CHAPTER - I

THE NORTHERN BORDER

SINO-INDIAN BOUNDARY

India's northern border stretches from the north-western tip of the State of Jammu and Kashmir in the West to the north-eastern point of Arunachal Pradesh (earlier called North-East Frontier Agency or NEFA) in the East. It has been a traditional frontier, in the sense that it has remained where it now runs for nearly three thousand years. The areas along this border have always been part of India(1). India's northern border in its north-western section is contiguous with Afghanistan and Pakistan and some part of it in the central region (marking the borders of the States of U.P., Bihar and Sikkim) touches the western, southern and eastern borders of Nepal. But for the above-mentioned portions, the whole of our northern frontier touches Sinkiang and Tibet regions of China. The entire length of about 4,250 km of the Sino-Indian border, including the 482-km long Bhutan-Tibet section(2), has long been recognised by custom or defined by treaty, or both. Although this border has largely remained undemarcated, it follows the geographical principle of watershed which, in most places, is the crest of the high mountains.

This long border can be divided into three main sectors, viz., the Western, the Central and the Eastern sector.

Western Sector - The north-western, northern and eastern boundary of the Indian State of Jammu and Kashmir with Sinkiang and Tibet regions of China extending to about 1770 km forms the Western Sector of the India-China border. It starts from the tri-junction of the boundaries of India, China and Afghanistan and runs eastward through the Kilik Pass, Mintaka Pass, Kharchanai Pass, Parpik Pass and the Khunjerab Pass. After that, the boundary lies along a spur down to the north-western bend of Shaksgam or Muztagh river, which it crosses at that point and ascends the crest line of the Aghil mountains. It then runs along the crest of the Aghil watershed through the Aghil Pass, the Marpo Pass and then to the Karakoram Pass (Long. 77°50' E and Lat. 35°31' N)

From the Karakoram Pass, the boundary lies along the watershed between the Shyok and the Yarkand rivers and runs through the Qara Tagh Pass to cross the eastern bend of the Qara Qash river and to ascend the main Kun Lun mountains. Thereafter, the boundary runs along the main crest of the Kun Lun mountains and then descends in a south-westerly direction down to Lanak Pass.

South of the Lanak Pass, the boundary passes through the Kone Pass and Kepsang Pass which lie along the watershed between the Chang Chenmo and Chumesang in India and the streams flowing into Dyap Tso in Tibet. Thereafter, the boundary runs along the southern bank of the Chumesang and the eastern bank of the Chang-lung Lungpa, skirts the western extremity of the eastern half of Pangong Lake, cuts across the eastern part of Spanggur Lake and follows the northern and eastern watershed of the Indus River through Chang Pass upto the Jara Pass. Subsequently, it turns south-westwards, crosses the Indus about 8 km south-east of Demchok, and following the watershed between Hanle river and the tributaries of Sutlej river, it passes through the Charding Pass, Imis Pass and the Kyungzing Pass. Thereafter, it turns westward and crosses the Pare river about 8 km south of Chumar to reach Gya Peak(3), marking the limit of the Western Sector.

The boundary in the Western sector has been sanctified by custom and tradition. It was first confirmed by the Treaty of Tingmosgang of 1684(4) signed after a war between Ladakh and Tibet. This traditional boundary was recognised and reaffirmed by a treaty signed by representatives of the Dogra ruler of Kashmir on the one hand and of the Dalai Lama of Lhasa and the Emperor of China on the other. Significantly, the treaty of 1842 referred to the Ladakh's boundary "as fixed from ancient times"(5). It clearly meant that the Ladakh-Tibet boundary was well-known and it did not require any formal delimitation. After the suzerainty of the present State of Jammu and Kashmir came under the (British) Government of India under the Treaty of Amritsar (1847), Lord Harding, Governor General of India, wrote to both Tibet and China in 1847 to appoint a joint Boundary Commission to formally fix the Ladakh-Tibet border. But the Chinese felt no need for such a step and replied that "the borders of those territories have been sufficiently and distinctly fixed so that it will prove far more convenient to abstain from any measures for fixing them"(6). The agreement signed in 1858 between Dewan Basti Ram on behalf of the Kashmir State and Mangual Islae on behalf of Tibet(7) further confirmed the traditional border. The area was surveyed by Indian officials, and Indian maps began to show the boundary with precision. Even the official Chinese maps of 1893, 1917 and 1919 showed the boundary exactly as depicted in official Indian maps today.

Central Sector

The middle portion of the northern frontier stretches from the Gya Peak at north-eastern point of Himachal Pradesh (where it meets south-eastern tip of the Ladakh region of the State of J&K) to the tri-junction of Bhutan, Arunachal Pradesh and Tibet. The Indo-Tibetan section of this middle portion can be sub-divided into two parts which are separated by Nepal. They can be called the West Central and the East Central sections.

The 225-km long northern and eastern border of the Indian State of Sikkim with southern Tibet(8), and then the 482-km long Bhutan-Tibet border(9), constitute the East Central sector of the northern border. For various geo-political and strategic reasons, China has not questioned the borders of Sikkim and Bhutan. But it has created incidents along the West Central section from time to time. We would, therefore, not concern ourselves with the East Central part of the middle sector of our northern border in the context of the Sino-Indian problem.

