



The WEAP software is a Water Evaluation and Planning Tool to support decisions in the Integrated Water Resources Management. It was initially developed by SEI in 1988 and improved since then continuously.

It is freely licensed to all government, research and non-profit organizations in developing countries.

Download software from: www.weap21.org

ACSAD, BGR and SEI are supporting applications and implementations of WEAP as a Decision Support System (DSS) by:

- training seminars
- on the job trainings
- user networking
- annual WEAP-user conferences

For more information contact us



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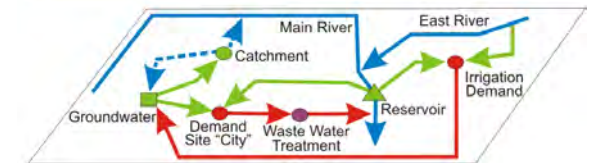
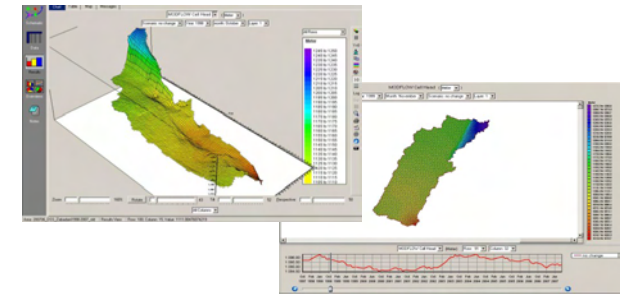
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Arab-German Cooperation: Management, Protection and Sustainable Use of Soil and Water Resources in the Arab Region

A Decision Support System for Integrated Water Resources



WEAP - MODFLOW by SEI



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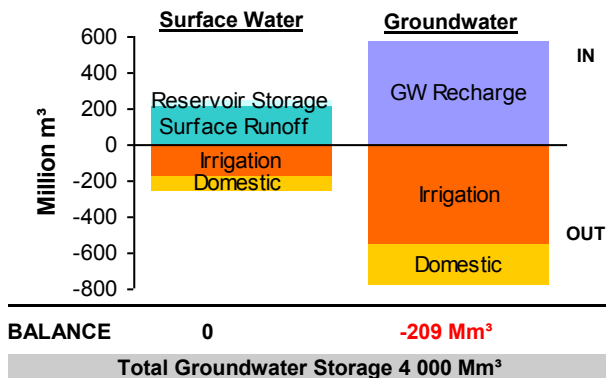
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Why a Decision Support System?

Background

Water Resources are very scarce in the Arab region. Recent climate change models predict for the future years even more severe conditions, due to increasing temperatures and decreasing precipitation.

Therefore it is important that water resources are managed carefully in a sustainable way following the Integrated Water Resources Management (IWRM) concept. This is a very difficult task and reliable tools are needed to support the management and planning.



The key questions in every region, country or basin are:

- What is the current water balance?
- Is there already a negative balance?
- How are the water resources utilized now?
- How will be their management in the future?

ACSAD, BGR and SEI worked jointly in developing and improving a user-friendly planning and management tool, which simulates:

- The whole hydrological cycle in a basin.
- Irrigation demands (soil, crop and climate dependent)
- Water management and allocation constraints

Scenarios

The key problem in most countries of the region is the limited knowledge of the hydrological system and thus the water resources are not well evaluated. The impact of the limited knowledge and management of the resources is often overexploitation and water quality deterioration.

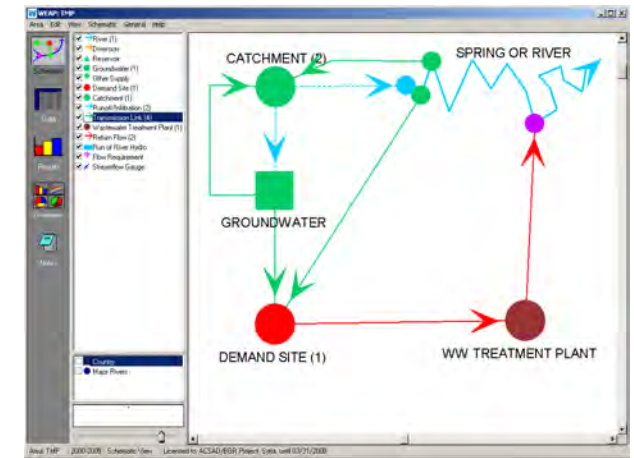


In addition to the actual problems future constraints need to be considered in water management planning:

- What if demographic or economic patterns change?
- What if water conservation is introduced?
- What if ecosystem requirements are tightened?
- What if the mix of agricultural crops changes?
- What if irrigation efficiency is improved?
- What if groundwater is more fully exploited?
- What if reservoir operating rules are altered?
- What if climate change alters demand and supplies?
- How does pollution affect water quality?

About WEAP

The Tool



By a simple graphical user interface, the schematic water system is designed and respective data are either entered directly or read in from existing database files. Userdefined management constraints and allocation priorities can be entered and results can be evaluated as graphs, tables, maps or 3D-views.

