

International
Encyclopaedia
of

HIMALAYAS

Vol-3

Indian Himalayas

Ramesh Chandra Bisht

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INTERNATIONAL ENCYCLOPAEDIA OF HIMALAYAS

[FIVE VOLUMES]

Ramesh Chandra Bisht

VOLUME-THREE

Indian Himalayas



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Preface

Covering the six nations of Bhutan, India, China, Nepal, Pakistan and Afghanistan in its snow-laden abode, the Himalayas from one of nature's most pristine and beautiful marvels. Extending along the entire northern boundary of India, the arc shaped mountain range inspires mixed feelings of admiration, awe and fear.

Spanning five Indian states—Jammu and Kashmir, Himachal Pradesh, Uttar Pradesh, Sikkim and Arunachal Pradesh—the Indian Himalayas offer some of the most spectacular terrain of the Himalayan land. For the mountain people in these states, not only do the Himalayas provide one of the best landscapes on earth, they also continue to be a predominant factoring their lives. Having acted as a natural and political barrier for centuries, the Himalayas have isolated a number of communities, cultures and customs. Not only this, but the Indian Himalayas have proven to be a hot spot among climbers and trekkers throughout the world, giving majestic views of towering mountain peaks, deep valleys, a fantastic variety of flora and fauna and some breathtaking splendours.

This book is an attempt at giving the reader a comprehensive account of the Indian terrain of one of the world's highest and largest mountain chains. Giving an erudite exploration of the origin and growth, geology, the sub division of the ranges, the vegetation and animal species and the environmental issues pertaining to the

region, the book is an attempt to unearth a storehouse of legend, mysteries, histories and wonders. A glimpse into the life that thrives in the heart of some of the highest roads in the world has also been touched upon, with an insight into the political and social problems plaguing the area. With a thorough study having been made of a region which continues to be a source of immense fascination and wonder, it is hoped that the book lives up to its promise of offering the reader a compelling introduction to the world of the Indian Himalayas.

Ramesh Chandra Bisht

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Introduction

The Himalayas are part of the string of Eurasian mountain ranges from the Alps to the mountains of Southeast Asia that were formed within the past sixty five million years by global plate-tectonic forces that produced tremendous upheavals in the Earth's crust. Etymologically Himalaya means "abode of snow" in sanskrit {from hima "snow", and aalaya "abode"}. The correct name for the range is Himalaya, though the plural Himalayas is often used.

The Himalaya stretch across five nations Pakistan, China, India, Nepal, and Bhutan. It is the source of two of the world's major river systems—the Indus Basin and the Ganga-Brahmaputra Basin. An estimated 750 million people live in the watershed area of the Himalayan rivers, which also includes Bangladesh. The Himalaya is a mountain range in Asia Separating the Indian Subcontinent from the Tibetan Plateau. By Extension it is also the name of the massive mountain system which includes the Himalaya proper, the Karakoram, the Hindu Kush, and host of minor ranges extending from the Pamir Knot.

To comprehend the enormous scale of Himalayan peaks, consider that Aconcagua at 22,841 feet [6962m.] is the highest mountain in the Andes, while there are over thirty peaks in the Himalaya exceeding 25,000 feet [7620m.]. The Himalayan have attracted geologists, geographers and lovers of nature. They have a strange

fascination for artists, poets photographers and mystics. They are a paradise for trekkers and mountaineers and are the cradle of thousands of rivers, streams and glaciers. The Himalaya extend over 2500 km in east-west and between 250 to 425 Km in north-South direction. The Himalaya can be divided into four zones parallel to each other:

The Shiwalik Foothills: 5 to 50 km. wide and their altitude rarely exceeds 1500m. This region is generally covered with damp forest.

The Great Himalaya: Comprising the Zone of high snow-capped peaks which are about 150 or 160 Km. from the edge of the plains, this consists of lower alpine zone up to 4875 M. and upper snow-bound zone usually above 4575M. to 5100 M. The alpine zone has rhododendrons, thick shrubs with variety of beautiful flowers and grass.

The Trans Himalayan Zones: About 40Km. in width, encompassing the valleys of the rivers rising behind the great Himalaya, these river basins are at an altitude of 3600M. to 4250M.

Himalaya Ranges: The most extraordinary thing about Himalaya is the way they have been formed in three parallel ranges known as Great Himalaya, the Lesser or the Central Himalaya and the Outer or the Shiwalik Himalaya. Commencing at Nanga Parbat in the north-west, these ranges pass through Pakistan, Jammu & Kashmir, Himachal Pradesh, Garhwal, Kumaon, Nepal, Sikkim, Bhutan & Arunachal Pradesh.

Since time immemorial, symbols reflecting ideology and social order have been used by human societies. Archaeologists and ancient scholars affirm that this tradition goes back to the Paleolithic period, the earliest stage in the evolution of the Homo Sapiens. However, it was only with the rise of urban civilisation the world over that one sees as almost theatrical increase in the production and the use of symbolic objects. The symbols of the Indus Valley civilisation were also produced in the context of cities.

The innumerable finds of symbolic representations and objects in the different cities of Indus civilisation are both exotic and mind boggling. Unfortunately, the exact and specific meaning of Indus symbols eludes us because of the absence of written texts. Many scholars tried to correlate the Indus symbols and ritual objects with those used by the later Hindu and Buddhist cultures.