In the West Central section of the northern border or the Central Sector of the Sino-Indian boundary as it is generally refered to, the natural boundary marks off the Indian States of Himachal Pradesh and Uttar Pradesh from Ari district of Tibet. Beginning from the Gya Peak the boundary in this sector follows the watershed between the Spiti and Pare rivers and crosses the Pare river about 1.6 km south of the village of Kauirik. South of the Pare river the frontier ascends one of the ranges leading to the high peak of Leo Pargial, crosses the Sutlej at its bend, and following the Zaskar range lies through the Shipki Pass, the Raniso Pass and the Shimdang Pass. Thereafter, it follows the main watershed between the Sutlej and the Ganges basins and lies through the Thaga Pass, Tsang Chok Pass, Muling Pass, Mana Pass, Niti Pass, Tun Jun Pass, Kungri Bingri Pass, Darma Pass and the Lipu Lekh Pass, to join the trijunction of the India, Nepal and Tibet boundaries(10).

The boundary with Tibet in this section of the Central sector "is also traditional and follows well-defined geographical features. Here, too, the boundary runs along well-defined watersheds between the river systems in the south and the west, on the one hand, and north and east on the other. This delineation is confirmed by old revenue records and maps and by the exercise of India administrative authority upto the boundary line for centuries"(11).

The traditional and customary boundary between India and Tibet in the Spiti area was confirmed by the treaties of 1684 and 1842 because those treaties had recognised the traditional border between Tibet and Ladakh and in those years Spiti and Lahul areas formed part of Ladakh(12). The boundary in the Barahoti area of Uttar Pradesh was also the subject of diplomatic correspondence and exchanges in 1889-1890 and in 1914, which resulted in effect in a confirmation of the traditional and customary Indian alignment in this area(13). The traditional boundary from Shipki Pass to the tri-junction of India, Nepal and Tibet was also confirmed in the Agreement on Trade and Intercourse between India and the Tibet Region of China signed on 29 April 1954. Article IV of the Agreement stated:-

> "Traders and pilgrims of both countries may travel by the following passes:-
>
> Shipki La Pass(14), (2) Mana Pass, (3) Niti Pass, (4) Kungri Bingri Pass, (5) Darma pass, and (6) Lipu Lekh Pass"(15).

Eastern Sector

In the eastern sector, the Arunachal Pradesh-Tibet boundary is a natural, traditional and administrative dividing line as in other sectors. It runs east from the eastern extremity of Bhutan to the tri-junction of the China-Burma-India borders near the Diphu Pass. In 1913-1914, Captain Bailey had carried out extensive surveys in the area to determine the line separating the territorial jurisdiction of southern Tibet and of the Government of India in northern part of what was then known as North East Frontier Tract(16). The border thus determined was formalised at a Tripartite Conference of representatives of Government of India, Tibet and China held at Shimla in 1913-1914. The boundary line as agreed upon at Shimla and reaffirmed formally by the Indian and Tibetan plenipotentiaries - was incorporated in a map in the scale of roughly 1:500,000, attached to a draft convention and initialled by the Chinese representative also. The border-line as delineated is called the McMahon Line(17) after the name of the British Indian representative at the "Simla Conference". The McMahon Line, thus, did not create a new border. It merely confirmed the long-standing, ethnic, natural and administrative boundary in the area.

It can, in fact, be argued that, at the time of the 'Simla Conference' in 1914, Tibet was an independent country, having thrown off the Chinese yoke and driven away the Chinese "Amban" or Governor from Lhasa in 1912. Tibetan independence was a reality, though China had not accepted it formally, just as Pakistan refused to accept formally the independence of Bangladesh in December 1971. Tibet remained a sovereign independent country in fact - in spite of continued Chinese claims of some sort of suzerainty - till the Chinese armies reoccupied Tibet in 1950. In the 'Simla Conference' therefore, the signature or initials of the Chinese representative on the document depicting the boundary between Tibet and India could be only in the capacity of a witness, and ratification by the Chinese Government at Beijing (Peking) was not essential to the validity of the border agreement between Tibet and India. For its own imperial reasons, mainly to avoid chances of independent Tibet falling under influence of Czarist Russia feared by the British Government, Whitehall continued the myth of Chinese overlordship over Tibet. But myths cannot change reality. The McMahon Line, therefore, has full legal validity, apart from the fact that it only depicted the existing traditional boundary.

