Persia, by Sir Arnold Talbot Wilson London, 1932

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Before leaving the question of irrigation, mention must be made of the system of qanats - channels dug for many miles to bring underground water to fields on alluvial soil at the foot of the hills with the least possible loss by evaporation. The system is of extreme antiquity - it may well be contemporaneous with the earliest civilization of Persia: it involves a high standard of judgment in locating springs, and exceptional qualities of skill, endurance and patience in execution. Lands so irrigated probably exceed in extent those irrigated directly from running streams. There is some reason to think that many subterranean sources await discovery or re-discovery, and could be profitably connected by qanat to fertile lands nearby, but schemes of this kind require capital, as well as skill, and will not be undertaken without security of tenure and immunity from onerous revenue assessments. The revenue system of India, under which the population has trebled in a little over a hundred years, might well be adapted to Persian needs today, and the more easily because it is in its essentials a system introduced into India by the Mogul Emperors. Other irrigation schemes, not within the personal knowledge of the writer, but known to be of potential value, relate to the great marshes of the Helmund in Seistan where elaborate irrigation systems existed in very early times. The headwaters and main stream are in Afghanistan, but this fact need not impede development any more than in the case of the Nile, the headwaters and potential reservoirs of which are in part controlled by Abyssinia and utilized in part by the Sudan before they reach Egypt. In fact, the same difficulty may arise on the Euphrates and will doubtless be surmounted when the time comes.

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