However, the inability to decipher the Indus script clouds any final conclusion and neither the Indus script clouds any final conclusion and neither can one be certain about the precise meaning of symbols in a particular period. This is because the meanings of a specific symbol might have changed over a period time. Therefore, the meaning of symbols can only be inferred by examining the different contexts in which the symbolic objects and representations were found.

The use of the Pipal tree as a religious symbol appears to have discrete regional variations. At Mohenjodaro, the deity is always seen standing in the centre of the tree, while at Harappa the deity is placed below an arch made of leaves. The use of garlands and arches made out of Pipal leaves in addition establishes the divine character of the tree. The Pipal and banyan trees are quite common throughout Hindu mythology, where they serve as important symbols of fertility and protection and also death. On the Indus seals, however, the protective and the sacred power of the tree were distinctly portrayed, but it is difficult to confirm any other specific meaning.

MAJOR INDIAN HIMALAYAS

Assam Himalaya

Assam Himalaya is a traditional designation for the portion of the Himalaya range between the eastern border of Bhutan, on the west, and the Great Bend of the Tsangpo River, on the east. The highest peak of this range is Namcha Barwa. Other high peaks include Gyala Peri, sister

peak to Namcha Barwa; Kangto, and Nyegyí Kangsang. The area is still poorly surveyed in general, and little visited by outsiders.

The name "Assam Himalaya" is misleading, as some parts of this range are in southeastern Tibet, and some are in the Indian state of Arunachal Pradesh. Assam itself is an Indian state which borders Arunachal Pradesh on the south.

Arunachal Himalaya

Arunachal Himalaya stretches from Gori Chen in the east to Namcha Barwa. Due to government restrictions not many mountaineers have been there. There are several high peaks like Gyala Peri (7150 m), Kangto (7090 m) and Nyegi Kangsang (7047 m), not many of which have been climbed from the Indian side. Some of them were approached from Tibet and climbed from the north. The only peak which has been regularly climbed from the Indian side is Gori Chen (6858 m). Its lower peak, Peak II, has also had some infrequent visitors.

Sikkim Himalaya

Sikkim shares a mountainous border with Nepal in the west and north and with China only in the north. All the early (pre-war) expeditions went through Sikkim to cross over to Tibet on their way to Everest. Francis Young's famous expedition to Tibet expedition also went through Sikkim. Doug Freshfield was one of the first mountaineers to visit this area. His book *Round Kangchenjunga* is a classic record of all the peaks in Sikkim. In west Sikkim, peaks like Kabru (7338 m) were climbed in 1935 by C.R. Cook. Others like Kokthang and Rathong were climbed much later. Even now, many have not been climbed from the Sikkim side, e.g.: Talung.

Northern Sikkim consists of the Zemu glacier valley from which rises the third highest mountain of the world, Kangchenjunga. Paul Bauer and his German team

repeatedly attempted to climb it via its western approaches before the Second World War. Ultimately the Indian Army team was successful in doing so, in 1977 and there have been several subsequent repeats. There are many peaks around Kangchenjunga, like Simvu and Siniolchu, which are tempting, open invitation to climbers.

Further north is Pyramid Peak, climbed by the Himalayan Association of Japan (HAJ) in 1993. In the vicinity are peaks like Jongsang and Chorten Nyima. Pahunri with the pinnacle of Donkhyia Ri upon it, is one of the chief attractions on the eastern side. There is a lot climbers can do in the Sikkim Himalaya.

Uttaranchal Himalaya

Kumaon

Kumaon consists of three different valleys. They lie to the west of Nepal. Kumaon is generally confused with Garhwal. In fact Garhwal was once a part of Kumaon till the British separated it and gave it a different name. The first valley, in the east, is the Darma Ganga valley. At its head are several peaks above 6000 m, technically difficult to climb.

The Central valley in the Kumaon is the valley of the Milam glacier. Beside its eastern branch is an excellent climbing area of Kalabaland glacier. The peak Chiring We (6559 m) rises from the Kalabaland glacier and was climbed only once in 1979 by the Indian team led by Harish Kapadia. To its south, is Suitilla (6373 m) a most formidable and difficult goal. At the head of the Milam glacier are the enticing peaks Hardeol (7151 m) and Tirsuli (7074 m).

Nanda Devi East has been climbed from this valley. Panch Chuli is the south eastern valley of this section in the Kumaon. It has five different peaks which were conquered with great difficulty, both from the East and the West. The western valley of Kumaon is the Pindari valley, flanked by peaks like Panwali Dwar (6663 m) and Nanda

Khat. This area is very popular with climbers. The Sunderdhunga valley branches off from the Pindari and leads to the southern foot of the Nanda Devi Sanctuary.

Garhwal

The Garhwal is a tract in the centre of the Indian Himalaya. For many years mountaineers have visited and climbed in this area. North Garhwal consists of peaks like Kamet (7756 m) and Mukut Parbat (7242 m). Many high peaks here have not been climbed. The famous Hindu temple of Badrinath attracts many Hindu pilgrims.

The valleys to the extreme west of the Garhwal region house some very easy, gentle peaks. Many students and early mountaineers have trained in these areas. The Swargarohini group can prove a bit troublesome though. Bandarpuch West and Bandarpuch (6316 m) have been climbed a couple of times. For a quick trip from Delhi this area is the most convenient.