The Indian border in this sector runs mostly along the crest of the high Himalayan range which forms the natural frontier between the Tibetan Plateau in the north and the lower hills in the south. Starting from the Indian-Bhutan Tibet tri-Junction the boundary follows on to the Mela Ridge and runs along the crest of the Thag La. The boundary then crosses the Nyamjang Chu to the east of Khinzemane, enters the Zanglung Ridge of the Great Himalayas and runs upto Bum La. From Bum La the line runs along Nakchutpa to Tsona Chu. It further proceeds eastward after crossing the Tsona Chu and follows the crest of the Great Himalayan range which is also the watershed between the Chayul Chu in Tibet and the Kameng, Kamala and Khru rivers in India. It then proceeds east and north-east, crossing the Subansiri river and then the Tsari river just south of Migyitun. Here, the line runs between Migyitum and Longju. The boundary continues in a generally north-easterly direction till it crosses Tunga Pass. The boundary then runs east, crosses the Dihang river and ascends the watershed between Chimdru Chu and Rongta Chu in Tibet and the Dibang and its tributaries in India. The line then crosses the Yonggyap Pass and the Kangri Karpo Pass in this section. It then crosses the Lohit river few kilometres south of Rima, and joins the tri-junction of the India, Burma and China boundaries at Peak 15283 ft about 8 kms north of the Diphu Pass(18).

GEOGRAPHICAL FEATURES OF BORDERING AREAS

Broadly speaking, all the areas along the vast Sino-Indian frontier are very sparsely or not at all inhabited because of the very high altitudes and inhospitable climate.

Western Sector

In the western sector of the Sino-Indian boundary lies the Ladakh region of the Indian State of Jammu and Kashmir. Ladakh comprises the region astride the Indus river including Nubra-Shyok valleys and Aksai Chin-Lingzitang Plateau in the north and the sub-division of Kargil and Zaskar in the South. Ladakh is bounded by the stupendous Kun Lun ranges in the north and the mighty wall of the Himalayan Range in the south. In the east, it is separated from the Lake district of Chang Thang, Rudok and Chumurti (all in Tibet) by high mountain ranges, and to its west lies that part of the State of Jammu and Kashmir which is presently under illegal occupation of Pakistan(19). Its north-western part Baltistan extends northward to eastern Gilgit and the frontier with Sinkiang region of China roughly along the Kun Lun range. Its north-eastern part, the high-plateau land of Aksai Chin, borders the Ngari region of Tibet and its southern part adjoins the Rudok Province of Tibet.

Ladakh is a land of high mountains with a total area of approx. 97,872 sq km. The average height of mountains is about 5,100 metres(20). No other part of the Himalayas is traversed by so many high ranges running diagonally and flanking trough-like, longitudinal basins. The Nanga Parbat (8,126 metres), K-2 (8,611 metres), Hidden Peak (8,068 metres), Broad Peak (8,047 metres), Gasherbrum II (8,035 metres), Rakaposhi (7,788 metres), Saser Kangri (7672 metres) Haramosh (7,397 metres) - all are situated in this area(21).

The Indus is the principal river of the region which flows in a general north-west direction through the whole length of the region in a deep through between the trans-Himalayan range on its left bank and the Kailash and Karakoram ranges on the right bank. Its chief tributaries on the left bank are Hanle, Zaskar, Dras and Aster rivers, while on the right bank it receives the Shyok, the Shigar and the Gilgit rivers(22). While the Shigar is formed by the junction of the Basha and Bralda rivers, the Shyok receives the waters of Chip Chap, Galwan and Chang Chenmo rivers in its upper reaches and of the Nubra in the lower reaches. The Ladakh Range separates the Indus valley from the valley of the Shyok.

The natural features of Ladakh can best be described by two native terms, under one or other of which every part is included, viz., Changtang, i.e., "northern" or "high plain", where the amount of level ground is considerable, and rong, i.e., "deep valley" where totally different conditions prevail(23). The former predominates in the east gradually diminishing westward.

In the north-east corner of Ladakh are located the Aksai Plain and the Lingzitang Plain. The desert plain of Lingzitang is, in effect, a southern extension of the Aksai Chin. The two are separated only by the Logzung Mountains of low height and narrow breadth. Hence, the northern and southern plains are generally called by a combined name of Aksai Chin - Lingzitang Plateau. In the geological past this plateau was a lake. In course of time, it dried up or silted up leaving a group of small and big lakes having no outlet, with the result that whatever precipitation takes place it is either soaked up by the parched land or drained into these lakes. The area is almost flat with average height between 4,880 metres and 5,180 metres above the sea level(24).

Aksai Chin (which literally means 'desert of white stones') is a vast desert of salt. Whatever rain or snow falls here dries up on the plateau itself. Absence of fresh water and a dried up land full of salt lakes and marshes scares away people from going there. Obviously, Aksai Chin is a soda mine. That is why it is also called the Soda Plain. The statement: "not a single blade of grass grows there" is almost true of the whole of the plateau. The lakes are devoid of fish and worms and the sky is clear of birds. Little animal life exists in the Aksai Chin - Lingzitang Plain(25). The Kun Lun Range, the Ladakh-Sinkiang boundary range is the northern boundary of the plateau. The Kun Lun is the highest and best defined range of all the ranges surrounding the Aksai Chin-Lingzitang Plateau.

In the south of the Aksai Chin - Lingzitang Plateau are situated the Nischu mountains, a continuation of Karakoram Mountains. Their southern edge forms a mountainous chain dividing the waters of Lingzitang from those of the Chang Chenmo river.

