

on the south-east from another equally large loess area which bears the villages of the Mokuila tract administratively united with Gūma.

Irrigation of
Gūma.

Both the Gūma and Mokuila oases owe their fertility to the water brought down by the river of Kilian. Where the latter emerges at the foot of the hills on to the Dasht glacis, it divides into a number of channels, partly natural, partly artificial. As these diverge a kind of delta is formed, with its base extending from Chōlak-Langar in the north-west to Kakshal-Tati in the south-east, a direct distance of about 32 miles. But the distribution and importance of these channels is very unequal. To the west of Gūma they are few, and the limited quantity of flood-water they carry for brief periods would not suffice for regular cultivation of such loess soil as may be available between the Dasht and the moving dunes of the desert. Gūma itself enjoys an abundant supply of water from a number of 'Ūstangs' or canals; and the surplus, together with the occasional summer floods which pour down in broad torrent beds (*sil*) on both the west and the east of the oasis, has in recent years led to the creation of several detached settlements within the area of sandy jungle to the north-east of the oasis.

Mokuila
tract.

The tract of Mokuila is less favoured by facilities for irrigation. The water obtainable from the easternmost channels fed by the Kilian river is not sufficient to fertilize more than a small portion of the loess ground which stretches eastwards of the flood-water bed marked as 'Tazgun R.' on the map³. Consequently we find here strips of fertile village-lands, like those of Aramelle, Chōtla, Kakshal, broken by stretches where the naturally arable loess soil either lies bare and is undergoing erosion, or else is slowly being overrun by low dunes of fine drift-'sand'. We shall see hereafter that this drifting 'sand', highly productive wherever brought under irrigation, is itself composed largely of disintegrated loess⁴.

The physical features here outlined will help to give the right 'setting' to the antiquarian observations which I have had occasion to make about Gūma. These observations were at first of a quasi-negative character; but this, as subsequent experience showed, scarcely detracts from their interest. In my Personal Narrative I have indicated the reasons which induced me to make a halt at Gūma on the 5th of October for the purpose of antiquarian inquiries. Among the purchases of Central-Asian antiquities made for the Indian Government by Mr. Macartney and Captain (now Major) S. H. Godfrey, paper MSS. and 'block-prints', all in 'unknown characters', had since 1895 turned up more and more frequently and in increasing bulk. These, and similar acquisitions which had reached public collections at St. Petersburg, London, Paris, and probably elsewhere through European collectors at Kāshgar, were all supposed to have been discovered at sand-buried sites about Khotan⁵.

Inquiries
for Islām
Ākhūn's
'find-places.'

Islām Ākhūn, the Khotan 'treasure-seeker', from whom most of these strange texts were acquired, had, in statements recorded at Kāshgar by Mr. Macartney, and reproduced in Dr. Hoernle's Report on the 'British Collection of Central-Asian Antiquities', specified a series of localities from which his finds were alleged to have been obtained. Islām Ākhūn described these places as old sites in the desert north of the caravan route between Gūma and Khotan, and furnished

³ *Tāzgun* or *Tāzghun* is, in reality, a generic designation applied to rivers and streams which periodically carry flood-water. To distinguish the many 'Tāzguns', the names of the oases which they pass, or of the valleys from which they issue, would have to be added.

⁴ With this brief sketch, based on personal observations and notes, it will be useful to compare the ample details recorded regarding the oasis of Gūma in Hedin, *Reisen in Z.-A.*, pp. 11 sqq.

⁵ For a systematic synopsis of these 'finds', so far as they were acquired for the Indian Government, see Dr. Hoernle's *Report on the British Collection of Antiquities from Central Asia*, *J.A.S.B.*, Extra No. 1, 1899, pp. iii sqq.; also *J.A.S.B.*, 1897, pp. 237 sqq. For MSS. of this type purchased at St. Petersburg, comp. *Nachrichten über die Expedition nach Turfān*, 1899, p. 48, pl. 8; for similar acquisitions elsewhere, *J.A.S.B.*, 1899, Extra No. 1, pp. vii, xx, 59; Hedin, *Through Asia*, p. 760 (with illustrations in German edition).