Himachal Himalaya

Kullu

The lovely dales of Kullu have been a major attraction area for those who prefer to climb difficult but low peaks. The south Parvati area has peaks like Dibibokari, Pyramid, Papsura and Peak 20,101 (6127 m). This area too, is open to all climbers with peaks like Mukarbeh and Indrasan (6221 m), and has a lot to offer hobbyists and serious climbers alike.

Kinnaur

Kinnaur lies north of Shimla, in Himachal Pradesh. The National Highway leads through Kinnaur to Spiti. Recent changes in policy allow visitors entry to the area west of the road without official permission. Which means, high peaks like Jorkanden (6473 m), Manirang (6593 m) and several others are now easily accessible. Above the eastern

valleys of Baspa, Tirung and Leo Pargial (6791 m) rise many peaks above 6000 m. Kinnaurs architecture, its people and customs could each attract curious minds, interested travellers.

Lahaul

The area north of the famous Rohtang Pass road consists of the valleys of Lahaul. It has been open to mountaineers for many years now. Around the Bara Shigri glacier rise peaks like Kullu Pumori (6553 m) and Shigri Parbat (6626 m). Towards its north the Chandra Bhaga group (CB Group) has peaks like Minar (6172 m), Akela Killa (6005 m) besides others with different numbers, of around the same height. Phabrang (6172 m) and Mulkilla (6517 m) are the chief draws of the west side. Motorable roads lead to almost all the valleys here and the approached are easy and free of hassels.

Spiti

Spiti is the most barren Trans-Himalayan area. In the east, the highest peak is the defiant Gya (6794 m), still unclimbed. The controversial Shilla (6132 m) stands proudly above this valley. In the west, are the Ratang, Gyundi and Khamengar valleys. Khangla Tarbo is one of the better known peaks here. Here, too, no permits needed!

Jammu & Kashmir Himalaya

Kishtwar

West of Lahaul along the Chandrabhaga river, which becomes the Chenab, is Kishtwar. Now due to the political troubles there, it is not easy to reach there and a thorough knowledge of prevalent conditions is a prerequisite. To climbers, it offers treats like Brammah I (6416 m), Brammah II (6425 m), Sickle Moon (6574 m) and Hagshu (6300 m). It is one of the most challenging and difficult areas if ones entry and exit is safe.

Ladakh

Ladakh is sometimes called 'Little Tibet'. It has a landscape and culture similar to that of Tibet. Caravans used to pass through Leh on the way to and from Central Asia. Almost all the valleys of Ladakh are now open to foreigners. The area of Panggong lake has Kakstet peak (6442 m) and the highest unnamed peak in the world (6725 m). In south east Ladakh, in the Rupshu valley there are peaks as high as 6600 m around the beautiful lake of Tso Morari. The highest amongst them is Lungser Kangri (6666 m) neighbouring, Chhamser Kangri (6622 m).

Zanskar

Entire barren valleys of Zanskar, south of Ladakh were once inaccessible. But now a road runs through its centre. Hundreds of trekkers cross over to Padam in Central Zanskar. This is rapidly becoming one of the world's most popular trails. For serious climbers there are high peaks like Nun (7135 m) and Kun (7087 m). For the others are peaks like Zanskar 1 (6181 m) and Zanskar 2 (6175 m). All these peaks arouse interest and excitement.

Kashmir

The valley of Kashmir was known for centuries for its beauty. Caravans passed through it. In recent times, trekkers and campers flocked to it. Early climbers attempted the small peaks in the south. For instance, Kolahoi (5425 m) and Haramukh (5143 m). A large area around Sonamarg was visited by British climbers. The Climbers Guide to Sonamarg published by the Himalayan Club is an excellent reference book.

Eastern Karakoram

The valleys in the extreme north of India are those of the Eastern Karakoram. These form a special group in the Great Karakoram Range. It has some very high mountains, many of them still unclimbed some climbed only in recent

years. Records reveal that this area was visited in 1821. Dr. T.G. Longstaff went there in 1901. From 1914 to 1922 several Italian and European expeditions climbed here.

Col J.O.M. Roberts undertook explorations in 1946. After this, the area was closed for many years. In the 1970s different Japanese teams crossed over from Bilafond la onto the Siachen glacier and climbed peaks like Teram Kangri I (7462 m) amongst others. The Japanese mountaineers were very active here, and climbed many difficult peaks. Then, once more, the area was closed to all for many years.

In 1984 members of a Japanese expedition became the first foreign mountaineers to be allowed into this area from the Indian side. They climbed Mamostong Kangri I. The following year an Indo-British team climbed Rimo III and a few other peaks in the Terong Valley. Some peaks on the Siachen glacier were climbed by the Indian Army. There are still several enigmatic peaks in the Siachen Muztagh like Saltoro Kangri I and II.

The second group of mountains in the Eastern Karakoram is that of the Saser Kangri. This particular peak was approached by Col. Roberts and finally climbed from the eastern side by an Indian team. A Japanese team made the first ascent of Saser Kangri II West (7518 m). The eastern peak of Saser Kagri II remains one of the highest virgin mountains in the area.

The third group is that of Rimo Muztagh. The famous Central Asian trade-route over the Karakoram Pass, goes this way. Chong Kundan I (7071 m) was climbed in 1991 by an Indo-British team. Chong Kundan II (7004 m) is still unclimbed. The valleys of Eastern Karakoram are open to joint ventures between Indian and foreign mountaineers. Permits for climbing are readily available for almost any peak here.