In the west of Aksai Chin there is a tract of high ground running along the right bank of the Qara Qash river which keeps the plateau separated from the river. The Qara Qash river originates at a place a few kilometres on the south-west of Sumdo. It follows the north-east direction. Along the left bank of the Qara Qash river there is a mountain structure pierced

by one of its tributaries to the south-west of Qizil Jilga. At the cutting, a bifurcation branches off from the structure making a fork the western tongue of which forms the eastern boundary of what is called the Daulat Beg Oldi (DBO) sector. The Chip Chap Pass is its main depression. The main mountain chain, after the cutting, resumes its course and runs along the left bank of the Qara Qash river. The average height of this mountain system is nearly 5,500 metres(26). The Qara Qash river after having completed its course for about 130 km cuts its way through the southern Kun Lun Range and enters Sinkiang. The Qara Qash valley in its upper reaches is broad and shallow. Hence, the river is fordable at many places(27). In the Qara Qash valley the dryness of the adjacent Aksai Chin - Lingzitang Plateau is not found. There is plenty of grass and water for the animals. But this phenomenon is confined to summer months only. In the winter the upper valley is deserted and quiet, while in the lower part, with the availability of ordinary means for keeping warm, man can manage to live more easily(28).

The Chip Chap river valley, the Despang basin and the surrounding areas west of the Qara Qash river form the Daulat Beg Oldi (DBO) sector. The DBO area is a depression of the Karakoram system. The tract is surrounded by the bifurcations of the Karakoram Mountains in the north, east and west and by the main Karakoram Range in the south. It is drained by the Chip Chap river emanating from the northern slope of one of the bifurcations of the Karakoram Mountains, which separate the waters of the Chip Chap and the Murgo rivers from those of the Qara Qash to the north-west and the Galwan to the south. The DBO area is highly mountainous and the height of Daulat Beg Oldi is over 5000 metres(29). The place is situated in the Despang plains at a distance of 16 km south-east of the Karakoram Pass (approx. 5,575 metres). From Leh, there are two routes to Daulat Beg Oldi, one, via the Shyok river, known as the winter route; and the other, across the Saser La, used during summer. Both routes converge on Murgo(30).

In the north of the Chip Chap river there are two mountain ranges or ridges. Through one of the ridges, passes a mountain stream, called Lungnak Lungspa, which joins the Chip Chap river about 8 kms east of Daulat Beg Oldi. This stream is separated from the DBO nullah, which springs from the Karakoram Pass, by a hill feature. The nullah joins the Chip Chap river to the west of the Daulat Beg Oldi. In the south of the Chip Chap river there are two mountain ranges - Range I and the Karakoram Range. There is also a stream, which may be called the Southern

Stream(31) which flows parallel to the Chip Chap and then joins it. In the south of this stream is the Murgo river. After flowing to the west, the Murgo river joins the Shyok river in the south of the Murgo Camp. Still further south there is the Nachhu Chu which springs from the mountains in the east. These mountains form the watershed between the Chip Chap and the Qara Qash basins. The Nachhu Chu flows west and joins the Shyok river near Sultan Chushku. It is here that the Shyok, after receiving the waters of the Chip Chap and having pushed through glaciers, comes out of the snowy region.

The western part of the DBO area is covered with glaciers, the vagaries of which have made the Shyok valley an inaccessible and hazardous place.

In the DBO area, there is plenty of drinking water in summer months. Tibetan grass is also available near the water points which are many in the season. Even in the perpetually snow-covered western part of the DBO area explorers have noticed fresh and crystal clear water collected in many places(31).

The Raskam river valley extends from the Tagdumbash Pamir in the west to the Karakoram Pass in the east. It is bounded on the north by the Kun Lun mountains and on the south by the Muztagh and the Aghil-Karakoram. "The whole of this tract", noted Younghusband, "is a vast mass of lofty mountains and even the lowest valley - bottoms are situated at a very considerable altitude above the sea level"(33). It is entirely unpopulated and uncultivable, except in a few places along the Yarkand river. "The mountain summits are covered with perpetual snow, and their sides.....are always utterly devoid of vegetation"(34).

The central region of eastern Ladakh is bounded by the Chang Chenmo river in the north and the Indus, flowing from the south-east to north-west, bounds it in the south. Like other areas of Ladakh, it is highly mountainous. Two big lakes - Pangong (elevation approx 4,270 metres) and Spanggur are the special features of this region. The Ladakh-Tibet boundary passes virtually through the middle of these lakes. Lanak La (approx. 5,485 metres), Kone La, Domjor La, Chang La and Jara La are important border passes in this area.

The area south of Indus, extending from Demchok in the east to Kargil in the west, is the southern region of Ladakh. On the eastern and south-eastern side the region touches the border with Tibet. The Zaskar Range encloses it towards south-west. The

region is mountainous with many peaks ranging in height between 5,000 and 7,000 metres with several glaciers. But as the valley itself is at a great height, the slopes of high mountains are moderate. It is cut up by several streams, like Zaskar, South Shigar and Hanle. The valleys of these streams are generally broad and their current slow. The eastern part of the region, astride the border with Tibet, is called Rupshu, where there is a small inland drainage basin with a salt encrushed lake - Tso Morari - in the centre(35). About 8 km to the west of the place where the Indus enters India is located the town of Demchok. Further north-west is located Hanle on the west bank of the river of the same name. Hanle sub-division is the area contiguous to the Tibetan territory. The Ladakh Range passes through its middle. The area is very remote rugged and sparsely populated(36). Charding La, Imis La and Kyungzing La are the important border passes located in this region of Ladakh.

