

Ruin of
Kosh-tura.

The first day's march was directed to Dō-shamba-bāzār, the chief market-place of the fertile village tract lying west of that branch of the Muz-art river which, lower down, flows past Shahyār. The road to it, after passing for about six miles from Kuchā town across gravel Sai and bare steppe, brought us to a conspicuous tower-like pile known as *Kosh-tura*. It stands close to the point where the easternmost of the small new canals from the Muz-art river has made it possible to resume cultivation on patches of ground apparently long deserted. This invests with special interest the evidence of ancient occupation afforded by the ruined pile, which still rises to a height of about 54 feet, and shows an oblong ground-plan. It measures, at the present ground level, 95 feet on the northern face and 82 feet on the eastern, the other two sides being badly broken. At an elevation of 25 and 38 feet, respectively, from the ground, the masonry recedes, forming terraces 10 feet wide around a solid mass of brickwork. No trace of any decorative facing of the brickwork survives. Yet the constructive features indicated leave little doubt that the ruin is that of a Buddhist shrine built on the plan of those found at the Turfān sites of Idikut-shahri, Astāna, and Sirkip.¹ The masonry consists of sun-dried bricks, 15" × 12" × 4" in size, mixed in places with flat slabs of hard clay (*kisek*). About 40 yards from the south-western corner another solid pile rises to a height of 36 feet. Here an older structure, built of stamped clay and about 32 feet square, appears to have been enlarged on the south by considerable additions of brickwork, which, however, are badly decayed. This ruin, too, is probably that of a shrine, but no definite indication of its character is traceable on the surface.

Canals on
R. bank of
Muz-art R.

Three miles farther on, the road brought us to the continuous belt of cultivation south of the village of Kum-tura. When passing through this to the left bank of the Muz-art river, I was able to measure successively the volume of seven separate canals. They take off some three miles higher up, near the small ruined site of Sarai-tam, and supply irrigation to the main portion of Kuchā cultivation stretching east and north of the Muz-art river. These canals are known as the 'üstangs' of Pailu, Chaka, Faizābād, Yangi-toibalde, Kōne-toibalde, Toghache, and Ugen from the names of the chief villages served by them. The volume of water carried by them at the time amounted, on approximate measurement, to 28, 46, 103, 159, 105, 45, and 132 cubic feet per second, respectively. Since our measurements were taken at points comparatively close to the canal heads, the aggregate volume of 618 cubic feet per second may be accepted as representing the total supply of irrigation water then available from the Muz-art river for the lands on its left bank, apart from the 30 cubic feet per second that we had measured in the new canal passing Kosh-tura.

The total thus arrived at agrees very well with the volume which, nine days later, I found being carried by the river where it debouches from the defile above the ruins of Duldul-okur, if allowance be made for the increase due to the progressive melting of the mountain snow at this season. That volume was then about 2,025 cubic feet per second, and of this close on 800 cubic feet were taken up by the two main canals on the right bank, known as the Toksu-üstang and 'Shahyār yangi-daryā', which irrigate the village lands stretching down from the tract above Dō-shamba-bāzār to Shahyār in the south. The third big canal on that side, which serves the canton of Yulduz-bāgh to the west, was undergoing its annual clearance at the time, and was consequently empty. Judging from its dimensions and slope it would have required some 760 cubic feet per second of water to fill it to the depth which, I was told, corresponded to the regular discharge at that season.

Large area
capable of
irrigation.

The measurements here recorded, approximate as they are, will give some idea of the large area—probably not far short of half a million acres—in the present districts of Kuchā and Shahyār, which existing canals and methods of irrigation enable to be cultivated with water from the Muz-art river. It is difficult to form an adequate estimate of the extension of which the present irrigated

¹ See *Serindia*, iii. Fig. 272; above, p. 613.