GEOGRAPHY

Himalayan Lands Explore the unique geography, culture,

wildlife and history of the Himalayas lands of India, Nepal and Tibet. The Himalayan range runs for about 2400 km, from Nanga Parbat in the west to Namche Barwa in the east. The width varies between 250-300 km. The Himalayan range comprises three parallel ranges, arranged by elevation and geological age.

The youngest of the three is called the Sub-Himalayan range [Siwalik Hills in India] and has an elevation of about 1200m. This range is made up of erosion material from the rising Himalaya. Running parallel to this is the lower Himalayan range which has an elevation between 2000-5000 m. a number of Indian Hill Stations very well known as: 'Shimla, Nainital and Darjeeling are located here.

The northernmost range is called the Higher Himalaya and is also the oldest of the three. It has an elevation of more than 6000 m and contains a large number of the world's highest peaks including the three highest Mount Everest, K2 and Kangchenzunga. Archaeological evidence reveals that urban civilisation first emerged in the valleys of the rivers coursing down from the Himalayan mountains. When man elsewhere was cautiously emerging from his cave shelters, spectacular cities flourished at Mohenjodaro and Harappa in the Indus valley. The Indian States of Jammu & Kashmir, Himachal Pradesh, Uttaranchal, Sikkim, and Arunachal Pradesh lie mostly in the Himalayas.

Although seemingly timeless, the Himalaya are anything but unchanging. The mountains themselves continue to grow an average of one centimeter per year, with some peaks rising ten centimeters in a single year. More alarming are the profound environmental and cultural changes occurring throughout the region. In *Himalaya: Life on the Edge of the World*, David Zurick and P. P. Karan explore these dynamic changes through geological records, scientific reports, and official documents dating back over a century and through years of field

research and travel which have given them an intimate knowledge of the landscape and people of the Himalaya.

RELIGIONS

In Ladakh (Jammu-Kashmir), Lahaul & Spiti, Sikkim (East Indian Region), and Tibet there mainly majority of Buddhism, Hinduism & Islamic Religion.

Land of Lord Shiva

The many forms of Hinduism are henotheistic religions. They recognise a single deity, and view other Gods and Goddesses as manifestations or aspects of that supreme God. Henotheistic and polytheistic religions have traditionally been among the world's most religiously tolerant faiths. However, until recently, a Hindu nationalistic political party controlled the government of India.

The linkage of religion, the national government, and nationalism led to a degeneration of the separation of church and state in India. This, in turn, has decreased the level of religious tolerance in that country. The escalation of anti-Christian violence was one manifestation of this linkage. With the recent change in government, it is hoped that the level of violence will diminish. Since time immemorial, the Himalayas has been recognised as the sanctuary for ascetics and philosophers.

Famous shrines like the ice cave at Amarnath in Kashmir, the glacial formation at Kedarnath in Garhwal, and Jageshwar amidst a thick stand of deodar in Kumaon are dedicated to him. Kalidas, a resident of Ujjain, a city of Shiva, aptly described the Himalaya as the dazzling laughter of Shiva. The Himalayas also occupy a central place in Hinduism. The whole region is considered the realm of Shiva- the supreme ascetic, and 'Pashupati'—the protecting deity of pastoral herds. Lord Shiva is worshipped in the form of a lingam—a phallus symbolising the male principle in the universe. In his

manifestation as the cosmic darer, the 'Natraja', he rhythmically creates and destroys the cosmos.

Buddhism

Ladakh is home to some of the most spectacular monasteries on the planet. Perched on remote high peaks, these monasteries seem to rise from the formidable surrounding terrain. They have a certain timeless quality about them, an unfathomable yet distinct sense of belonging to these highlands. Standing alone on distant mountains, these edifices are living mementos of an ancient faith. Buddhism hardly needs to be studied in Ladakh.

The impact of the religion on the hardworking and deeply religious mountain folk is obvious from their simple yet profound way of living. In Ladakh one can see the 'eight fold middle-path' unfolding. If at all you want to study Buddhism, just come and live here in a little village. Most villages have a monastery that normally stands on the highest mountain around the hamlet, as if to say that the gompa (monastery) withstands the onslaught of the elements, while the people it protects lie comfortably tucked away in a valley.

Islamic Religion

Islam and Christianity also have a distinct presence in the Himalayas. While the Muslims of the valley of Kashmir are mostly descendants of people who converted to Islam after the conquest by Muslim invaders, the Ladakhis adopted Islam after encountering it via the Central Asian trade route. On India's northeastern frontier, Christian missionaries won many converts among the tribes. Proselytising has gone hand in hand with the spread of education and health care. One can also discern traces of animist of Bon worship in tribal areas bordering Tibet. In Kumaon, Gharwal and Himachal local, pre-Aryan deities vie with the Gods of the Hindu pantheon for propitiation by the faithful.

Most of the Muslims in the Kashmir valley, Jammu province and Azad Kashmir are Sunnis. Shias, mainly Nizari Ismailis, dominate in the Northern Areas. Ladakh also has a large number of Shias. Muslims are a majority in the Kargil district of Ladakh while Buddhists dominate in the Leh district. There are also some Sikhs, mostly in Jammu. Overall, according to the 1981 census, Muslims are 74.9% of the population of Kashmir, followed by Hindus (22.6%) and Buddhists (0.8%).

