

by the Ladak Indus in double that course and from double the area of country. »Rivers of considerable volume sometimes issue ready formed from glaciers.»

It is strange that hardly any other traveller in these interesting parts of Tibet than Henry Strachey has pointed out this important fact. I found a striking example of the truth of this physical law at the source of the Brahmaputra. There it is obvious that the branch, Kubi-tsangpo, which comes down from a group of Himalayan glaciers must be the principal source and not such branches as those which come from the dry Chang-tang or rise near to its border.¹

Therefore Henry Strachey concludes that the scanty volume of the Singi-tsangpo or source branch of the Indus proves that there is no active effluence of any extent from the north. The gradual subsidence of the Panggong-tso proves also that this lake received little affluence from the east.

One can of course, as Strachey does, speak of the *source of greatest volume* of the whole Indus and place it in the head of the Monlung of Lingti where the rivers of Sanskar and Lungnak rise. The source of greatest volume of the Shayok he places in the Kumdan glaciers, whereas the Yapchan river is the longest source branch of the same. Here, however, he omits the branch from the Remo glacier. He points to the fact that if there were any active effluence from Panggong-tso, and the main trunk of the river extended to the farthest affluent of the lake eastwards, the Kumdan river would be reduced to a tributary and the extreme length of the main river would be increased probably to 400 miles.

Here he touches a problem to which we have a striking analogy in the combination Satej—Manasarovar—Rakas-Tal. The eastern half of Panggong-tso, the Tso-ngombo, is fresh as it has an effluent to the western half which is salt as being cut off from the Shayok-Indus. As Strachey himself had seen water flowing from the Manasarovar to Rakas-tal and supposed the latter had a temporary effluent, he had no cause to make a comparison with the changes which have taken place with the Panggong-tso. Nobody knows whether the desiccation will continue in future at the same rate as hitherto. But if it does the Rakas-tal will meet exactly the same fate as Panggong-tso and the Tso-morari and become salt, whereas the Manasarovar will continue to remain fresh for a much longer period. This is only a future prospect; but as long as both lakes are fresh and still have temporary effluence, they belong to the Satej. In this respect Strachey had no doubt, and therefore he makes no comparisons.

He calculates the longest trunk of the Tibetan Indus at 750 miles from its farthest sources in Seng Tot to Lower Balti. The highest point upon the main Indus attained by Strachey was Demchok. But Moorcroft and Hearsay had seen the river at Gartok. Therefore the Indus may be said to be positively determined for nearly 700 miles. Concerning the real source he says: »Little or nothing is known

¹ Regarding the important part played by glacier sources we shall return to this matter in Chapter XXIX, p. 205.