

In 1839 Captain Sir ALEX. BURNES gives us his views of the Indus and he has even a special chapter (XI) *On the sources of the Indus*, which shows the state of knowledge of his time.¹ But he says, as the whole of his information rests on the authority of others the credence to which it is entitled should be well weighed. The main Indus he regards as four times as great in volume as the Ganges in the dry season and nearly equal to the Mississippi.

»The much greater length of course in the Indus and its tributaries, among towering and snowy mountains near its source, that must always contribute vast quantities of water, might have prepared us for the result; and it is not extraordinary, when we reflect on the wide area embraced by some of these minor rivers, and the lofty and elevated position from which they take their rise: the Sutlege, in particular, flows from the sacred Lake of Mansurour, in Tibet, 17,000 feet above the sea. The Indus traverses, too, a comparatively barren and deserted country, thinly peopled and poorly cultivated: while the Ganges expends its waters in irrigation . . . Moreover, the Ganges and its subsidiary rivers derive their supply from the southern face of the great Himalaya, while the Indus receives the torrents of either side of that massy chain, and is further swollen by the showers of Cabool and the rains and snow of Chinese Tartary. Its waters are augmented long before the rainy season has arrived; and, when we look at the distant source of the river, to what cause can we attribute this early inundation but to melting snow and ice?»²

The difference he makes between the two rivers is only partly correct, as several of the tributaries to the Ganges rise on the Tibetan side of the Himalayas. He states that the sources of the great rivers of the world have always excited the particular attention of mankind; and that of none has our information been more conflicting and obscure than of the upper course of the Indus. After he had extended his journey into »Tartary» he made inquiries amongst the natives, which were assisted by Lieut. Macartney, though there is a great difference between Macartney's map and Burnes' results. »Great, however, is the aid which one derives from the records of a preceding enquirer.» And he expects much from Moorcroft's second journey, the results of which had not yet been published. When Burnes says: »The following are our present and received opinions regarding the sources of the Indus,»³ one would expect to get some new information about the real source, but he only tells us that the river of Ladak, joined by the »Shyook», falls into the Indus at Dras, a view which he materially improved by stating, that the river of Ladak, and the Shyook, instead of existing as two minor tributaries of the Indus, form of themselves the Indus; the one rising near the lake of »Mansurour», and the other in the

doubtful is only, whether not a channel, though Moorcroft did not find any, goes from Mansarowar to Rawan-hrad, and therefore can be regarded as the source-branch of Setledshj . . .»

Palmblad's discussion regarding this most interesting hydrographical problem was much more clever and scientific than many speculations of a much later date.

¹ Travels into Bokhara, etc. New edition. London 1839. His journey was undertaken some seven years before this date.

² Op. cit. Vol. I, p. 201.

³ Op. cit. Vol. I, p. 270.