The "controlled by" data in the above table is based on who controls more of the district as some districts are divided by the Line of Control. For example, more than half of the Punch district is controlled by Pakistan but the town of Punch is on the Indian side of the line of control. It is not clear which census results they are using. For India, the religious data for the 2001 census has not been released yet and it seems that the 1991 census was not conducted in Indian Kashmir.

Christian Religion

The British, after their advent, sought to establish contact with the countries across the Himalayan barrier. Strategy and commerce dictated this. The proselytising zeal of Christian missionaries also contributed to a keen interest in this region. Their conquests soon brought them to the foothills but it was only with their victory in the Anglo-Nepalese War of 1816-17 that they achieved a breakthrough.

The war opened trade channels and increased their contacts with the territories beyond the Himalayas. This also helped them consolidate their position in their imperial rivalry with Russia in the Central Asian area. Tibet had become enfeebled by this time and had retreated into an isolationist shell. The British, having established themselves in India, could now mould their expansionist policies at will. This situation continued till India became independent on 15 August 1947.

Sino Indian Relations

With the success of the Maoist revolution and assumption of power by the Communists in China, unexpected strains were introduced in the region. The geopolitical significance of the Himalayan borderland increased dramatically with the 'liberation' of Tibet in 1950. The Sino-Indian border dispute transformed the relationship between India and the Himalayan Kingdoms of Nepal and Bhutan. It would not be an exaggeration to say that, ever since the clash of arms between the two Asian giants in 1962, the strategic considerations have dominated in the Himalayas.

CULTURE

In the valley of Himalayas which include the highly number of Cultural Destinations for the trekkers and travelers can easily enjoy with the cultural Activities, Festivals, and meet there cultural people around Himalaya. The Culture around Himalayas respectively given below according to the Destinations by Jammu & Kashmir Himalaya to Arunachal Pradesh.

Ladakh

Most of the region's principal gompas are open throughout day and a caretaker lama is available to show visitors around. Some of the less visited establishments have special opening hours, as in the case of Namgyal Tsemo, Shey Palace and the Stock Palace Museum. Check the timings in the Tourist Office before proceeding to these places. Most of the monasteries charge a small entrance fee.

Jammu & Kashmir

The Lifestyle of the local people is quite slow in the old city. The waterways and shikaras are the best way of going into the interiors of the old city. Women are very enterprising, they sell food items, flowers and handcrafted items on their floating markets. Kashmiris use willow

baskets for carrying essential items from one place to the other. There are a number of open-air markets in the old city. Here visiting tourists have the pleasure of buying all the traditional Kashmiri spices and food items.

Himachal Pradesh

Ethnicity—About 90% of the population of Himachal Pradesh is Hindus. Their main communities are Brahmins, Rajputs, Kinnars, Rathis and Kolis. The tribal population of the state comprises of the Gaddis, Kinnars, Gujjars, Pangawals and Lahaulis. The Gaddis are the traditional shepherds who migrate from the alpine pastures to the lower regions during the winters. The Kinnars are the inhabitants of the Kinnaur region and practiced polyandry and polygamy. The Gujjars are nomads who rear buffalo herds. The Pangawals of the Pangi region of the Chamba district are both low and high caste Hindus. The Lahaulis of Lahaul and Spiti region are mainly Buddhists.

Garhwal Kumaon

The culture of the present Kumaon is a blend of influences from the indigenous population as well as from the immigrants to this region. Consequently, the myths, dialects, languages, folk literature, festivals, fairs and forms of artistic expression are examples of the creative influences of the different cultural.

Sikkim

The Sikkimese can be broadly classified into the Lepchas, the Bhutias, the Nepalese and the plainsmen (mostly businessmen from elsewhere in India). Communities, cultures, religions and Customs of different hues intermingle freely here in Sikkim to constitute a homogeneous blend. Hindu temples co-exist with Buddhist monasteries and there are even a few Christian churches, Muslim mosques and Sikh "Gurdwara". Although the Buddhists with monasteries all over the state

are the most conspicuous religious group, they are in fact a minority constituting only 28% of the population.

Arunachal Pradesh

Broadly the people may be divided into three cultural groups on the basis of their socio-religious affinities. The Monpas and Sherdukpens of Tawang and West Kameng districts follow the lamaistic tradition of Mahayana Buddhism. Noted for their religious fervour, the villages of these communities have richly decorated Buddhist temples, locally called 'Gompas'. Though largely agriculturists practicing terrace cultivation, many of these people are also pastoral and breed herds of yak and mountains sheep.

CLIMATE

The Himalayas influences the climate of the Indian subcontinent by sheltering it from the cold air mass of Central Asia. The range also exerts a major influence on monsoon and rainfall patterns. Within the Himalayas climate varies depending on elevation and location. Climate ranges from subtropical in the southern foothills, with average summer temperatures of about 30°C (about 86°F) and average winter temperatures of about 18°C (about 64°F); warm temperate conditions in the Middle Himalayan valleys, with average summer temperatures of about 25°C (about 77°F) and cooler winters; cool temperate conditions in the higher parts of the Middle Himalayas, where average summer temperatures are 15 to 18°C (59 to 64°F) and winters are below freezing; to a cold alpine climate at higher elevations, where summers are cool and winters are severe.