Leh, at a height of 3,522 metres, is the capital of Ladakh. In 1962, Leh was connected with Srinagar by a fair weather "access road" (without surfacing, but with some strengthening of curves on route) by Army engineers under 'Project Beacon'(37). From Srinagar, the road ran towards north and then north-eastward. After criss-crossing the river Sind it reached Sonamarg. Continuing its north-easterly ascent, through towering peaks lining the route most of the way, the road crossed Zoji La (approx. 3,530 metres) and passed through Dras before reaching Kargil. From Kargil the road took a south-easterly turn, crossed the 4100 metre high Fotu La and then turned north and crossed the Indus at Khalsi (Khala tse) about midway between Kargil and Leh. Thereafter, it hugged the valley of the Indus most of the way and ran almost parallel to the river along its right bank. After passing through Nimu where the river Zaskar joined the Indus from the south, the road terminated its 389-km(38) journey at Leh.

It is obvious that the logistical problems of Leh were enormous. It was situated at a distance of over 820 km from the nearest railhead, Pathankot. While the route from Srinagar to Leh (389 km) was not fully developed and was subject to vagaries of weather, the road from Pathankot to Jammu(112 km) and then Jammu to Srinagar (about 320 km) was only somewhat better, in that it was also liable to be disrupted by snowfall and landslides beyond Jammu.

There was a subsidiary route to Leh from Manali. It passed through Lahul, Rupshu and Zaskar areas before reaching Leh. The 400-km(39) route crossed Rohtang Pass (approx. 3,980 metres), and Baralacha Pass (approx. 4,890 metres) and was even more undeveloped , being just a mule track.

Except for the road connecting Leh with Srinagar, modern road communication was virtually non-existent in Ladakh. Stone avalanches, which were of constant occurrence in the hills after rain and during the period the winter snows were melting away, greatly hindered the work of road building in the area, apart form the extreme altitudes and sparse population.

The scenery and climate of Ladakh are entirely different from the Kashmir Valley. The joint effects of elevation and isolation amidst snow mountains produce perhaps the most singular climate in the known world. Rain clouds are held up and forced back in the Kashmir Valley by the Himalayan wall; so that Ladakh gets very scanty rainfall, about 15 cm in the west and only 5 cm in the east, every year(40). In January and February the air is generally calm, and April and May are the windiest months of the year.

The atmosphere in the Indus Valley is remarkably clear. Not a speck of cloud is to be seen in the deep blue sky. Burning heat by day is succeeded by piercing cold at night and everything is parched by the extreme dryness of the air(41). There is generally a difference of more than 33°C in temperature between spots exposed to the sun and those in the shade. The extreme range of recorded temperature is not less than 60°C(42). January and February are the coldest months, and July-August is the warmest period of the year in Ladakh. In Leh, the temperature falls below -25°C in winter and it rises above 34°C in summer.

Central Sector

Lahul & Spiti and Kinnaur districts of Himachal Pradesh and the districts of Uttarkashi, Chamoli and Pithoragarh of Uttar Pradesh lie along the Central Sector of the Indo-Tibetan boundary. The whole region of the Central Sector, covering about 38,000 sq km, is a mountainous tract. It contains all the three Himalayan sections, viz., the Sivalik, Himachal (lesser Himalaya) and Himadri (great Himalaya)(43). These ranges are , however, by no means uniform or parallel to each other in their whole course. Innumerable branches of various height and extent strike off from each range in every point and direction(44). The intervals between the bases of the mountains are extremely small. The high mountain ranges and narrow river valleys are the two important features of this area.

The slopes of the mountains are characteristically stony and bare. The whole Lahul

and Spiti area is a cold desert whose bare rocks and steep slopes stare the visitor in the face. The highest village of Spiti is Gette, situated at a height of about 4,270 metres, one of the highest in the world(45).

Of the three Himalayan sections, the Sivalik range proper, with its forest covered slopes and flat summits rising to 900 and 1000 metres, extends uninterruptedly for about 74 km between the Ganga and the Yamuna. The Himachal section comprises mainly two linear ranges, the Mussorie and the Nag Tibba. The Himadri contains about 6,600 sq km of Himals, snow fields. The Gangotri Himal feeds the Gangotri and Kedarnath glaciers, and the Nandadevi Himal feeds the Milan and Pindari glaciers. Nilkantha stands directly above Badrinath, rising in a single awe - inspiring sweep to a beautiful snow-capped cone-summit. Nandadevi (7,817 metres), the highest peak in the region, stands within a vast amphi-theatre, 112 km in circumference. The other peaks are Dunagiri (7,056 metres) and Trisul (7,120 metres) standing on its northern and southern arms respectively. Further west lies the Kamet Himal with towering Kamet peak (7,756 metres). Above the Gangotri Himal there are Satopanth (7,094 metres), Badrinath (7,138 metres), Kedarnath (6,940 metres), Gangotri (6,614 metres) and Srikanta (6,728 metres) peaks. In Kulu Valley there are two main peaks, viz., Indrasan (6,220 metres) and Deo Tibba (6,001 metres). Most of the rivers, such as Ganga, Yamuna, Sutlej and their tributaries have their origin in this region(46).

