

thus available the extent of the clearings has been restricted, though there is fertile ground easily capable of irrigation close at hand amply sufficient for several villages.

For the last five or six years preceding my visit the terminal course of the Yārtunguz stream has shown a decided tendency to shift its main channel westwards, where it was said to lose itself at a distance of 'two or three Tāsh' from Jigdalik-bulung. In consequence of this change the existing *band* at the canal head has failed at times to divert into the latter as much water at the proper season as the area under cultivation would need. Unable from want of adequate labour to cope with the difficulty by a more elaborate 'band' or the construction of a new canal, the small settlement has found it expedient to start fresh cultivation at Yilba-sarīgh, a grazing-ground near the end of the new main channel, as an alternative in years when irrigation from the old canal is likely to prove insufficient. Yet even in the same years sudden floods may extend along the old bed and prove an equal source of trouble to the cultivators. I regret that the necessity of pushing on to Endere prevented me from giving time to a detailed inspection of the little colony and the surrounding ground; for, as I had occasion to explain in my general observations at the close of the preceding chapter, it presents, on a small scale but in a typical form, the characteristic features of a terminal oasis such as we must suppose the Niya Site to have been. So much, however, seemed clear from what personal observation and local information showed me, that given an adequate supply of labour for the systematic maintenance and extension of embankments and canals, the area of cultivation could be greatly increased. If fields were to replace the expanse of luxuriant jungle which at present covers an area at least eight miles long and from three to five miles broad, the terminal oasis of the Yārtunguz river might well present conditions approximating to those we must assume to have once existed round the ancient site below Imām Ja'far Sādiq. What portion of this area could possibly be reclaimed at the present day with the water-supply actually obtainable from the Yārtunguz river, is a question to which a safe answer would be possible only on the basis of an exact survey by a competent irrigation engineer. So much, however, may be considered as probable, that the vagaries of the river would prove a far more constant danger to a relatively large settlement than any advance of the desert dunes. According to the explicit assertion of Abdul-Karīm, who knew the ground well since his youth, the dark ridges of high sands which fringe the fertile area on the east and north-east, and form a striking contrast in colour to the yellow fields and the dry Kumush beds, had practically retained their position. The river's shift westwards was remembered to have commenced long years before the difficulty about feeding the canal was seriously felt.

The inquiries which the situation of the colony naturally suggested as to any ancient remains possibly extant in the direction of the desert proved fruitless, but our energetic Darōgha succeeded at least in hunting up reliable guides who were acquainted with the Endere river and the ruins in its vicinity. It was equally useful that our supplies of foodstuffs and fodder could be replenished from the ample stock of the little settlement, and some labourers hastily recruited overnight for excavation work. On the morning of February 18 we set out across the desert to the forest belt of the Endere stream. Immediately after leaving the open plain of Yārtunguz-Tārīm a formidable 'Dawān' of sand, reaching a height of about 180 feet, had to be surmounted. Then we crossed a depression about two miles broad, covered in great patches with soda efflorescence. It marks, no doubt, an old flood-bed of the Yārtunguz river, a small saline stream still making its way along the western edge. Two more ridges of dunes, less high than the first, and strips of Kumush-covered low ground between them were crossed before we reached that evening's camping-ground in a dreary expanse covered here and there

Vagaries
of terminal
river course.

Desert
march to
Endere
river.