



Water and
Environment Centre

Assessment of Water Demand Management in Wadi Hadhramaut Using IWRM Perspective

Study By: Omar Bin Shehab

WHAT & WHY

This study investigated the assessment of Water Demand Management in Tarim area in Wadi Hadhramaut using Integrated Water Resources Management (IWRM) Perspective. Tarim was selected because of its large population and extensive exposure to water and groundwater pollution. Many studies from 1952 to 2007 emphasized the continuing increase in water demand for agriculture and domestic use; poor water quality; decline of groundwater levels, and poor flood control. The main objective of this study was to analyze the pros & cons of the current water resources management's governance structure and practices in the short and long term; using the principles of IWRM in order to create a sustainable water management system in Tarim.

RESULTS

- Through this study and previous studies by NWARA-BH, LWSSC and Agriculture offices, it has been identified that the decreasing wells' water levels are due to the continuous increased water demand
- Drinking water quality is consistent with Yemeni and international standards.
- Most irrigation water attributes are consistent with FAO standards, however, there are some polluted wells due to their location near sewage treatment areas or farms using wastewater.
- Agricultural water's economic value is approaching to zero because of the high water depletion rates and the inefficient use, especially in large farms. However, after the cost of diesel had increased, farmers adopted new irrigation technologies such as the use of pipes to carry water to the fields, and the use of modern irrigation techniques of which all led to reduce water loss and use water efficiently.



MORE INFO

Water & Environment Centre (WEC)
P.O. Box 13886 Sana'a University
Ma'een Office
www.wec.edu.ye
Sana'a Yemen