At elevations above 4880 m (16,000 ft) the climate is very cold with below freezing temperatures and the area is permanently covered with snow and ice. The eastern part of the Himalayas receives heavy rainfall; the western

part is drier. It varies from the Tropical monsoon in south India to temperate in north India. India is such a vast country that the climate varies considerably. While the heat is unbearable in the Gangetic plain, the people of Ladakh shiver in the snowy cold. The Indian year passes through four seasons. Winter lasts from December to February, and summer from March to May.

The rainy season of Southwest monsoon is from June to September. The post monsoon season, which is North East monsoon in South India, is in October and November. The most pleasant weather in India lasts from June to November. There is a heavy rainfall in Northeastern region, the western slopes of the Western Ghats and parts of the Himalayas during the year. On the other hands, there is hardly any rainfall in Rajasthan, Kutch, and Laddakh. There is medium or average rainfall in other parts of the country.

Upland plain (Deccan Plateau) in south India, flat to rolling plain along the Ganges, deserts in western region of India, Himalayas in northern region. India is a vast country covering an area of 32,87,782 sq. km. The Himalayas, stretching from east to west in the north, form the northern boundary. The mighty mountain ranges separate India from China and Nepal. Where the Himalayan ranges end, there begin the great northern plains, are flat. They are drained by a number of rivers, the Ganga being the most important of them all. The Brahmaputra is another major north Indian river.

The Indus (Sindh) flows in the north-west direction. The Deccan plateaus, south of the plains, have ranges of hills along the eastern and western coasts of the peninsula. The Krishna and the Godavari are the major rivers of the south. There are ranges of hills even in the north-east. In the west the plains of the Punjab merge into the Thar Desert. That is why India has rich variety of landscapes and climates.

HIMALAYAN RIVERS

Indus River

The Trans Himalayan Indus River rises near the Mansarovar Lake on the Tibetan plateau. It enters the Himalayas in southeastern Ladakh near its confluence with the River Gurtang at an elevation of 4,200m. Thereafter it follows a north by northwest course between the towering Ladakh range in the north and the Zaskar Range in the south. There are a number of human settlements that lie along the Indus River in Ladakh, namely Leh, Marol, Skardu and Bunji.

Sutlej River

River Sutlej takes birth on the southern slopes of the holiest of mountains—Kailash, near the holiest of lakes Mansarovar. After a long run, parallel to the Himalayas, it finally penetrates these at Shipki pass. Later it cuts through the Zaskar range, makes a diagonal thrust through the Himalayas and blasts a deep gorge at the base of the Kinner Kailash massif. Within Kinnaur district, the Sutlej runs parallel to the Hindustan-Tibet Road. At Karcham, in Kinnaur, it is joined by the crystal clear, blue river Baspa that drains the Sangla valley.

Chenab River

Chandra River is one of the two rivers; the other one is Bhaḡa, which merges to form the Chenab in the Lahaul region of Himachal Pradesh. It rises in the snows lying at the base of the main Himalayan range in the Lahaul and Spiti district. The picturesque lake of Chandra Tal forms at this rivers source site.

Teesta River

Teesta River is a trans-Himalayan river flowing through Sikkim and is one of the most churning rivers in the Himalayas. It originates from the Cholamu lake and flows

south. It passes through West Bengal and joins the Brahmaputra River in Bangladesh. The total length of the river is about 315 km. Teesta River is famous for river rafting. River Teesta of Sikkim extends the most challenging invitation to the rafters in the eastern Himalayan region.

Beas River

The Beas forms the valleys of Kullu and Kangra, famed for their beauty. But ironically, its source is an insignificant looking igloo like structure near Rohtang Pass in Pir Panjal range to the north of Kullu. The main thrust of this river is southward to Larji and then to the west. Where it enters Mandi district and further still into Kangra.

Ravi River

There is something intrinsically romantic about the river Ravi. In divided Punjab used to ring with the haunting strains of love songs sung on the banks of the Ravi, which flowed past the elite city of Lahore. Now one only has to hear the outpourings of young hearts in Chamba celebrating the beauty of love and nature to know that the spirit of the Ravi is the same everywhere. Chamba town rests on a mountain shelf on the right bank of the river. As a settlement it is Indian to the core. Here, as in many ancient towns, flourished a civilisation that provided patronage to the arts so that the temple sculptures of Chamba are truly amazing.

Jhelum River

The Jhelum flows from the spring known as Verinag, 80-km south of Srinagar. This wide, swift flowing, muddy but picturesque river sweeps through Srinagar and is famed for its nine old bridges among many things else.

Spiti River

The valley of Spiti derives its name from the Spiti River,

which rises just below the 16,000 ft high Kunzum Pass. After flowing for about 60 miles, it joins the Sutlej River near the village of Namgiya in Kinnaur district.

Ganga River

The holiest of all the rivers, Ganga or the Ganges is a perennial river, which is held in high regard by the Hindus. The Ganga river has an exalted position in the Hindu ethos. The Gangotri Glacier, a vast expanse of ice five miles by fifteen, at the foothills of the Himalayas (14,000 ft) in north Uttar Pradesh is the source of Bhagirathi, which joins with Alaknanda, to form Ganga at the craggy, canyon-carved town of Devprayag.

