

Baspa Glacier: Sutlej's Big Feeder – A USI Sponsored Study-cum- Adventure Trek*

Colonel KS Dhami (Retd)**

Baspa is a big glacier. The valley is amongst the most beautiful in the Himalayas. The road journey, a destination by itself—and witness how, bumper to bumper, 'run-of-the river' hydel projects are killing the mighty Sutlej, and affecting the fragile ecology.

General

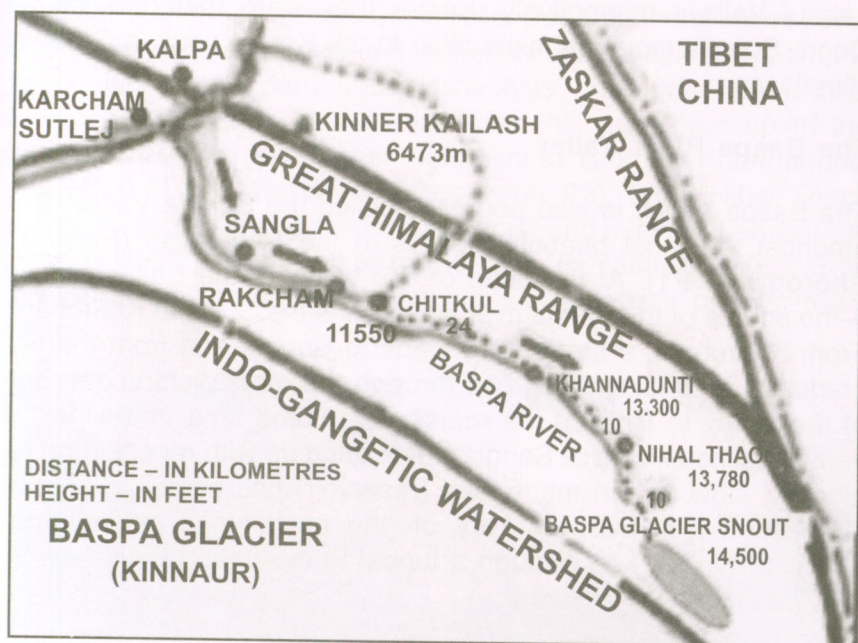
The author's trek to Baspa glacier was conducted from 08-17 July 2012 in continuation of USI sponsored adventure-cum-study treks for ground monitoring of 'snout zones' of big glaciers: Gangotri, Siachen and Kolahoi, feeding the main rivers of northwest Himalayas. The phenomenon of receding glaciers and its effect on climate change was earlier described in an article '*Himalayas: A Wake-Up Call*' in USI Journal, Vol CXL January-March 2010, No.579.

The journey, to the road head at Chitkul for the Baspa glacier, starts from Chandigarh through Simla to Narkanda. From Narkanda the National Highway leads up the Sutlej river to Rampur. The other route is along the old Hindustan-Tibet Road (HTR) that goes along the Narkanda-Bagi-Khadrala-Sungri ridge line and the Indo-Gangetic watershed—running at about 9000 ft through one of the finest fir line stretches in the Himalayas. This approach was very popular with the British Viceroys. From Sungri the old road/track led to Taklesh and then keeping well away from the Sutlej, crossed it at Wangtu. Presently, from Taklesh one has to come down to Rampur on to the main road—the old stretch has yet to be developed. At Kharcham a steep road takes off for Chitkul crossing

* This article is based on personal observations of the author on the ground and his earlier travels to this area.

** Colonel KS Dhami was commissioned into 14 Horse on 12 June 1960. Later, he got himself transferred to the Parachute Regiment, commanded 6 PARA and took premature retirement in 1983. He led the USI sponsored adventure-cum-study treks to Gangotri Glacier in Oct 2010, Siachen and Kolahoi Glaciers in Oct 2011 and Baspa Glacier from 8-17 Jul 2012.

the Sutlej over the diversion dam of the Kharcham-Wangtu Hydel project. (Refer to Map)



Map – Baspa River Valley

Along the road on the Sutlej are numerous hydel projects that have come up and are under construction, killing the great river as its flow will be restricted by passing through tunnels. They are becoming a major cause for environmental degradation of the Sutlej Basin. It was an interesting sight to see a Nano car near Chitkul at 11,000 ft, a road stretch which is traversed mostly by powerful SUVs – others not daring to do so. Later, while on a walk near the ITBP camp, I met three tribal women de-weeding in a field to the 'sound of music on a cell phone' and asked them about the Nano car. The reply was a full assessment of the mini car: "*Bahut achi hai, choti hai, is ilake ke liye nahi hai par fir bhi sab jagah jati hai*" (It is very good and small; not suitable for this area, but still it goes everywhere).

The 'Adventure-cum-Study Trek' started with the aim of fixing the snout position of the Baspa glacier and to observe the state of the ablation zone. The team consisted of; besides myself, Subedar Jagat Pal, Naik Champa Panchok, Sepoy Bheem Sen of

Dogra Scouts—the mountain warriors, a title they lived up to with tremendous enthusiasm. Champa and Bheem are from Spiti and Lahaul Valleys respectively. Earlier they were members of the Dogra Scout's mountain expedition to the Kamet peak in Garhwal Himalayas.

