

Main theme	Sub - Theme	Code Number
Socio-economic	Water	21
<b>Study Name</b>	<b>Potential Role of Shallow aquifers in the Badia ( Jordan)</b>	
<b>Author</b>	Nizar Abu Jaber	
<b>Date of Study</b>	2002	
<b>Objectives</b>	<p>The strategy of this project was to attempt to focus on finding and evaluating new shallow water resources in the area of Tulul al Ashqaf highlands which 80 km by 40 km ridge extending nearly north east half way between the towns of Safawi and Ruwaishid. And reaches elevations exceeding 950m. The Amman –Baghdad highway crosses the southern part of the ridge and provides the only major land access into the area.</p>	
<b>Output and Recommendation</b>	<p>Careful consideration of the various chemical inputs into the groundwaters of the Ghussein area give important insight into the nature of recharge in the area and the threats to water quality in the even of using these aquifers for water storage. Increasing salinity during storage is most likely the function of water-rock interaction rather than evaporation.</p> <p>The geomorphological, mineralogical, isotopic and geochemical evidence suggest that Biyar al Ghussein area suggest that water table extends beyond the wadi alluvium where the biyar are located into the adjacent basaltic flows. The thickness of the alluvium strata was found to range between 4 and 60 m. the water bearing formation was detected for values recorded between 3 and 80 <math>\Omega</math>m, with respect to resistivity values of the available water samples form certain location of the study area. The most promising areas that could have a potential subsurface flow are found in alghussein, alshwaydi, alabiadh, and Masmal wadis. Wadi Alabiadh is considered as a favorable location for potential shallow ground water. Certain areas below the alluvium consists of fracture basalt and most probably saturated with water. These are located in the following wadis, afassaf, Mahdath, and Ashwaydi.</p>	
<b>Development Aspects</b>	<p>This study is considered to be preliminary; therefore, a detail study should be conducted to cover wider area and deeper depth to include the underlying basalt. Weathered and fractured basalt have been detected during the study, which considered saturated and potential for groundwater resources.</p>	
<b>Remarks</b>	<p>Final report submitted to the International Development Research Centre, Ottawa, Canada. Under the Umbrella of UNESCO chair for Desert Studies and Desertification Control , Yarmouk University</p> <p><a href="http://hdl.handle.net/10625/31020">http://hdl.handle.net/10625/31020</a></p>	