Yamuna River

Yamuna, also called as "Jamuna", originates from the Bundar Poonch glaciers in district Uttarkashi of the state of Uttaranchal. It rises from Jamunotri, in the Himalayas. River Tons, which flows along the boundary of Himachal Pradesh, west of district Tehri Garhwal joins Yamuna River at Kalsi and thereafter joins the plains. From Kalsi, the river flows along the boundary of Himachal Pradesh. Yamuna flows in a southerly direction through the Himalayan foothills and onto the northern Indian plain, along the Uttar Pradesh-Haryana State border. The Eastern and Western Yamuna canals are fed from the river at that point.

Brahmaputra River

One of the great rivers of Asia, the Brahmaputra commences its 3,000-km journey to the Bay of Bengal from the slopes of Kailash in western Tibet. As Tibet's great river, the Tsangpo, transverses east across the high-altitude Tibetan plateau north of the Great Himalayan Range, carving out myriad channels and sandbanks on its way. As it tumbles from the Himalayan heights towards the plains of the subcontinent it twists back on itself, cutting a deep and still unnavigated gorge, until finally turning

south it emerges in Arunachal Pradesh as the Dihong. Just beyond Pasighat, it meets the Dibang and Lohit where it finally becomes the Brahmaputra.

WILDLIFE

The Himalayas are the world's longest, highest mountains. One third of all mountain animals live here. The range is home to many endangered species. The Himalayan mountain range is over 1,500 miles long and 250 miles wide and includes most of Nepal and Bhutan, south Tibet, and the extreme north of India. It is divided into three zones: the Greater, Lesser, and Outer Himalayas.

Since the range is so long with so many varied climates, the wildlife of the Himalayas is remarkably diverse. The Himalayan region displays great variety in flora and fauna. It is also where rare medicinal herbs are said to grow. In the Terai—the Himalayan foothills, there are luxuriant tropical forests of Sal, Teak And Shisham. As one climbs, one encounters a variety of Chir (Pine), Oak, Deodar, Fir, Rhododendron, Birch And Juniper. At higher altitudes the Juniper becomes a bush.

HIMALAYAN VEGETATION

Four different types of vegetation live in the Himalayas: tropical, subtropical, temperate, and alpine. The foothills of the Outer Himalayas are blanketed in dense tropical rain forests of bamboo, oak, and chestnut. Further west, as the altitude increases, the forest thins, and evergreen, cedars, pines, and firs become the dominant species. In the alpine zone, which begins at about 12,000 feet, grows great amounts of moist vegetation, including juniper and rhododendron. The domestic yak supplies rural nomads in Tibet with meat and hides. Its also serves as a pack animal.

The male monal or Impeyon pheasant, has iridescent, multicolored plumage that he displays when courting his

mate. This national bird of Nepal is widely hunted for sport. It is difficult to imagine today that these Himalayan slopes were densely wooded less than a century ago. While Himalayan forests are not as lush as the rain-fed South Indian forests, they do attain an impressive magnificence in the unspoilt upper regions.

INSECTS OF HIMALAYAS

The forests of the Himalayan foothills are an ideal home for insects, including bumblebees and crane flies. Higher up the slopes, where the nights are colder, many insect species have dark bodies to absorb as much heat as possible. Many butterflies live at surprisingly high altitudes: Apollo's, blues, vanessas, and papilios are common up to 14,000 feet. Even higher than this are other tiny insects. No one is sure how they survive at such altitudes; they likely feed on pollen, seeds, and other organic debris swept upward by drafts.

HIMALAYAN MAMMALS

More sheep species live in the Himalayas than in any other mountain range in the world. They include the Marco Polo sheep, which, because of the market for its long, spiraling horns, has been hunted almost to extinction. The largest wild sheep in the world, the great Tibetan sheep, also live here. They can withstand extreme temperatures ranging from scorching summers to freezing winters.

Three species of mountain goat live in the Himalayas: the Ibex, the markhor, and the wild goat. Three species of goat antelope live here too. Taken is the national animal of Bhutan. The massive yak is the largest animal of the mountains, and one of the highest dwellings animals in the world. Its long shaggy coat enables it to inhabit the coldest areas of the Himalayas.

The brown bear and the Himalayan black bear scavenge mammal carcasses, although they also eat fruit.

One of the rarest bears in the world, the Tibetan blue bear, also lives here. Cats and dogs live in the Himalayas: the wolf, the wild dog, and the hill fox are common. Among the cats are: the tiger and leopard, as well as the jungle cat, lynx, and Pallas cat. The beautiful snow leopard rangers throughout the Himalayas' its prey consists of wild sheep and goats.

The Himalayan mountain range is one of the most endangered environments in the world. Mankind is gradually encroaching on the wilderness, building, polluting, and destroying. Although steps are now being taken to preserve this important habitat, it is a case of too little, too late. The elusive snow leopard has a beautiful, thick coat that is soft gray on top, paling to a pure white underside. This has made it a target for hunters, and poachers; despite the species being protected, several are killed each year. The musk deer used to be common in the Himalayas. Musk from the males scent gland is in demand from perfume manufacturers.

Consequently, the species is in danger of Extinction, dispute protection with preserves. Other endangered Himalayan species include the brown bear, Tibetan blue bear, red panda, and black necked crane. The Marco Polo sheep, a rare subspecies of the argali, a sheep of the Himalayan plateaus, is widely hunted despite protection. Secluded valleys still preserve an unspoiled way of life for villagers and wildlife. The Chinese were the first to use the musk deer's scent in perfume. This deer is now very rare in the wild.

