

being 1.03m.¹ The average velocity measured at 32 points, at the surface, in the middle, and near the bottom, was 0.508m. a second. The breadth of the branch was 54m.; and the volume amounted to 21.38cub.m. a second.

The second branch had an average depth of 0.40m., an average velocity of 1.39m. a second, a breadth of 15.30m., and a volume of 8.54cub.m. a second. The whole Dok-chu therefore carried 29.92cub.m., or in round figures, 30cub.m. a second.

The Tsangpo itself presented some difficulties on account of the very great depth and the slow current. At the place where the rope was spanned across the river and the boat held at equal distances for measuring depth and velocity, the breadth was only 46m. The depth measured at 10 places along this line was on an average 2.82m., the deepest being 4.67m. The average velocity was 0.578m. a second, and the volume 74.98cub.m., or in round figures 75cub.m. a second. To this is, however, to be noted that the velocity instrument could not be held steady any deeper than 2m.; therefore I calculated a regular diminution of velocity towards the bottom, and perhaps in reality the current may be stronger somewhere near the bottom. The following measurements on the river will prove, however, that the value of 75cub.m. was very likely correct.

The whole Tsangpo, below the junction with the Dok-chu-Raga-tsangpo had thus a volume of 105 cub.m., and must have increased on its way to Shigatse to at least 125cub.m., after having received several tributaries, the greatest of which were Soo, Shab and Ta-nakpo-chu.

Below the point where the Dok-chu was measured it splits up in several delta branches spread over the gravelly bed and rushes murmuring down to the quiet and silent Tsangpo, which sweeps immediately along the rocks at its right bank.

¹ After introducing some corrections to the first calculations the results differ somewhat from those published in »Trans-Himalaya», Vol. I.