



Major physical division of Jammu and Kashmir and Ladakh.

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Abstract

The Valley of Kashmir, tucked in north-western folds of the Himalayas is a transverse valley, bordered on all sides by steep mountain ranges, characterized by snow covered towering peaks. The neighbouring mountain ranges, reaching to a height of 5,550 m to the north-east, where the Banihal-Pass (Jawahar-Tunnel) offers an escape from the valley. The sole exit for the rivers is the Baramulla-gorge, where the tranquil Jhelum River leaves the clean green banks and rushes headlong down its stony path to the vast plains of the south. The Kashmir Valley is distinctively basin-formed, and that it has a length of approximately 140 km (84 miles) and a width ranging from 53-55 km (20 to 25 miles) (20 to 25 miles). The lowest point in the valley has an elevation of 1600 m (5,200 feet) while the mean elevation is 184 m (6,000 feet) above the sea level. The river Jhelum, below the town of Anantnag (Islamabad), runs through a plain of low level recent alluvium: the breadth of this plain ranges from two to fifteen miles. It looks level to the eye having in the first 60 km (36 miles) a fall of 51 m (165 feet) but only 17 (55 feet) in the bottom four and a half miles. This alluvium has been created by the river in flood, and its creation may still be locally seen, albeit the activities of natural forces have been considerably hindered by manmade embankments.

Key words: physical, division, Jammu, Kashmir, Ladakh, India, Valley etc

Introduction

Jammu and Kashmir, union territory of India (until October 31, 2019, a state), situated in the northern portion of the Indian subcontinent focused on the plains surrounding Jammu to the south and the Vale of Kashmir to the north. The union territory is part of the wider area of Kashmir, which has been the subject of contention between India, Pakistan, and China since the partition of the subcontinent in 1947. Legislation enacted in August 2019 laid the ground for downgrading Jammu and Kashmir from statehood to union territory status and breaking off a portion of it, known as the Ladakh region, into a separate union territory. The modification entered into effect on October 31 of that year, but numerous court issues impacting its status remained unresolved in the years that followed. Jammu and Kashmir, formerly one of the largest princely states of India, is bounded to the east by the Indian union territory of Ladakh, to the south by the Indian states of Himachal Pradesh and Punjab, to the southwest by Pakistan, and to the northwest by the Pakistani-administered portion of Kashmir. The administrative capitals are Srinagar in summer and Jammu in winter. Area 16,309 square miles (101,387 square km) (101,387 square km). 12,367,013. The overwhelming bulk of the union territory is mountainous, and the physiography is split into five zones that are intimately linked with the structural components of the western Himalayas. From west to east such zones consist of the plains, the foothills, the Pir Panjal Range, the Vale of Kashmir, and the Great Himalayas zone. The climate ranges from alpine on the eastern border to subtropical in the southwest. In the alpine region average annual precipitation is approximately 3 inches (75 mm), while in the subtropical zone (near Jammu) rainfall rises to about 45 inches (1,150 mm) each year. The whole area is prone to severe seismic activity, and mild to moderate tremors are frequent. A



powerful earthquake focused in adjacent Pakistani-administered Kashmir killed hundreds in Jammu and Kashmir state in 2005 the Valley of Kashmir, there are three significant side valleys, namely:

Liddar Valley

“The Liddar Valley extends from Anantnag (Islamabad) to Pahalgam, including the Parganas of Dachinpora and Kaurpora. At Pahalgam, the valley divides itself into two branches which stretch obliquely, one towards the north-east, leading up to the Sheshnag and the Cave of Amarnath. At its lower end the valley is about 5 to 8 km wide but at its upper end it is only a few hundred metres in width. On both sides, it is bounded by lofty mountains covered with dense forests. Cultivation of crops does not extend beyond about a mile north of Pahalgam. There is a road along the left bank of the river upto the Amarnath Caves. This path is yearly traversed by lakhs of Hindu pilgrims, in the months of July and August. The river Liddar is fed with streams from the Kolahai and Sheshnag. Towards Kolahai is a small valley covered with grasses where glades are used by graziers.

