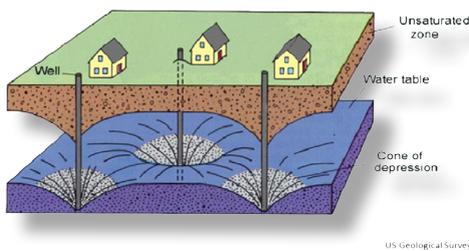


THE GROUNDWATER GAME

A Serious Game on Improving Groundwater Management Through Cooperation and Collective Action

CONTEXT

In this computer simulation you are part of a small rural community of farmers who irrigate their land using groundwater. Farmers will try to maximize production of crops while minimizing their environmental impact.



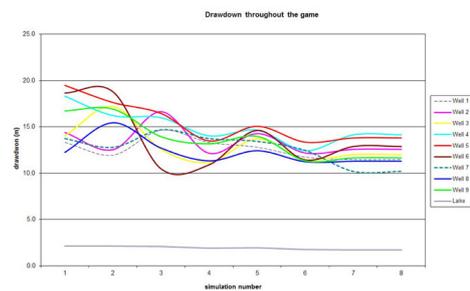
What are the consequences for you as a farmer and as a community? What needs to be done so that everyone in the community will benefit? Play this serious game to experience how groundwater can be used in a sustainable and equitable manner.

LEARNING OBJECTIVE

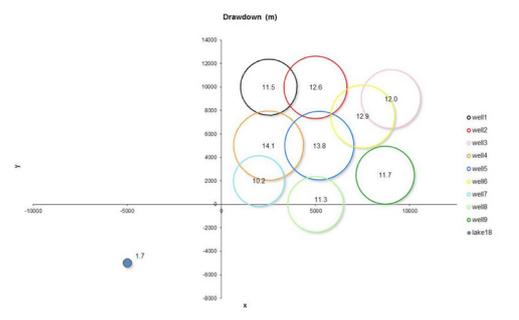
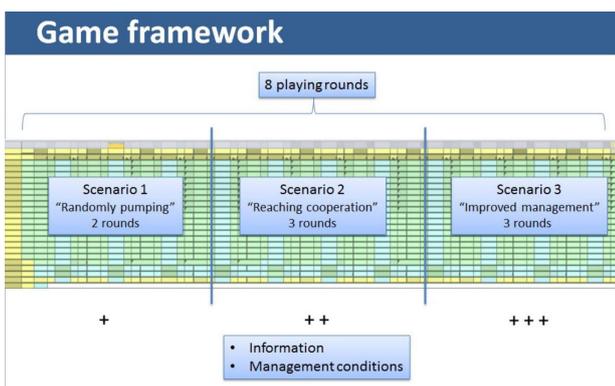
The objective of this workshop is gain a better understanding of groundwater resources management and to open up a discussion on the challenges of effective groundwater resource management following different scenarios of individual and collective action.

RULES AND SCENARIOS

- The game is played in a room with a computer and a projector to show key stages of the game to the participants
- Number of players: 9-27 (there are in total 9 'farmers' and wells in the game and therefore players can form farming teams of 1 to 3 persons)
- Workshop duration: ca. 120-150 min, including a 30 minute debriefing/reflection session



The game is designed to be used in an Excel spreadsheet and consists of 3 different groundwater management scenarios divided into 8 rounds. Depending on the scenario, players are prompted each round to make key decisions on the amount of land they want to irrigate, whether they would like to invest in more efficient irrigation and how they would like to organize themselves in order to set a limit on groundwater abstraction.



PAST GAME SESSIONS

IGRAC's serious game was used as part of the 'Groundwater Futures in Sub-Saharan Africa' (GroFutures) project. The main objective of this project was to review integrated physical and social science research plans in the three focal basin observatories, namely: Upper Awash (Ethiopia), Great Ruaha (Tanzania) and Iullemeden (Niger/Nigeria/Benin/Burkina Faso).



Recently, the game was also applied during a project meeting of USAID funded Kenya-RAPID project in Nairobi and will again be used as awareness raising tool during the next in-project training.

During regional workshops in Ethiopia, Tanzania and Niger, the groundwater game was applied in 'Play & Dialogue' sessions with basin stakeholders. The serious game proved to be an effective tool to improve basic understanding of groundwater resource management and sparked constructive dialogue among stakeholders.

INTERESTED?

If you are interested in including the groundwater game in a project, workshop, training programme or conference, please contact IGRAC: info@un-igrac.org.



International Groundwater Resources Assessment Centre

IGRAC
Westvest 7
2611AX Delft
The Netherlands

www.un-igrac.org
info@un-igrac.org
+31 (0)15 737 0196

