude of 4650 meters.

6.Chanderkhani Pass –

Chanderkhani pass connect Naggar with famous Malana village in Kullu district of Himachal Pradesh at a height of 3660 meters.

7.Chanshal Pass –

Chanshal Pass connect Rohru with Dodra Kwar of Shimla district of Himachal Pradesh. Chanshal Pass elevation is 3750 meters, and seasonable road connecting Rohru and Dodra Kwar.

8.Indrahar Pass –

Indrahar Pass is a mountain pass in dhauladhar range of Himalayas connecting Kangra and Chamba district, its famous trekking destination in summer.

9.Saach Pass –

Saach Pass is a 4,420 metre high mountain pass in Chamba District, Himachal Pradesh, India on the Pir Panjal Range of the Himalayas. It connects the Chamba valley with the Pangni valleys of Himachal Pradesh.

10.Rohtang Pass

-Rohtang is a famous Pass across the Pir Panjal range on the National Highway to Leh being the world's second highest road point

The first Englishman to reach the Rohtang Pass was Moorecraft who called it Ritanka Jot

He was followed by a second expedition undertaken

by Dr. J.G. Gerard, Lord Elgin the then Governor

General crossed it twice on the same day in 1863.

11. Shipki La –

Shipki La is a mountain pass and border post with a dozen buildings of significant size on the India-China border. It is located in Kinnaur district in the state of Himachal Pradesh, India, and Tibet, China. The pass is one of India's border posts for trade with Tibet. The pass is close to town of Khab.

12. Kunjum Pass

-Kunjum Pass provides the main approach to Spiti from Lahaul. The Spiti area is separated by the great/kunjum Range from where the Spiti river originates. This Pass is situated at 60 km from Gramphoo towards Kaza on the Gramphoo-Kaza-Sumdo road.

Shigri peak in all its grandeur is seen right in front from kunjum pass.

-Local people have built a Goddess Durga temple on the Pass now. For crossing, it closes earlier and opens later than Rohtang.

-/Located at 4520 mts elevation.

13. Manirang Pass – Lahaul Spiti

14. Debsa Pass –

-Debsa Pass is a 5360 metre high (17590 ft) mountain pass in the Himalaya mountains between the Kullu and Spiti Districts of Himachal Pradesh, India.

15. Pin Parbati Pass –

-Pin Parbati Pass connects Parvati Valley of Kullu with Pin Valley of Lahul and Spiti district of Himachal Pradesh. Pin Parbati Pass is at 5319 metre high mountain pass.

16.Darati Pass

– It is situated at an elevation of 4720 meters in the Chamba region. From Chamba one has to move to Alyas (4300 mts) via Bhango (2450mts).

– Here starts the steep climb of the Pass. To descend over grassy and moraine slopes to Tandi (2650 mts) one has to come down further to Udaipur which is known for Triloknath temple.

17.Takling La Takling La or Parana Pass is famous trade route of pass connecting Spiti valley with Ladakh at an altitude of 5575 metre high mountain.

18.Shinghor Pass

– This Pass too is approached from Alyas, lying beyond Dharamshala at an elevation of about 4310

mts. The route is very steep and waterless.

19.Tempola Pass

– It is situated in the district of Lahaul and Spiti. One

has to walk along Yochi nullah to the base of this

pass.

-To descend one has to pass by Khoksar village (3140

mts). From Khoksar either return to Keylong or to Spiti via Kunzum Pass or may go to Manali via Rohtang

Pass.

20.Waru Pass

– It is between Dharamshala and Chamba at an

elevation of about 3870 mts

– It is very windy, rough and stiff Pass however many

beautiful peaks are visible from its top.