The people on both the sides of the border had been freely using the border passes - Shipki, Mana, Niti, Kingri Bingri, Darma and Lipu Lekh for their trade and social get-together(47).

Eastern Sector

The Indo-Tibetan border in the Eastern Sector, i.e., the McMahon Line, spans from tri-junction of India-Bhutan-Tibet (south of the Me La) in the west to tri-junction of India-China-Burma (east of the Diphu Pass) in the east. The McMahon Line marks the border along the highest crest of the Himalayan range on the basis of the watershed principle adopted for determining firm international borders. North of the McMahon Line lies the Tibetan Plateau. The land south of the boundary is the mountainous territory of Arunachal Pradesh earlier known as North East Frontier Agency or NEFA. It is separated from the river Brahmaputra in the south by a belt of northern Assam plains. Along the border with Tibet lie four of its five frontier divisions(48), viz., (west to east) Kameng, Subansiri, Siang and Lohit. The fifth - Tirap - lies entirely south of the Brahmaputra and has common borders with Burma in the east and south.

Arunachal Pradesh has aptly been described as a region 'of bare, craggy hills, huge tropical and alpine forests, steep, rugged valleys and great cascading rivers"(49) and contains many lofty ranges and towering peaks, some of which rise to nearly 5,000 metres. The mountains are precipitously steep. The ranges are perpetually covered with snow. Separate names are applied to the different parts of this hill-belt with reference to the names of the local peoples, e.g., the Aka Hills, the Dafla Hills and so on.

Between the craggy hills, the dales open out at some places to plateaus with bold undulations intersected by glens and ravines. From the higher elevations of mountainous tract spring forth a number of rivers - Nyamjang Chu, Subansiri, Siang, Dibang and Lohit. The upper courses of these rivers lie in areas which are higher in altitude, difficult of access, and thickly wooded(50). The serpentine course of the rivers through the spurs of the hills, with dense forests on both sides, make the land difficult to cross. Landslides are frequent and very dangerous(51). The valleys in the area are marked by sharp contours of pointed hills and precipitous slopes(52).

The large flat pastures become quagmires in the monsoon. The locals use logs to make crossing places. When large bodies of men and cattle move across these logs, they are liable to be submerged, and the only way to negotiate marshy patches is to wade across in knee-deep mud(53). Much of the country is exposed to inundation in the rainy season and is covered with dense masses of grass and reeds more than 3 metres in height(54).

In the westernmost part of Arunachal Pradesh is located the Kameng Division. In its north-western part, from the India-Bhutan-Tibet tri-junction which, in itself, is a massive orographical knot on the Great Himalayan range, emanate other mountain ridges or spurs. One of the ridges is called the Thagla Ridge(55), which runs to the south-east of the Me La for some distance, and is then cut by the Nyamjang Chu. The depressions of the Thagla Ridge are the Dum Dum La, Yumtso La and the Thag La situated on the ridge on the western side of the Nyamjang Chu(56). The ridge extends to the east of the river to embody Bum La. The average height of this ridge is about 4,270 metres(57). Its southern slopes are steeper than the northern. The Namka Chu, a small rivulet, separates the Thagla Ridge from the Tsangdhar Ridge. Its main features are Tsangdhar (approx. 4,880 metres)

and Karpo La I. The Hathung La (approx. 4,570 metres) is its main depression. The area is dominated by numerous very high and practically inaccessible features, passage across which is possible only through some high altitude passes. The fast flowing rivers, principal among them being Nyamjang Chu and Tawang Chu, have made deep and big gorges. The area is marked by steep rises and deep depressions. The rivers are not generally fordable, either because of the fast current or their depth or sheer walls on either side.

The important monastery town of Tawang in the western part of Kameng Division was connected with the railhead of Misamari (near Tezpur) by a road in 1962. Starting from Foot Hills, the road went upto nearly 2,900 metres height via Bompu La and Chaku (approx. 2,130 metres) to a place named Eagles Nest (approx. 2,745 metres) with thick jungles, steep climbs and extremely difficult terrain.

Then the road glided down slightly to climb up to cross the next range through Bomdila. Bomdila is approx. 100 km from Foot Hills at a height of about 2,900 metres. The high ground around Bomdila dominated the surrounding area. Important routes from Dirang Dzong which is at a height of about 1,675 metres. Tracks from North Lungthang-Sangti met at Dirang Dzong. It is situated in a long stretch of valley. From Dirang Dzong the road skirted the stream on to the Sapper Camp, and later climbed to Senge Dzong and Se La (approx. 4,270 metres). The road to Se La passed through Nykmadong, a focal point where the tracks bypassing Se La met. The area was covered with thick jungles which started disappearing as the climb towards Senge Dzong - Se La started. Pine forests appeared in the beginning and they faded away when one reached Se La. The road up to Se La could be used by one-ton trucks. Beyond Se La, the road was jeepable upto Tawang (approx. 3,200 metres). Before covering the 40-km stretch from Se La to Tawang Chu the road passed through Nuranang (approx. 3,660 metres) and Jang (approx. 1,525 metres). From the Tawang Chu there was another 37-km drive up the hills to Tawang(58).