HILL STATIONS

Gulmarg & Sonamarg

Welcome to Gulmarg the hill resort with magical meadows and mountains. Then natural beauty of Gulmarg has attracted tourists since long. In fact the hill resort of

Gulmarg literally means "the meadow of flowers". The snow-clad peaks and the lovely landscapes of Gulmarg have provided background for several Bollywood ventures. The slopes of Gulmarg make it Asia's only heli-skiing resort. There are immense beauty and adventure activities that make Gulmarg much more than a cool hill resort.

Srinagar

Srinagar is the summer capital of the state of Jammu and Kashmir and is the pride of the beautiful valley of Kashmir. Srinagar is famous for its lakes and the charming rows of houseboats floating on them. It is also known for traditional Kashmiri handicrafts and dry fruits. Srinagar is located in the western part of the state of Jammu and Kashmir, in the northern region of India.

Ladakh

Ladakh—Ladakh is a land like no other. Bounded by two of the world's mightiest mountain ranges, the Great Himalaya and the Karakoram, it lies athwart two other, the Ladakh range and the Zaskar range. In geological terms, this is a young land, formed only a few million years ago by the buckling and folding of the earth's crust as the Indian sub-continent pushed with irresistible force against the immovable mass of Asia. Its basic contours, uplifted by these unimaginable tectonic movements.

Shimla

It is a beautiful hill town in the lap of nature, surrounded by pine and deodar forests. Temperature is ideal in summers and tourists flock it in great numbers and it is highly advisable to get hotel reservations done well in advance despite the fact that there are over 1000 hotels in Shimla. Shimla, the popular summer capital of the British times is a proud capital city of the state of Himachal Pradesh and it still retains the glory of its historic splendors; racing, golf and cricket still prevail.

Manali

Manali situated in the north Indian hill state of Himachal Pradesh. Situated at the Northern end of the Kullu valley with its spectacular views of the snowcapped peaks and wooded slopes, the Beas rushing along its rocky course amid grassy wild flowered meadows, is ideal for honeymooners and adventure sport lovers. As the earth slowly dried, here across a place of breath taking natural beauty which was only appropriate for it was at Manali that life began again.

Kullu

Kullu was once known as Kullanthapitha—the end of the habitable world. Beyond rose the forbidding heights of the Greater Himalaya, and by the banks of the shining river Beas, lay the fabled Silver Valley. The hill resort of Kullu is located in the Kullu valley of Himachal Pradesh. Kullu lies in the lower reaches of the Himalayan range.

Dharamshala

Dharamshala is the district hqr. of Kangra district. This is a hill station lying on the spur of the Dhauladhar range about 18 km. north east of Kangra town. Hill station is wooded with oak and conifer trees and snow capped mountains enfold three sides of the town while the valley stretches in front. The snow line is perhaps more easily accessible at Dharamshala than at any other hill resort and it is possible to trek to snow point after an early morning's start.

Sarahan

It is located in Himachal Pradesh, Tucked inside the northern Himalayas, Sarahan is a picturesque village overlooking a deep valley. Tranquil, forested Sarahan—with an unimpeded view of the Srikhand Mahadev peak—is definitely worth a visit. The Bhimakali Temple is also worth seeing.

Nainital

Nainital is a glittering jewel in the Himalyan necklace, blessed with scenic natural splendour and varied natural resources. Dotted with lakes, Nainital has earned the epithet of 'Lake District' of India. The popular summer retreat of India, Nainital attracts innumerable tourists during the summer heat.

Mussoorie

Mussoorie in Indian States of Uttaranchal, like other hill resorts in India, came into existence in the 1820s or thereabouts, when the families of British colonials began making for the hills in order to escape the scorching heat of the plains. Small settlements grew into large stations and were soon vying with each other for the title of "queen of the hills."

Rishikesh

Hill Station cum Holy Place in Uttranchal Valley—Rishikesh is the ashram capital of Hinduism. Located at the confluence of the Ganga and Chandrabhaga at a distance of 28 km from the Haridwar town, Rishikesh is a sacred spot where the great sage Raibhya performed penance and was granted an appearance by God in his/ 'Hrishikesh/' aspect. Rishikesh is today a centre of Vedic, yogic, herbal medication.

Gangtok

Gangtok—The Capital and principal town of Sikkim is a growing resort full of taxis, tourists and hotels. Spread on a ridge at 1870m, it has four to five roads running almost parallel to each other. It used to be a typical beautiful Himalayan town a few years ago. Now it is being spoiled by traders and builders. Box-Like hotels, houses and shopping centers are coming up without any consideration towards aesthetics or hill architecture.

Darjeeling or Darjiling

Darjeeling—This is Northern part of West Bengal. Darjeeling is tiny Himalayan Region with an area of 663 sq. km. Before Nepal was opened to the outside world, all expeditions to Everest used to start from here. Darjeeling the name derives from "Dorje Ling", meaning the place of the Dorje' the Mystic.

Kailash Mansarover

Kailash Mansarover—865 Km. from Delhi, stand Mount Kailash and Lake Mansarovar constituting one of the grandest of the Himalayan beauty spots. Mt. Kailash is the revered Mansarovar Lake, the eastern lake of two in the region. At an altitude of 14,950 ft above sea level, Mansarovar is the highest body of fresh water in the world. It is a remarkably beautiful site, with waters that glisten a clear blue near the shores and a deep emerald green in the centre.