LIST OF IMPORTANT PASSES

1. Basodan Chamba—Bhattiyat
2. Dulchi Mandi—Kullu
3. Bhubu Joginder Nagar—Kullu
4. Padri Chamba—Jammu
5. Jalori Inner & Outer Seraj in Kullu
6. Chauri Chamba—Kangra
7. Rashol Jot – Kullu
8. Pajanund Galu Mandi—Kullu
9. Khauli Galu Kullu
10. Jalsu Ka Jot Kangra—Chamba
11. Chandarkhani Galu Kullu
12. Tainti Galu Kullu
13. Baleni Jot Kangra—Chamba
14. Gharhu Jot Kullu
15. Sari Galu Kullu-Kangra
16. Waru Pass Kangra-Chamba
17. Shibaling Pass Kinnaur
18. Rohtang Pass Kullu-Lahaul
19. Bherianga Pass Kullu-Kangra
20. Hamtah Jot Pass Pir Panjal-Kullu-Spiti
21. Singoor Pass Kangra-Bharmaur
22. Indrahar Pass Kangra-Bharmaur
23. Tori Jot Kangra-Chamba
24. Sach Pass Chamba-Pangi
25. Ranjcha Pass Lahaul-Spiti
26. Shipkila Lahaul-Spiti
27. Kunzam La Lahaul-Spiti
28. Shi Jot Kullu
29. Rangchi Galu Kullu
30. Tamsar Pass Kangra-Bara Bangahal (Dhauladhar Range)

31. Shinka Pass Kinnaur -Gharwal
32. Burua Pass (Buran Ghati) Kinnaur-Gharwal
33. Rupin Ghati Kinnaur-Gharwal
34. Talang Pass Kangra-Chamba
35. Kathikukri Kullu-Kangra
36. Gairu Jot Kangra
37. Drati Pass Chamba-Pangi
38. Kalicho Lahaul-Bharmour
39. Khidala Galu Chamba
40. Nikora Pass Kangra-Bharmour
41. Animal Pass Kullu
42. Manali Pass Manali-Kangra
43. Bara Lachala Pangi-Rang, Lahaul, Bharmour
44. Tempo La Lahaul-Spiti
45. Chabia Pass Pangi Range-Lahaul, Bharmaur
46. Mulari Jot Lahaul
47. Kugti Pass Lahaul-Bharmaur
48. Shipting Bharmaur-Lahaul
49. Taintu Ka Jot Kullu-Kangra
50. Sara Umga Pass Kullu-Spiti
51. Shakarof Lahaul-Spiti

52. Asha Gali Kangra-Lahaul-Spiti
53. Nalgaon Pass Kinnaur-Gharwal
54. Duggi Jot Bharmour-Lahaul
55. Kamilaga Pass Kinnaur Gharwal
56. Makori Jot Kangra
57. Lamkhaga Pass Kinnaur-Gharwal
58. Charang Pass Kinnaur-Gharwal
59. Pin Parbati Kullu-Spiti
60. Borsa Pass Kinnaur-Gharwal
61. Laluni Jot Lahaul-Spiti
62. Chobu Pass Bharmour-Lahaul-Spiti



SPRINGS & WATERFALLS IN HIMACHAL PRADESH

Springs

A spring is a natural flow of ground water. A spring is the result of an aquifer being filled to the point that the water overflows onto the land surface

Himachal Pradesh has several springs that are ideal for naturally heated, mineral-rich thermal baths. Most of the springs in HP are located in Satluj and Beas valley.

Generally there are three types of springs observed in HP:

- 1) **Ordinary springs:** Temporary or permanent passing underground water to the surface.
- 2) **Mineral water spring:** it has mineral dissolved in it.
- 3) **Hot water spring:** Quite popular in HP for their medicinal properties.

1) Tatta pani:

- In mandi ,it is 29 Km from Naldera located on the right bank of Satluj.
- This is **natural sulphur spring with curative power for** various kinds of bodily and imaginative ailments.
- Water level of spring rises with water level of the River.
- Now a substantial part of this spring has submerged in **the kol dam project.**



2) Mani Karan:

- It is 45 KM from Kullu.
- Along the bank of **River Parbati**.
- Temperature is well above boiling point.

Why this spring named ManiKaran?

According to a legend once a while Maa Parbati was taking bath here, she lost her ear rings in the kund(Pond). When she told it to Lord Shiva, He became furious and looked at the water of the kund with great anger. With this thousands of ear rings flowed out from the boiling water and since then the water of the spring is boiling. The name Mani-karan also means ear rings.

There is no sulphur or iron content in the water but it is said to be a radioactive spring.

The water is so hot that pulse, rice etc can be boiled and cooked in it.

People come here for the cure of their ailments such as pneumonia, muscular pain etc.

It is famous for a Hindu temple and Gurudwara.



3) Kasol :

It 1 KM further upstream Manikaran and 32 KM from Bhuntar(first airport of HP).

Located opposite to Nihthan village on the bank of Parbati.

