

hold good as regards the earlier and far more important phase of occupation which is proved for the site of Mīrān by the remains to be described further on, is a question that need not concern us here. But in order to understand the complete state of abandonment into which Mīrān appears to have fallen after the Tibetans left it, it is enough to remember the geographical facts which rendered the position so important for them and for them only.

As a reference to the map shows, the Tibetans at Mīrān were guarding a point of the greatest strategic importance for them. This little oasis forms the key to the direct route which leads, from the southern oases of the Tārīm Basin and the border lands of Īrān and India beyond them, to Tun-huang and Kan-su. At Achchik-bulak or Donglik (Map No. 61), a short march to the east of Mīrān, this route bifurcates into two tracks. Both pass eastwards, one along the southern shore of the great dried-up salt lake of Lop, and the other along the northernmost range of the Āltin-tāgh, to meet each other again at Tun-huang. Like the ancient Chinese 'route of the centre', which we have so often had to refer to above, and which once passed through Lou-lan, this southern route was a main line of communication into China from the last centuries B.C. onwards, and its importance must have greatly increased after the Lou-lan settlements were abandoned about the fourth century A.D., and want of water permanently closed the ancient 'central route'.

Strategic
importance
of Mīrān.

water from springs, the only one available during the late autumn and winter, is very limited. Fortunately on my second visit in 1914 I found the Lopliks of Abdal, who previously carried on cultivation at Mīrān in a spasmodic fashion, settled in a little hamlet of newly-built permanent homesteads near their fields, and the cultivated area considerably enlarged.

The change brought about by this settlement of the Abdal Lopliks, who until a generation or two ago were all fishermen and shepherds, was striking in many ways. It also made it easier for me to obtain reliable information as to the agricultural resources and possibilities of the place. I found that the total number of cultivating families exceeded two dozen. But it was acknowledged that the labour they could provide was quite inadequate for bringing under cultivation all the fertile land which the available water-supply would permit to be irrigated.

According to the statements then made to me by Nūr Muḥammad, the old Bēg of Abdal, and his intelligent son Niāz Bēg, the volume of water which reaches the Mīrān colony at the season when the river carries only spring water (*kara-su*) and is at its lowest, i.e. during the autumn and late spring, is estimated at 3 *tāsh* or 'stones'. This measure, based upon the volume of water needed to turn a millstone, would correspond, according to the average of the rough estimates ascertained elsewhere in the oases of Eastern Turkeṣtān, approximately to a discharge of 90 cubic feet per second. This volume was declared to increase temporarily to about 15 *tāsh* at the time of the early spring sowing towards the close of February and in March, when the ice in the river-bed and the snow in the lower mountains melt and, as in other rivers draining the north slopes of the K'un-lun, cause a short-lived flood. Subsequently the supply diminishes again until the big summer flood arrives late in June, when the snow and ice on the high ranges begin to melt and the volume of water in the river vastly exceeds all possible irriga-

tion requirements, just as it does in the rivers of Khotan, Keriya, etc.

The Lopliks now settled at Mīrān and claiming possession of all cultivable land there are, for a variety of obvious reasons, anxious to prevent that influx of new colonists from the chief centres of cultivation westwards which has enabled the Chinese administration to create and develop the relatively important oasis of Charkhlik within the last two generations (see above, p. 312). Hence I have no reason to assume that the above statements as to their irrigation resources are likely to be greatly exaggerated. I am confirmed in this view by the independent and reliable testimony which my faithful old follower of three journeys, Ibrāhīm Bēg of Keriya, was luckily able to furnish. He had, in addition to the visits paid while with me, made a prolonged stay at Mīrān in April-May, 1908, when he accompanied Naik Rām Singh on his ill-fated mission there. Being a landowner himself and specially experienced in irrigation matters—for a considerable number of years before and after my second expedition he had held charge as 'Mīrāb Bēg' of the canals of the Chīra oasis, as recorded in *Desert Cathay*, i. p. 236—he had been naturally interested in the irrigation of Mīrān, and made his own inquiries on the subject. Ibrāhīm Bēg's view was that the water-supply available in the Mīrān River was not inferior to that of Charkhlik, and that, though the conditions of the ground owing to shifting beds, stony soil, etc., were less favourable for its use in canals than at Charkhlik, the irrigation resources of Mīrān, if utilized under labour conditions such as obtain at Chīra, would suffice for the needs of a colony counting some 500 households instead of the present two dozen. Whether they will ever be utilized to the full, and whether such a colony would succeed in coping with the difficulties which great changes in the bed of the river, as suggested by the map (see Map No. 57), might create, only the future can show.