

ANCIENT WATER SUPPLY SYSTEMS IN THE MA'AN AREA JORD.

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The Ma'An region has a large desert area, located east of the city, near the king's way. The climate is arid, there are hot summers and rain in winter. Two methods have been used for the use of water: 1) to take groundwater with qanats and 2) to collect rainwater.

The qanat takes the water from the aquifer through a well mother, and it carries it downstream through an underground gallery. This system is widespread in the Middle East, Asia and North Africa. On the surface the qanat is indicated by a long line of wells dug to build the main tunnel. During the November 2017 surveys the qanats of southern Jordan have been identified in part, because the area was devastated by the construction of roads, embankments, dams, etc.

An interesting qanat is about 4 kilometers south of Udhruh (Tall Abar'ah), near the road to Ma'An. This qanat has three ramifications which flow into one channel, it is probably about five kilometers long. It is not possible to identify the final structure of the channel and not even know its use. The accessory constructions to the qanat have all been destroyed, now you can only see the remains of an ancient mill near the qanat, but it is not certain that in the past it was fed by the waters of qanat. The traces of another qanat can be found on the outskirts of the city of Ma'An, near the soccer field, along a wadi, but even this qanat is only partially visible, due to roadworks and the construction of the wadi banks.

For what refers to the collection of rainwater, in the area between Udhruh and Ma'An there is a rectangular tank for collecting rainwater. It measures 25 meters by 12 meters and is protected by a small 50 cm high dam and it has a waterproofed base. The tank has two channels for water distribution, in the past used for agricultural activities. Another tank is located on the eastern outskirts of Ma'An, it measures 60 meters by 60 meters and is 4 meters deep. In the past the water from the cistern flowed towards the city of Ma'An through an artificial little canal. In the past the water from the cistern flowed towards the city of Ma'An through an artificial canal.



Qanat of Ma'An (Photo Ezio Burri)



Qanat of Udhruh (Photo An. Ferrari)



Ma'An pool (Photo An. Ferrari))



Ma'An, collection of rainwater (Photo An. Ferrari)