The Baspa River Valley

The Baspa Valley is also popularly called the Sangla Valley. It is amongst the most beautiful valleys in the Himalayas (**Refer to Photograph P1**). At the head of this valley is the Baspa glacier—the source of the Baspa river which joins the Sutlej at Kharcham. From Kharcham, a steep road leads to Sangla and from there a gradually ascending road runs through the most picturesque part of the valley to Chitkul, the road head. Some time in the past a beautiful lake existed at Sangla which dried up with receding of the glacier. Now a man made lake (reservoir) has come up as part of the 300 MW Baspa-II 'run- of- the river' hydel project from where water is taken through a tunnel to the power house below at Kharcham.

From the Baspa Valley a number of famous high altitude treks take-off. The famous ones being: around the Kinnar Kailash massif on the great Himalayan Range; across the Indo-Gangetic watershed over the Lalalanti pass into Pabbar river valley to Rohru; over the Lamkhaga pass to Harsil on the Bhagirathi river; and over the Yamrangla into Tibet, which was one of the popular trade routes into Tibet prior to occupation of Tibet by China.

The Glacier Trail

From Chitkul a steep 44 km pony/foot trail takes one to the Baspa glacier snout. It is a difficult and demanding trek with most of it over stones, rocks, steep skiing slopes. At times toeing is required to make a foothold, and to walk over glacial moraines. Numerous big and small glacial streams have to be crossed by stone hopping over improvised wooden log bridges and some of them have to be waded through. Change in weather can lead to sudden torrents of water gushing down suddenly, leaving you stranded on the wrong side.

In high valley pastures and on high mountain slopes, flocks of sheep and goats can be seen. At lower heights cattle are much healthier than those around Simla Hills. Degradation of forest cover continues unchecked near habitations and by graziers — like it is happening in other parts of the Himalayas. The Indo-Tibet Border Police (ITBP) keeps surveillance over this area right up to the International Border. It has set-up posts at Tangtse, Khannadundi and Nihal Thach (**Refer to Photograph P2**). From Nihal Thach routes bifurcate, one to the Baspa glacier and over the Lamakhaga pass to Harsil and the other to the north to Yamrangla (pass) on the Indo-China border, which in older days was a popular trade route.



P 1 – Baspa Valley – A View to Remember



**P 2 – Nihal Thach ITBP Post.
Rainbow – A Welcome Omen in the Mountains**

The Snout Zone

From available records Baspa glacier extends across 18 km with its width varying from half a kilometre near the snout to about 3 km, covering an area of 35 sq km. The snout is about 4300 m and the highest portion of the glacier is 5800 m.

The Baspa glacier snout zone is quite different from the Gangotri, Siachen and Kolahoi glaciers that we have studied. The glacier spreads over relatively level ground and has gradual gradient. The melted water does not gush out from one or two cave like openings as in the glaciers mentioned above; but from a big cave like water outlet covering practically the whole front. The edges of the glacier, near the mountain slopes on which we stood, have solid ice covered by debris. The water flow close to the snout is well spread and is used for crossing, rather than to take the risk of crossing lower down (**Refer to Photograph P3**).



P 3 – Baspa Glacier Snout. Toe Cutting will lead to large scale shearing of unsupported ice

Ice is visible only at the melting face of the snout or in crevices, other visible portions are all covered by black soot and debris. The backward and side toe cutting due to melting will lead to the massive unsupported portion shearing and crumbling—this is the way the glacier snout is melting and retreating. The melting rate cannot be assessed without some previous record but from what we saw on the ground, the glacier is definitely receding fast and shrinking, like others.

The snout zone was photographed clearly and the coordinates were recorded by using the GPS and data recorder. Accurate reading on the GPS could be taken from a distance of about 100 m from the ice face and in line with the snout's left (southern) edge. The snout coordinates were recorded as: Long - 78° 41' 54.36" E, Lat - 31° 13' 33.32" N (**Refer to Photograph P4**).



P 4 – For accuracy taking coordinates on GPS 100 mtrs from cave opening and in line with left edge of snout

Weather was an important consideration on which we could take a calculated risk. We had to do our job quickly and then get out fast. In four days we trekked about 90 km at altitudes ranging from 11,500 to over 14,500 ft and it was really a tough going. Last year, tourists were stranded in Sangla and had to be evacuated by helicopters. I had assured my team not to worry about the weather based on my experience of last 12 years of trekking in the Himalayas. The weather Gods had never upset my plans even once nor, interfered with my photography. Weather remained clear during the four days of our trek. We felt further reassured to see a rainbow—a welcome ‘omen’ in the mountains. It appeared in the evening of the day prior to our trek to the snout; but at night, I was awakened by rain drops on my tent which had me worried the whole night. I wondered, how can this happen? However, the weather Gods relented and we could not have asked for better weather on the next day and the day after that — that helped us to complete our trek successfully. The logistics support provided by HQ Western Command and its units in the area of the trek contributed considerably to the success of our expedition.

References

1. USI Journal, Vol CXL, January-March 2010, No 579, '*Himalayas : A Wake-up Call*', p. 88-95
2. USI Journal, Vol CXL, October-December 2010, No 582, '*Gangotri Glacier – Unveiling the Ground Reality*', p. 503-510
3. USI Journal, Vol CXLI, October-December 2011, No 586, '*Kolohoi Glacier : Kashmir's Vanishing Life Support*', p. 566-574

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