

which must be situated quite close to Dangbä-la; at any rate the Chang-la must be a saddle in the Nien-chen-tang-la.

The right tributaries on the same section are: Tsasa; Sanak-pu which is a considerable valley coming from S. 60° W.; it has the same size as the main valley, although much less water, and its fan forces the Mü-chu over to the left side of the main valley. In the background of Sanak-pu a range is seen covered with some snow. Then follows the Dera valley coming from N. 80° W. where black, rocky mountains are seen. The rocks at its mouth and higher up at the right side of the main valley consist of porphyry. Töngbuk and Tinga are small valleys, each with a brook.

The rise of the main valley becomes gradually somewhat steeper and ordinarily the river forms small rapids, between which the quiet stretches become more rare and shorter. One of them, opposite Shavo, where the road crosses the river, has a breadth of 95 m and an average depth of 1 foot; here the valley is fairly broad, otherwise always narrow and deep-cut. Two stories of terraces are generally developed, one old at 30 or 40 m above the present bottom of the valley, and one recent, being from 2 to 5 m high. Sometimes the road is laid on the top of the old terraces, but generally it proceeds between the old and the new ones. They are much interrupted and pierced by all tributaries. The Chepu brook, which carries comparatively much water goes out in the main valley through a narrow gate in the terrace of gravel and shingle, and is itself provided with 10 m high terraces. All the villages are situated at the mouths of the tributaries, where the ground is favorable for irrigation purposes. The bottom of the main valley is full of gravel of granite and porphyry, and occasionally of sand and blocks.

What the country is like some three days further east we know from the first crossing, *viâ* Sela-la, although it is completely unknown still further east. It is more difficult to form an idea of the orography in the country west of Mü-chu. Some considerable tributaries come from the west, and in the background of every one of them fairly high mountains are to be seen. It is true that one gets the impression, that these mountains all belong to one ridge, which, under such conditions, should be a meridional, southern ramification from the Pabla range. But comparing the region in question with the general orography in the rest of central Transhimalaya, the existence of meridional ramifications of any length seems to be very unlikely. The existence of two east-west running ranges is beyond doubt, the Pabla range and the Nien-chen-tang-la range, the latter following quite close the northern bank of the Raga-tsangpo and continuing westwards beyond Amchok-tso, as is also in accordance with Ryder. There may exist a third, small range between these two, but it is more likely that the intermediate space is filled with ramifications from the two principal ranges. This question can only be solved by new exploration in the region between my second and third lines of crossing.

Above Sirchung the following valleys enter from the left or eastern side: Tsiglung or Tsigelung with brook and bridge and cut through mica quartzite which