

reach the ruins. It must have been accompanied by vegetation to the end of its course, just as it is to-day. The ruins, for the most part, however, lie among vegetation which has been dead so long that the majority of the trees have lost their branches, and must have perished centuries ago. A comparison of the Niya River site with old Dumuka illustrates the matter. An abundant water supply was cut off from Dumuka in 1841 at a single blow. The vegetation is still vigorous, and only the weaker plants have died. If an equally abundant supply was cut off from the Niya ruins at approximately the same time, it is hard to see why the vegetation in the one case should be vigorous, and in the other should appear to have been dead hundreds of years. Altogether, it is highly improbable that the river would reach the ruins even if there were no such place as modern Niya. The idea of its not only reaching them, but supporting twice as large an oasis as it now does sixty or seventy miles upstream, is still more untenable. Apparently, at the beginning of the Christian era, the available water supply of the Niya River — which may be a very different matter from the rainfall of the region — was at least three times as great as now. One part or more was needed to balance the absorption and evaporation of the sixty or seventy miles from Niya to the ruins, and two or more to irrigate the ancient oasis. It is highly probable that the site of modern Niya was inhabited at that time, as it certainly was three or four centuries later, in 644 A. D., at the time of Hwen Tsiang's visit. In that case, the water supply must have been four or more times as great as now.

If we suppose that the climate of Central Asia has grown