

to judge from the actual width of the well-marked main bed near the small town, and from what local information could be gathered, the available supply of water would probably be adequate to allow of a further extension of the irrigated area, were the needful labour assured. My own short stay at a season when the much-reduced winter supply of water in the river was already frozen would not allow of the collection of reliable data, and those which Dr. Hedin is likely to have gathered during his prolonged sojourn in April and May 1901 are not at present accessible to me for reference. But the abundance of the spring and summer supply is proved by the fact that the river is fed by the snowy mountains of Chimen and is large enough to have carved its way in deep-cut gorges through the outer main range of the K'un-lun or the Ältin-tāgh.<sup>5</sup>

The essential fact, however, for our inquiry is that the water available for irrigation in the Charkhlik-su is greatly in excess of that carried by either of the two streams of Vāsh-shahri and Mīrān, which alone at present support cultivation in this region apart from the Charkhlik oasis. Whatever physical changes desiccation may have worked in this part of the Tārīm Basin, it is impossible to assume that in the case of these three rivers originating in the same range, flowing over ground of essentially identical nature, and having their terminal courses at distances of only two marches from each other, the relative volumes of water carried by them and their relative importance for supporting agricultural settlements could have undergone material variation within the limited period to which our historical information for these parts is confined. On this ground it appeared *a priori* safe to assume that if earlier occupation was attested westwards at Vāsh-shahri by the remains already described and eastwards at Mīrān by the ruins of an 'old town' which our maps have marked since Prejevalsky's journey, the position of Charkhlik itself must also have been occupied before by some old and probably larger oasis.

Antiquity of  
Charkhlik  
oasis.

In view of these indications, the mention of an old *Sipil* or circumvallation at Charkhlik had already attracted my attention when I passed through Charchan.<sup>6</sup> Busy as I was kept by my other work, I looked for it on my arrival without loss of time, and my satisfaction was great when a necessarily rapid survey showed that signs of ancient occupation were clearly traceable in the very centre of the present cultivated area of Charkhlik, even on the surface. Quite close to the east of my quarters stretched one of the walls of a ruined circumvallation, built in oblong shape and well known to the people as the *Sipil*. Its mud ramparts, though badly decayed and completely levelled in places for the sake of cultivation within and without, could easily be traced for rather more than half a mile from north to south. Its width was about one-third of a mile. The extant height of the ramparts varied from twelve to twenty feet. The line could best be followed on the north and west fronts; on the south it was almost effaced. Though the whole of the interior was occupied by fields and homesteads, a rapid examination disclosed evidence of old walls in the large bricks utilized in parts for the dwellings of the modern settlers. Thus, near the centre of the enclosed area I noticed a mound about thirteen feet high, adjoined and partly built into by a cultivator's house. On the top one half, more or less, of a circular structure in masonry, some twelve feet in diameter, showed to a height of about four feet. The bricks, fairly hard, measured fourteen by ten inches, with a thickness of four and a half inches. On the east slope a straight edge of masonry, which seemed part of a base, was exposed at about five to six feet above the ground. The whole was suggestive of a small Stūpa ruin with its dome and square base, and a well sunk from the top showed that it had long ago been dug into for 'treasure'.

Ruined  
circumvallation within  
oasis.

<sup>5</sup> At a point not very far above the debouchure and less than forty miles from the oasis Dr. Hedin measured in the third week of May a discharge of 318 cubic feet per second, a relatively large volume at so early a season; see *Central*

*Asia and Tibet*, ii. p. 209.

<sup>6</sup> I was not aware at the time of Prejevalsky's earlier reference quoted below.