Sind Valley

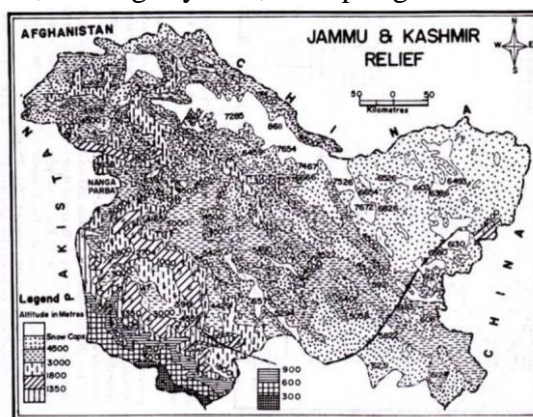
It is one of the most beautiful valleys of Kashmir. It owes its name to the river Sind-Lar which is fed by glaciers and streams. It extends from Ganderbal to the Zoji-La Pass, covering a distance of about 100 km. Sonamarg (golden meadow) is a beautiful meadow near the Thajwas Glacier. The Sind valley widens after Shadipur. On either side of the valley are the lovely snow covered peaks. The valley abounds in large forests of pine, and other fruit trees. The famous lakes of Vishansar, Krishnsar and Gangabal are within the catchment of Sind River which attract large number of tourists every year

Lolab Valley.

This fertile oval shaped valley is situated in the north-west side of Kashmir; it is about 25 km long and 5 km wide. It is traversed by the Lahwal Stream which flows down from the surrounding hills. The valley is covered by thick forest of deodar. The extensive pasture lands in the valley are the excellent grazing grounds. It is also famous for apple, cherry, peach and walnut.

Physical Regions of Jammu and Kashmir

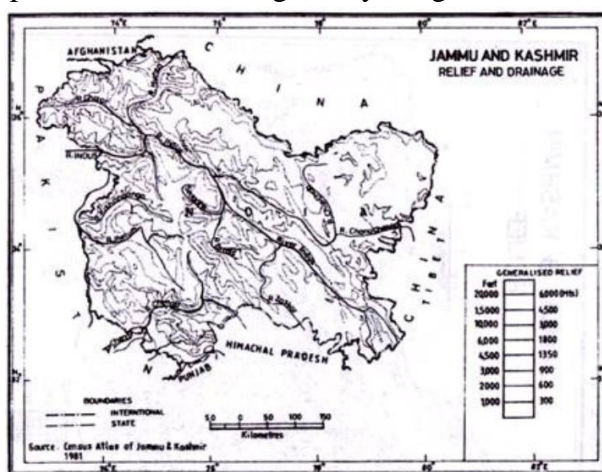
Physical features of a region largely influence the climate, soils, vegetation and lifestyle the people. An understanding to physical features is imperative to assess the resource potential and their management. In the following paragraphs a brief account of the relief or contours, mountain systems, glaciers, Earthquakes, drainage system, and springs have been given.





1. The Outer Plains

The outer plain of Jammu and Kashmir, locally known as Andarwah or Ba-jwat, is a part of the Great Plains of India. In the opinion of Oldham, the depth of the alluvium of the Indo-Gangetic plain is about 4,600 m near its northern limit. Recent calculations from geodetic survey, however, give a much greater thickness for these lighter deposits resting on the pre-Tertiary bed-rock. The rocks of the outer plain are everywhere of fluvial and sub-aerial formation—massive beds of clay, either sandy or calcareous, corresponding the silts, mud and sand of the modern rivers. Gravel and sand become scarce as the distance from the hills increases. At some depth from the surface there occur a few beds of compact sands and even gravelly conglomerates.



2. The Siwaliks

The relatively low outermost hills of the Himalayas along its whole length from the Indus to the Brahmaputra are known as the Siwaliks. The Siwaliks are conspicuously well developed for a distance of about 200 km between the Ravi and the Jhelum rivers in the state of Jammu and Kashmir. The width of the Siwaliks is between 20 to 50 km and height above the sea level between 600 to 1220 m in the state of Jammu and Kashmir. The rocks of the Siwaliks are disposed in parallel folded zones. The outer most ranges of the Himalayas rise from the plains of Punjab, commencing with a gentle slope from Jammu, attain about 600 m in altitude, and then end abruptly in steep, almost perpendicular escarpments inwards.

3. The Lower or Middle Himalayas

The Middle Himalayas of the Jammu and Kashmir state lie between the Ravi in the east and the Punch in the west and continues up to Muzaffarabad. The ranges of Pir Panjal and Dhauladhar lie in the Lesser Himalayas of the state. In Jammu region they are locally known as Pahar (mountain). In elevation they seldom rise above 3600-4600 m, and have a width of about 60 km near Rajauri. In general, it has an east-west extension. At Tanager, a branch ridge runs due south-west. This branch is known as Trikuta Mountain, which is characterised with limestone strata.

