

always been sufficient for carrying out detailed work in every one of the upper valleys of the Himalayas. But in the course of years every detail will be filled up. As it is, the work of the Survey is gigantic and admirable.

It is of great interest to hear that the Gurla Glacier »shows signs of actual recession at the present time». ¹ This was in 1905 and was in perfect harmony with the fact that the channel between the lakes was dry, although, of course, the recession of glaciers begins later than the drying up of river beds. The Manasarovar could easily again overflow whilst the glaciers of the surrounding mountains were still in recession. On the other hand it is not quite in harmony with the retreat of the Gurla Glaciers that some passes in Garhwal, which, according to Bhotia tradition, long ago were easy to pass, now are crossed only with great difficulty. ²

Dr. Longstaff comes to the following conclusion:

Such cases may be due merely to local changes in these particular glaciers, but one cannot help remembering the evidence brought forward by Blanford, Garwood, and others to the effect that the Himalayas are still undergoing a process of elevation. Such elevation, by arresting an increasing amount of the monsoon water-vapour, would surely be at least a contributory cause in the desiccation now taking place in Central Asia, indications of which are evident even in regions so close to the Himalaya as Mansarowar. ³

I have touched upon this problem in a work which was published during my last absence in Tibet, and I will here content myself with quoting the following passage about my own views; ⁴ speaking of the general desiccation of Tibetan lakes I say:

Can it be that it is dependent upon a still active elevation of the geologically recent ranges of the Himalaya, or, as Dr. Ekholm suggests, upon the encroachments which the peripheral regions are making upon the central regions? That the Himalayan waterdivide is advancing from the Indian side towards the Tibetan is certain; but considering the amount of the precipitation, this change can hardly produce any other effect except that of diminishing to some extent the supplies yielded up to the Indus and the Tsangpo, without on the other hand influencing the amount of the precipitation in the interior, self-contained drainage-basins. It is more probable that the desiccation of the Tibetan lakes is dependent upon more comprehensive climatic alterations, possibly of a periodic character and affecting perhaps the whole of the Asiatic continent.

It is of course absurd to make the mountain-building forces in the earth's crust responsible for the greater difficulty in passing the passes in Garhwal at the present time than two or three hundred years ago. The denudation works fairly parallel

¹ *Ibidem*, p. 207.

² *Ibidem*, p. 210.

³ *Ibidem*, p. 211.

⁴ *Scientific Results of a Journey in Central Asia, 1899—1902. Vol. IV: Central and West Tibet*, p. 597.