The Subansiri Division (now divided into two - Upper and Lower districts) got its name from the river which drains its eastern and northern parts. It is separated in the west and east by high mountain ranges from Kameng and Siang divisions. The Indian frontier area opposite Tibetan area in the Subansiri division was called the Longju Sector.

Siang Division (now divided into West Siang and East Siang districts), like Subansiri, is named after

the river Dihang or Siang which runs across the division from north to south. The Siang Division is separated from the Tibetan Plateau in the north by the Great Himalayan range, whose height varies from 3,660 metres to 5,500 metres(59).

The Lohit Division, the north-eastern part of Arunachal Pradesh, is now divided into two districts. The upper district is called Dibang Valley after the name of the principal river in the district, and the lower, Lohit, also named after the river of the same name. The Lohit Division is bounded by the Himalayan range in the north and east. The range that separates it from Burma in the east is called the Patkoi Range(60).

Walong is an important strategic town in the Lohit District. It is situated on the Lohit river (the Tsayul or Zayul Chu of Tibet) which enters India at a height of about 1,371 metres approx.imately 6 km north of Kibithoo. Walong is located in a bowl-like tract surrounded by hills. About 16 km north-west of Walong is the prominent and dominating feature 4,410 metres high. Another feature in the east is the tri-junction (India-Burma-China) at a height of 4,038 metres(61).

Of all the strategic places in the Eastern Sector, Walong had been the most inaccessible. The nearest roadhead was at Lohitpur, about 14.5 km north of Tezu. Lohitpur was connected to Walong by a 174-km long mule track, but the track was not fit for movement of large bodies of men. Troops were to disembark from trains at Jorhat to be airlifted to Walong(62). Aircraft had been the most practicable means of communication between Walong and Lohitpur. Similarly, Dakotas were the most dependable means of communication between Jorhat and Lohitpur available in 1962(63).

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NOTES AND REFERENCES

1. Notes, Memoranda and Letters exchanged between the Government of India and China, September-November 1959 and A Note on the Historical Background of the Himalayan Frontier of India : White Paper (hereafter referred to as White Paper) No.II, (Ministry of External Affairs, Government of India, Nov 1959); Appendix I, p.125.

2. Bhutan is attached to India by special treaty. Under this treaty, the defence and external relations of Bhutan are the responsibility of the Government of India. Since India is responsible for the defence of Bhutan's borders with Tibet, the Bhutan-Tibet border, in effect and for all practical purposes, becomes part of India's northern border.

3. For other details about the alignment of the boundary in this sector, see Report of the Officials of the Governments of India and the People's Republic of China on the Boundary Question (hereafter referred to as REPORT) (Ministry of External Affairs, Government of India, February 1961), pp.1-2.

4. The Sino-Indian Boundary (Texts of treaties, agreements and certain exchange of notes relating to the Sino-Indian Boundary) (published by the Indian Society of International Law, New Delhi-1), pp.1-2.

5. Ibid, p.3.

6. Quoted in letter dated 26.9.1959 from Prime Minister of India to the Chinese Prime Minister, Chou En-Lai, para 7, White Paper No.II, p.36.

7. Bajpai, S.P., India-China Boundary: Central Sector, in S.P. Sen (ed): The Sino-Indian Border Question- A Historical Review, (Calcutta, 1971), p.92.

8. In March 1890, the Anglo-Chinese Convention signed at Calcutta defined and confirmed the boundary of Sikkim - then a protectorate of India - and Tibet. The boundary alignment was jointly demarcated on the ground - the eastern portion in 1895-1896 and the northern in 1902-1903. REPORT, p.101.

9. This is also a traditional, customary and natural border which follows the crest of the Himalayan range which forms the main watershed between the

rivers flowing into Tibet, on one hand, and those into Bhutan, on the other. This whole natural alignment stands recognised by the Chinese Government except for a small discrepancy between the delineation on the maps of the two sides. See Chinese note of 26 December 1959. Cited in White Paper III, p.79.

10. REPORT, p.2.

11. Letter of Prime Minister Jawaharlal Nehru to Chou En-Lai, Prime Minister of China, 22 March 1959, quoted in China's Betrayal of India - Background to the Invasion (Publications Division, Ministry of Information and Broadcasting, Government of India, November 1962), p.20.

12. REPORT, p.84.

13. Ibid.

14. The word 'La', in Tibetan, means a 'pass'. The use of the word 'Pass' in this case is, therefore, superfluous.

15. REPORT, p.85.

16. White Paper II, p.40. The area was renamed as North East Frontier Agency (NEFA) after the promulgation of the North East Frontier Areas (Administration) Regulation, 1954.

17. The whole McMahon Line also included the Tibet-Burma border. But for the purposes of this study the McMahon Line has been used to signify the Eastern Sector of India's border with China.

