Main theme	Sub - Theme	Code Number
Natural Resources	Hydraulic system in Jawa	24

Study Name	**Jawa, the lost &found eh known and unknown the city of the Black Paradise**
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Date of Study	1998
Objectives	This report will talk about the formation of the land, the history and prehistory of Jawa and the Jawaites and where they could come from. Construction at Jawa fortifications, domestic architecture, hydraulic system, urban planning analysis, and numristics at Jawa.
Output and Recommendation	The black desert, a land covering 45,000 km², which over 11000 km² lie within Jordan. It is called the basalt barrier. Which stretches form just south of Damascus to south of Jauf. Creation of Jawa was almost at the end of the 4th millennium. This area is also part of later kingdoms (Edom and Amon). There are two main fortifications at Jawa, the upper town and lower town fortifications. Each is consisted of walls and gates. Gates were of a limited number six to seven with a few posterns. The total built area of Jawa at phase 2 was of 100,000m², almost 30 acres. The total length of fortifications is almost 2,700m, only 1,000 m belong to the upper town. The upper town represents 12,000 tons of basalt, while the lower presents 36,000 tons. The total external area of site is about 120,000 square meters. The whole population of Jawa rages between 3378 people, represented by 17-18 square meters built area of city/ person.
Development Aspects	At Jawa, Wadi Rajil is the life source that steers winter floods coming form Jabal AL-Arab to Jawa. The Jawaites have built their hydraulic system beside and upon this wadi. So, in the region around Jawa one can see unconscious reference to ancient hydraulic technology. For example: shallow pools, shallow depressions blasted into the bedrock with loose rubble piled around the pool and stone lined gullies. The intelligent hydraulic system of Jawaites was built to store as much water as possible. Reservoirs and pools were located around the western and southern sides of the city. Along the hydraulic system and in a way to take most efficient advantage of the macro and micro catchments. The water systems at Jawa as one comprehensive system. Mainly this system consists of four parts deflection area, gravity canals, dams and pools. In addition to sluice gates and deflection walls. In terms of development aspect, We could gain from their knowledge to establish new dams, pools by using harvesting techniques in many parts of Jordanian Badia
Remarks	https://doi.org/10.2307/1356942