

head, and of the old villagers I examined, there had been no change in the water-supply in their time, nor was any remembered by tradition. So it was clear in this case that any *yangi-yer*, or new land, that has been opened since Yāqūb Bēg's times—and its extent as ascertained by me in the course of my survey is considerable—was the result solely of increased pressure of population and not of a change in climatic conditions.

The evidence thus furnished by Kelpin has its obvious importance in dealing with questions concerning 'desiccation' or climatic oscillations in the Tārīm Basin and with the arguments for the latter which may be derived from archaeological observations at abandoned sites, etc. It demonstrates once again the need of caution in accepting the fact of extended cultivation in the past as a definite proof for more abundant water, i. e. a moister climate. This evidence deserves all the more attention because the question as to the conditions affecting Kelpin irrigation is singularly free from such complications as we have noted in the case of the oases of the Domoko tract,⁷ or as must necessarily arise at oases dependent for their water-supply upon rivers the beds of which are liable to silt up and shift. The whole of the Kelpin water is furnished by springs which rise in a deep-cut gorge at a point known as Su-bāshi and about 10 miles from the centre of the oasis. This gorge resembles in character that of Kōrum-boguz, and debouches into the valley plain from the north-west through the narrow defile of Chong-karaul.⁸ It was interesting to note that in spite of this limitation of the water-supply and the steady rise of the population, which the irrigable land could no longer suffice to maintain, permanent emigration was unknown. Even Ak-su and Korla, with their abundance of water and arable land, could not tempt the men of Kelpin to extend the seasonal visits which many of them were accustomed to pay as labourers to these and other northern oases.

No change
in Kelpin
irrigation
resources.

In view of what has just been explained about the source of Kelpin irrigation it did not surprise me to find the reported ruins in the immediate vicinity of, or rather within, the present cultivation limits. *Sayāt-shahri* proved to be a small oblong circumvallation situated to the west of a deep-cut flood-bed known as Kuchak-yāri and surrounded on the other sides by new fields irrigated in rotation. The poorly built clay walls of the enclosure form a rectangle of about 166 yards by 90 and rise in places from 6 to 10 feet. Their thickness appears to have been about 6 feet; a weak parapet, about 1½ feet thick, crowned them at a height of *circ.* 6 feet above the present ground-level. No structural remains could be traced within apart from a completely decayed low earth mound; outside the south-west corner were seen the low clay walls of two adjoining enclosures measuring about 50 yards by 25, but they furnished no indication of their original character. No finds of any sort were reported at this small site, and, as occasional flooding from canals prevents wind-erosion, not even pottery débris could be traced on the surface. Hence the date of this small fortification remained quite uncertain. The same was the case also at the site of Munjakche, a small débris area only about a mile to the south of the little Bāzār of Kelpin, most of which had been recently laid out into fields. I noticed here only scanty potsherds and a shapeless clay mound about 15 feet high, partly dug into for manuring earth. Years before small stone ornaments were said to have been picked up near by.

Ruined sites
adjoining
oasis.

These remains at Kelpin itself having proved of no archaeological profit, I was all the more pleased with the lucky chance which caused my visit to coincide with the return of a party of

⁷ See above, pp. 202 sqq.

⁸ The name is derived from a ruined watch-post (*karaul*) which with its flanking walls forms a *chiusa* across the mouth of the defile. Want of time prevented me from visiting it. But local information asserted its relatively

modern origin, and this was confirmed by the statement of the local Chinese subdivisional officer who had found the construction of this 卡子 *ch'ia-tzū* in the Emperor Ch'ien-lung's time mentioned in a Chinese descriptive account of the 'New Dominion'.