

as consisting of flat plains of fine alluvium and dark gravel over which the fierce north winds drive fields of sand-dunes. On the southern edges of the desert the dunes often attain a height of 200 feet, and enormous drifts of sand bury the volcanic mountains of northern Baluchistan to depths of one or two thousand feet, or even more (McMahon, *b*, p. 290). North of the Helmund River the Dasht-i-Margo, or Desert of Margo, which was crossed by Ferrier (*a*, p. 400), appears to be of much the same character, although the sand-hills are not so high apparently, and the area of fine silt exceeds that of gravel.

The river itself flows in a distinct valley of erosion, which Colonel McMahon described to me as being broadly open, with three or four persistent terraces of gravel, like those which will be described later as occurring along other streams nearer to the Hamun-i-Sistan. Between these receding terraces lies what Holdich (*a*, p. 106) calls "the curious green ribbon of Helmund cultivation which divides the great untraversed wastes of the Dasht-i-Margo from the somewhat less formidable sand deserts to the south." "Here in a narrow little space of a mile or so in width we found the great river shut in with a green abundance, infinitely refreshing and delightful." Jungles of tamarisks border the river, and here and there nomad Baluchis feed their flocks, or even cultivate fields of grain. Far more impressive than the modern villages, however, are the innumerable evidences of a far greater population which finally disappeared not many hundred years ago. Every writer on the region dwells on the "cities of the dead, spreading out like gigantic cemeteries for miles on either side of the river, gaunt relics of palaces and mosques and houses, upright and bleached, scattered over acres of débris, masses of broken pottery, mounds of ancient mud ruins. . . . The extent of these Kaiani ruins (dating their final destruction from a century and a half ago) would be incomprehensible were it not for the extent of the indications of that canal system which was developed from the Helmund to assist in supporting the crowd of humanity which must have dwelt in the Helmund Valley" (Holdich, *a*, p. 107).

The other main affluents of the Hamun-i-Sistan repeat the features of the Helmund on a smaller scale. Rising in the mountains south of the Heri Rud, they run southwestward to the desert. Through this they flow in intrenched valleys which are probably like that of the Helmund. Along their courses through the plains, ruins replace the settled villages of the upper valleys, while at the heads of the deltas not far from the lake of Sistan the remains of ancient cities, such as Peshawaran, cover the plain for miles. Except for the distributaries which traverse the western half of the delta of the Helmund, all the important streams of the Sistan basin are located in Afghan territory, where exploration has always been exceedingly difficult. To-day it is practically impossible for a European to enter the country, and we must perforce rest content with the scanty accounts contained in the works of a handful of adventurous explorers half a century ago.

DESCRIPTION OF SISTAN.

The district of Sistan occupies a shallow depression on the southwestern edge of the Sistan basin. It comprises the lake, the swampy belt of reeds, and the low arable plain. Along the western border for a distance of 50 miles or more the