The sacred cave of Vaishno Devi is situated on a peak of Trikuta Mountain. The Lesser Himalayas form an intricate system of ranges. The Pir Panjal is a singularly well-defined range from Kaghan Valley to beyond the Ravi Valley, which may be taken as a type of mountain of the Middle Himalayas; these ridges present generally a steep escarpment towards the plain and a long gentle slope towards Kashmir.



The Greater Himalayas or Inner Himalayas:

To the north of Pir Panjal and Dhauladhar ranges are the more lofty mountain ranges of the innermost zone of the Himalayas rising above the snow-line into peaks of perpetual snow. In the north, Kashmir Range is an offshoot of the Zaskar Range, which forms the north-eastern border of the Valley of Kashmir.

In the Zaskar Range there are a few peaks which have heights between 4,500 to 6,100 m above the sea level. Beyond this range, the country, with the exception of the deep gorges of the Middle Indus, is a high-level plateau-desert, utterly devoid of all kinds of vegetation. Here, one may observe the elevated plateaus and high mountain ranges separated from one another by great depressions, with majestic peaks towering to 7,300 m.

The altitude steadily increases farther north, till the Peak K² on the mighty Karakoram or Mustang Range, attains the culminating height of 8,621 m, the second highest peak in the world. Farther north is the Karakoram Range which makes a watershed between India and Tajkistan.

The valleys of these regions show varying characters. In the south-east is the Changchenmo whose width is from eight to ten km with an average height of 4,270 m above the sea level. From that to the north-west the height of the valley beds descends, till in Gilgit on the very flanks of the gigantic peak of Nanga Parbat, Diyamir (8,120 m), the rivers have cut so deeply through the bare, bleak mountains that the streams flow at an elevation of only 1,525 m above the sea level.

Ladakh Plateau:

Ladakh is also known as “the Land of Passes” (La-passes, dakh-land) is the largest in area among the regions viz., Jammu, Kashmir and Ladakh with an area of 95,876 km². The region is administered by India as a union territory.

Ladakh is one of the loftiest inhabited regions of the world, (3,600-4,600m). Its short but warm summers enable a few grain and fruit crops to ripen. Owing to the great aridity of the atmosphere, the climate is one of fierce extremes, from burning heat of some of the deserts to several degrees below freezing-point at night.

The bare mountains which rise from them exhibit the exquisite from burning heat of some of the deserts to several degrees below freezing-point at night. The bare mountains which rise from them exhibit the exquisite desert coloration of the rocks due to the peculiar solar weathering.

Between Ladakh and the Dhauladhar-range are the districts of Zaskar, Lahoul, and Rupshu, consisting of intricately ramifying glaciated ranges of crystalline rocks, intersected by lofty valleys having but a restricted drainage into a few saline lakes and marshes.



- **Bordering regions:** It is bordered by the Chinese Tibet Autonomous Region to the east, the Indian state of Himachal Pradesh to the south, both the Indian union territory of Jammu and Kashmir and the Pakistan-administered Gilgit-Baltistan to the west, and the southwest corner of Xinjiang across the Karakoram Pass in the far north.
- **River system:** The Indus River and its major tributaries, the Shyok-Nubra, Chang Chenmo, Hanle, Zaskar, and Suru-dras rivers, drain the region. Glacio-fluvial processes aided by freeze-thaw weathering have formed the high altitude landscape of Ladakh.
- **Climate:** Ladakh has an extremely harsh environment and one of the highest and driest inhabited places on earth. Ladakh's climate is referred to as a "cold desert" climate due to its combined features of arctic and desert climates.
- **Soil type:** In Ladakh soils range from gravely and sandy loams on the alluvial fans to sandy and silt clay loams on the flood plains of Indus. Ladakh's soil is described as skeletal, calcareous with an alkaline reaction. By and large, soil is coarse and sandy, having varying quantities of pebbles. The soils are characterized by low organic matter content and poor water retention capacity".

Conclusion

As a conduit for India's energy resources, Ladakh has great promise. For this to happen, stability in Ladakh is a must. Equal and impartial growth is a precondition for peace. As a result, authorities in India should take into account Ladakh's geographic position, vulnerable environment, resource potentials, and people's ambitions while developing policies for the region. To make the most of a prime site, it's critical to maintain all of these elements in balance. As the second biggest city in the union territory, Jammu was traditionally the seat of the Dogra dynasty during the winter months. Hinduism is practised by more than two-thirds of the people who live in this area. They are closely connected to Punjabi speakers in Punjab state, and many of Jammu's Hindus speak Dogri as their native tongue. The Jammu area is also home to the bulk of the union territory's Sikh population. Muslims make form a strong majority in the region surrounding the western town of Punch, which is to the northwest.

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