

# **GEOGRAPHICAL FEATURES OF HIMACHAL PRADESH**

## **(1) LOCATION**

**1.1.** Himachal Pradesh is situated between 30° 22' 40" to 33 ° 12' 20" north latitudes and 75 ° 45' 55" to 79 ° 04' 20" east longitudes. 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.

## **(2) CLIMATE**

**2.1** Himachal Pradesh can be divided into three regions: - (i) The Shivalik ranges (the height from plain upto 915 metres); (ii) Colder Zone (the height is about 4500 metres); and (iii) the Axis and Crystalline core of the whole system (the height above 4500 metres but below 5500 metres).

**2.2** The climatic conditions, therefore, vary from the semi- tropical to semi-artic. Physiographically, the state can be divided into five zones based on altitudes and moisture regime conditions. These vary from wet humid sub-temperate situation to dry temperate alpine high lands.

**2.3** Besides the seasonal variations, the climate of Himachal Pradesh varies at different altitudes. The average rainfall is 152 cms. (60 inches). The highest rainfall occurs in Kangra district followed by Shimla district.

## **(3) FORESTS**

**3.1** Forests are an important resource of Himachal Pradesh. Although the area classified as "Area under Forest" is 67 percent of the total area of the Pradesh, yet the effective forest cover is much lower than this area, primarily on account of the fact that a very large area is either alpine meadows or is above the tree line.

**3.2.** Current scenario is described in the following table: -

**(Area in Sq. Km.)**

<b>Sr. No.</b>	<b>Category</b>	<b>Area</b>	<b>Remarks</b>
1.	Geographical area of the State	55,673	-
2.	Area required under forest cover as per NFP 1988	37,115	Total culturable area under recorded forests is 20657 sq.km. For the purposes of policy requirements unculturable area forming vital eco-system and wildlife habitats shall also have to be considered.
3.	Forest area as per forest record	37,033	
4.	Unculturable area	16,376	Includes under snow cover, permanent high altitude pastures, rocky mountains and above tree line ( unfit for tree growth).

(Area in Sq. Km.)

Sr. No.	Category	Area	Remarks
5.	Culturable Area	20,657	
6.	Very Dense Forest	1,093	Requires protection.
7.	Moderately Dense Forest	7,883	Requires protection improvement in density.
8.	Open Forest	5,377	Requires protection improvement in density.
9.	Balance Culturable Area	6,304	Includes scrub, blank areas and areas covered by plantations, which are not picked up in the satellite imagery (say post 1980 plantations).
10.	Plantations (Post 1980 till 2000-05)	6,557	Assumed to be fully surviving and left out of the satellite imagery.
11.	Area under Scrubs	389	Requires conversion into useful forests.

3.3 In view of the above scenario, category wise break up for the area in Himachal Pradesh is as under:

CATEGORY	AREA IN SQ. KM.
Total Geographical Area.	55,673
Area under management with the Forest Department.	37,033
Area under alpine pasture including under permanent snow	16,376
Balance area.	20,657
Area over which forests can be raised/tree cover can be provided/density can be increased.	13,007 <b>(Sr. 5-6-10)</b>

3.4 As per latest State Forest Report of FSI, an area of 14,353 sq. km. is actual forest cover. This is constituted by 1,093 sq. km. of very dense forests, 7,883 sq. km. moderately dense and 5,377 sq. km. with open forests. In addition to this, 389 sq. km. area has been described as scrubs.

3.5 Forest wealth of Himachal Pradesh is estimated at over Rs. 1,00,000 crore. Most of precious coniferous forests are of such nature that these cannot be truly regenerated by human beings if these are cut once. The State Government has imposed a complete ban on commercial felling and the only removals from the forests are either by way of timber distribution rights to the people or salvage extraction. Even the royalty from the silviculturally harvestible volume according to working plan prescriptions would presently be annually worth over Rs. 250 crore. However, the State Govt. has been denied of this financial resource for about two decades, primarily for preserving the fragile Himalayan ecology and environment to serve the national interests.

#### (4) RIVERS AND LAKES

4.1 Himachal Pradesh has the privilege of snowfed perennial rivers and rivulets flowing in almost all parts of the Pradesh. Yamuna, with its important tributaries of Tons, Pabbar and Giri in the east and Satluj, Beas, Ravi and Chenab in the west flow through various parts of the Pradesh. Some of the important natural lakes worth mentioning are Khajjiar, Ghadasasu Lamba Dal, Manimahesh, Mahakali in Chamba Distt.; Dal, Kareri in Kangra Distt.; Rewalsar, Kumarwah, Prashar in Mandi district; Bhriagu and Dashahr in Kullu Distt.; Chandratat and Surajtal in Lahaul & Spiti Distt.; Chandra Naun in Shimla district; and Renuka in Sirmaur Distt. The man made lakes include Gobind Sagar in Bilaspur district; Pong lake in Kangra district; Pandoh lake in Mandi district; and Chamera lake in Chamba district.

## **(5) MINERAL WEALTH**

**5.1** Himachal Pradesh is blessed with mineral wealth. As per investigation of Geological Survey of India, the minerals available in Himachal Pradesh include limestone, byrites, clays, mica, iron pyrites, salt, gypsum, slate, antimony and lead. The distribution of these minerals is scattered all over the State and includes lime stone in Bilaspur, Sirmour and Kangra districts; salt and slates in Mandi District; gypsum in Rajban, Bharli Sirmour distt.; Lahaul & Spiti and Sapatu in Solan distt.; byryte in Sirmour, iron ore in Mandi and Kangra; and uranium in Kullu and Hamirpur districts.

## **(6) SOILS**

**6.1** The soils of the State can broadly be divided into nine groups on the basis of their development and physico-chemical properties. These are: (i) alluvial soils, (ii) brown hill soil, (iii) brown earth, (iv) brown forests soils, (v) grey wooded or podzolic soils, (vi) grey brown podzolic soils, (vii) planosolic soils, (viii) humus and iron podzols (ix) alpine humus mountain speletal soils. The soil found in the districts of Mandi, Kangra, Bilaspur, Una, Solan, Hamirpur and Sirmour is generally brown, alluvial and grey brown podzolic, Kullu and Shimla have grey-wooded podzolic soils, while Kinnaur, Lahaul and Spiti and some parts of Chamba district have humus mountain speletal soils.