4) Khirganga:

It is 26 KM from Kullu

It is also hot water spring but not as hot as Manikaran.

5) Vashisht:

It is 3 KM from Manali.

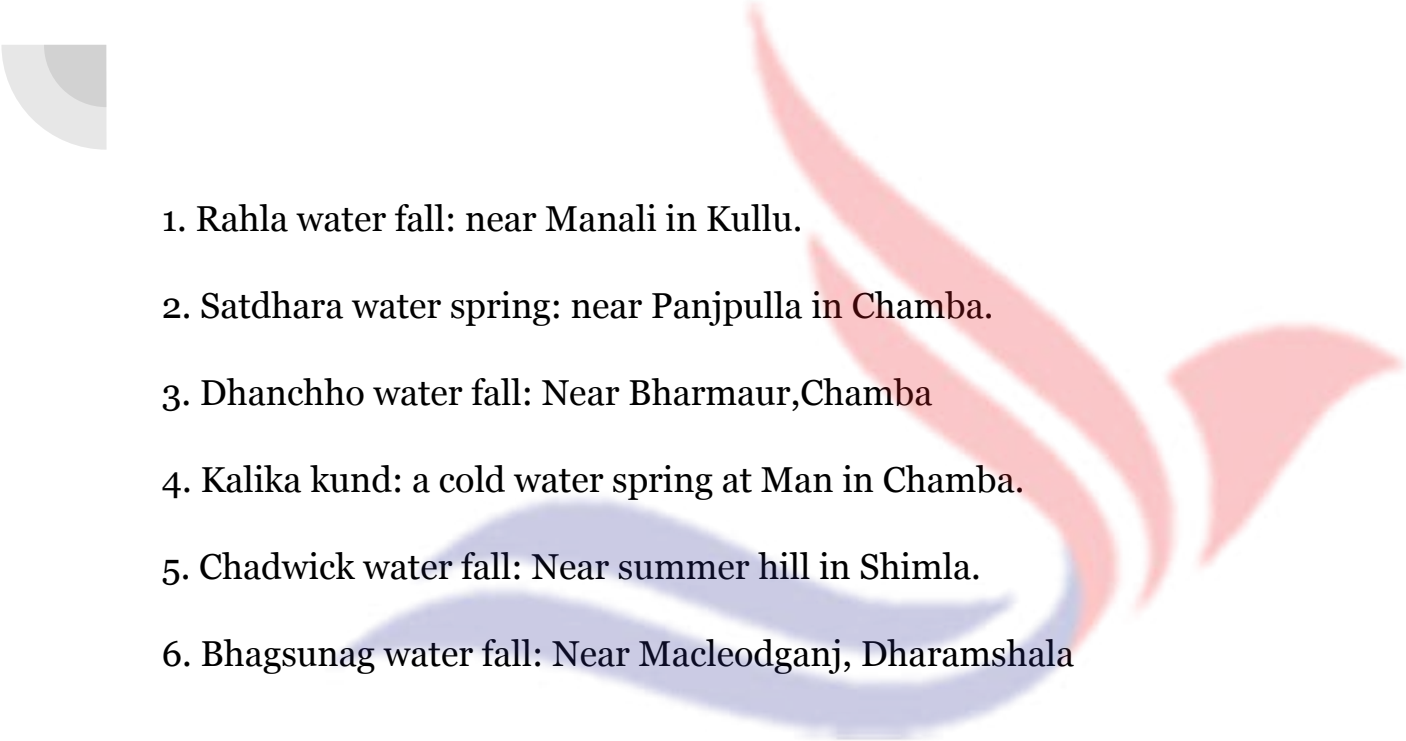
Located on the left bank of Beas.

It is famous for temples of Vashisht Rishi and Lord Rama.

HP tourism Development Corporation have built Turkish type baths,500m below Vashisht village . Hot water from the spring is brought and stored in a huge water tank from where it is channelled to the bathroom of HPTDC.



Falls/Springs in Himachal:

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1. Rahla water fall: near Manali in Kullu.
 2. Satdhara water spring: near Panjpulla in Chamba.
 3. Dhanchho water fall: Near Bharmaur, Chamba
 4. Kalika kund: a cold water spring at Man in Chamba.
 5. Chadwick water fall: Near summer hill in Shimla.
 6. Bhagsunag water fall: Near Macleodganj, Dharamshala