18. This description is based on WHITE PAPER, V, p.20; REPORT p.2, and S.K. Pathak, India-China Boundary: Eastern Sector in S.P. Sen (ed), The Sino-Indian Border Question - A Historical Review, pp.144-146. For further details about the alignment of the boundary in this sector, see REPORT pp.2 & 12-17.

19. Johri, S.R., Chinese Invasion of Ladakh, (Lucknow, 1969),p.10.

20. Jagjit Singh, The Saga of Ladakh - Heroic Battles of Rezang La & Gurung Hill 1961-62, (Delhi, 1983), p.19.

21. Bajpai, S.C., India-China Boundary: Western Sector in Sen, S.P., (ed): The Sino-Indian Border Question - A Historical Review, p.83.

22. Gazetteer of Kashmir and Ladakh, (Delhi, 1974), p.13.

23. Encyclopaedia Britannica, Vol.13, London etc., 1964.

24. Johri, S.R., Chinese Invasion of Ladakh, p.62.

25. Ibid., p.68.

26. Ibid., p.63.

27. Ibid., p.64.

28. Ibid., pp.68-69.

29. Jagjit Singh, The Saga of Ladakh, p.39.

30. Ibid.

31. Johri, S.R., Chinese Invasion of Ladakh, p.65.

32. Ibid., p.69.

33. Younghusband's description of the area he visited in 1889. Report of a Mission to the Northern Frontier of India, p.91, cited in Rao, G.N., The India - China Border, A Reappraisal (Bombay, 1968), p.41.

34. Ibid.

35. Bose, S.C., Geography of the Himalaya (New Delhi, 1972), p.118.

36. Ibid.

37. In an interview on 14 March 1988, Brig J.F.N. Vakil (Retd), who was Brig ASC, Western Command in 1962, informed that in 1961 the road was motorable only upto Kargil. It was made motorable upto Leh by May 1962. But the road was narrow in many areas necessitating the adoption of 'gateway system' at those places.

38. Operations in Jammu and Kashmir 1947-48, Ministry of Defence, Government of India (New Delhi, 1987), p.9. Various distances mentioned here are based on the information given in this publication on pages 8 and 9.

39. Ibid., p.326.

40. Ibid., p.7.

41. Charak, S.S., Indian Conquest of the Himalayan Territories, (Military Exploits of General Zorawar Singh Dogra), (Pathankot, 1978), pp.55.

42. Encyclopaedia Britannica, 1964.

43. Chatterji, S.P., Physical Features of the Himalayas, Himalayan Seminar Volume (IISS/Delhi School of Economics, New Delhi, 1965), pp.1-13. quoted in S.C. Bajpai, India-China Boundary: Central Sector in S.P. Sen (ed) The Sino-Indian Border Question - A Historical Review, p.121.

44. Official Report on the Province of Kumaon, edited by J.H. Batten, Esq., Commissioner of Kumaon, 1878, p.1.

45. District Gazetteer, Lahul & Spiti, (Published by Himachal Pradesh Government, 1975), p.70.

46. Chatterji, S.P., Physical Features of the Himalayas as reproduced in S.C. Bajpai, op.cit., pp.121-122.

47. The Sino-Indian Boundary (Texts of treaties, agreements and certain exchange of notes relating to the Sino-Indian Boundary) (published by the Indian Society of International Law, New Delhi-1), p.8.

48. In 1964, the word 'Frontier Division' was changed to 'District'. In 1980, under the Arunachal Pradesh Re-organisation of District Act, nine districts were created. These are:- (West to east) West Kameng & East Kameng (out of the earlier Kameng Frontier Division), Lower Subansiri and Upper Subansiri (out of the former Subansiri Frontier Division), West Siang and East Siang (formerly Siang Frontier Division), Dibang Valley and Lohit (erstwhile Lohit F.D.) and Tirap.

49. Quoted in K.C. Praval, The Red Eagles - A History of Fourth Division of India (New Delhi, 1982), p.179.

50. Rao, G.N., The India-China Border: A Reappraisal, p.71.

51. Pathak, S.K., India-China Boundary: Eastern Sector in S.P. Sen (ed) The Sino-Indian Border Question: A Historical Review, p.149.

52. District Gazetteer, Lohit, p.4.

53. Dalvi, J.P., Himalayan Blunder (The Curtain-raiser to the Sino-Indian War of 1962), (Bombay, 1969), p.204.

54. District Gazetteer, Lohit, p.5.

55. In this text, popularly known Tibetan word 'La' is used separately to name a particular mountain pass, e.g., Thag La. But, if the name of the pass is used as an adjective signifying a place or thing associated with its name, then 'la' is used as suffix to the name of the pass, e.g., Thagla Ridge.

56. Johri, S.R., Chinese Invasion of NEFA, (Lucknow, 1968), p.33.

57. Ibid., p.35.

58. Saigal, J.R., The Unfought War of 1962 - The NEFA Debacle (New Delhi, 1979), pp.11 & 13.

59. Johri, S.R., Chinese Invasion of NEFA, p.244.

60. District Gazetteer, Lohit, p.3.

61. Johri, S.R., Chinese Invasion of NEFA, p.201.

62. From Official Records.

63. Johri, S.R., Chinese Invasion of NEFA, p.201.

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