

## Generic Issues:

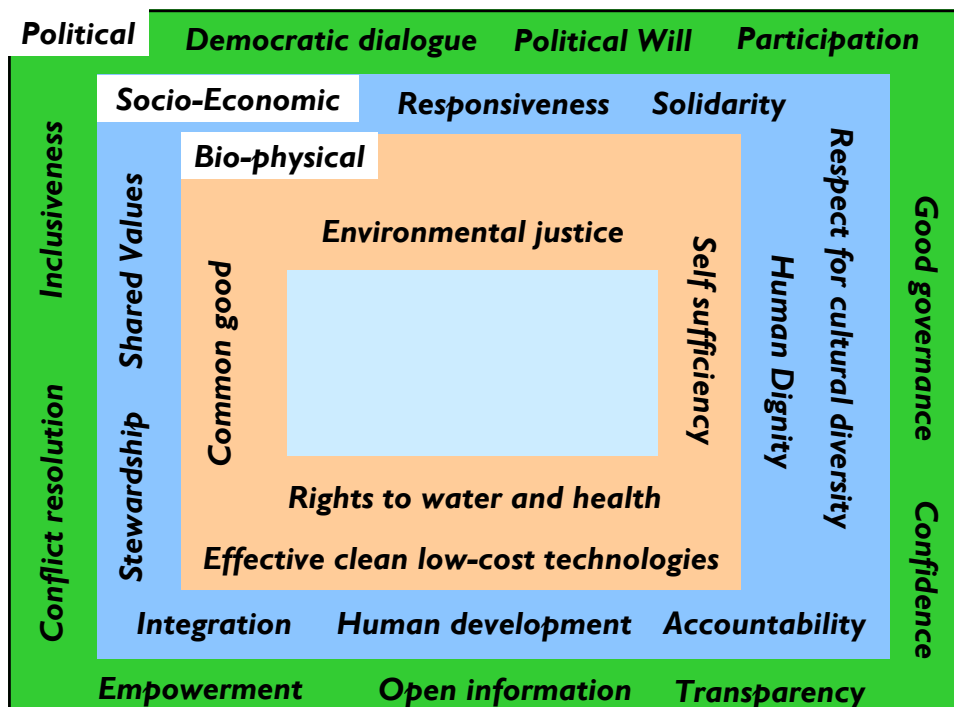
### Measuring Progress in Ethical Behavior of Water Management

A strategy based on good policies and entailing comprehensive actions has to be based on "who needs to do what, how, and when?" not on "what needs to be done".

Best practices analysis in a case study approach will make it possible to measure progress in ethical behavior in water management. It will also contribute to enlarge the dialogues decision makers will have when planning and managing water resources. Our common future rests not only with scientific discoveries and technological knowledge, but also with faith in ethical values, good will and proactive imagination.

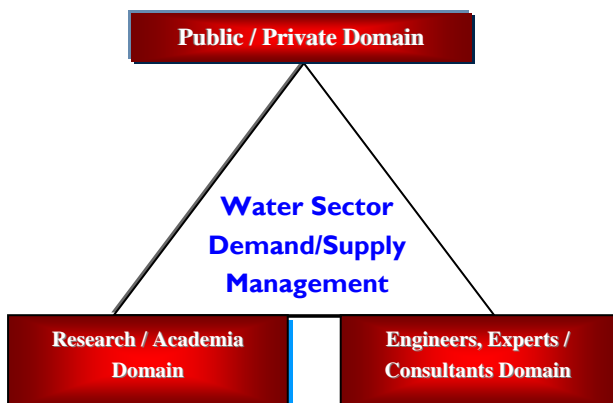
Water management is fundamentally a question of social and environmental justice based on three essential concepts: **equity, fairness and access between and across generations.**

Best ethical practice is all about applying these fundamental principles (see Figure). The Figure below shows that there are standards and each standard has indicators.



## Meeting in Alexandria (Cont'd)

The Director of RCWE, **Dr. Magdy Hefny**, outlined in his statement the ethical values related to water and their applications. He pointed out that Alexandria has set an excellent example in achieving a great project of the cornice widening on the eve of the reviving of Bibliotheca Alexandrina. This can only be attributed to a high sense of responsibility, commitment, and social mobilization among the private sector, the governorate and the scientific community (Alexandria University). In this context, benchmarking of such success stories could be a lesson to learn from and disseminate. In the experience economy, we need to allow for creating space and time to develop a triangular partnership as shown below, and to create a knowledge based idea that could be translated into a project.



## Events to be Announced

- Seminars for Introducing Activities of RENEW-Egypt (September-2005)
- The Center's Higher Committee Meeting (to be announced)
- Workshop on Ground Water Use Ethics (October-2005)
- Workshop on a Code of Conduct for Ethical Water Use in Industry (September 2005)
- Benchmarking of Best Practices in Water Use Ethics (to be announced)



**RENEW-EGYPT**  
Regional Center for  
Research and Studies of  
Water Uses Ethics

Fum Ismailia Canal  
P.O. Box 74  
Shoubra Elkheima, 13411,  
Egypt

Phone: 4467975  
Fax: 4467975/2612285  
E-mail:  
mhafny14@hotmail.com  
magdyhefny@menanet.net

WE ARE ON THE WEB

[www.mwri.gov.eg/egyptrenew](http://www.mwri.gov.eg/egyptrenew)

### VISION

**A**ctualizing water use ethics among various stakeholders

### MISSION

**K**nowledge and experience exchange and dissemination, as well as benchmarking and bench learning of best practices and success stories. To serve as a Center for Learning by using information, technology, and networking, formulating indicators and standards of responsible social conduct. A monitor to this end is established.



Regional Center for Research and Studies of  
Water Use Ethics

**RENEW-EGYPT**

(One of the three regional nodes of Research Ethical Network Embracing  
Water: Bergen, Canberra, Cairo)

Learning, Knowledge Generation and Creative Thinking

# Water Ethics Monitor

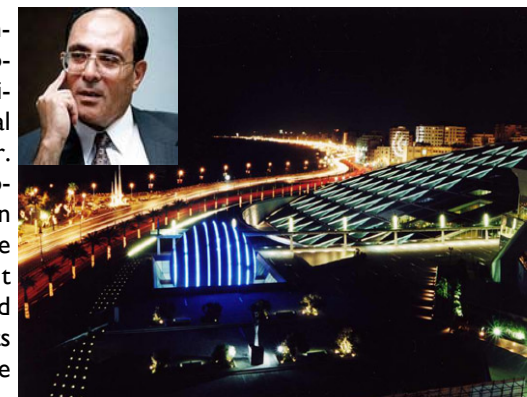
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## Keynote Speech of H.E. the Minister– Dr. Mahmoud Abu Zeid to the Alexandria Forum on Water Ethics (Alex. 12th April 2005)

A meeting took place in Alexandria, organized by Eng. Yasser Seif, the Alexandria Forum on Water Ethics, and with the participation of: H.E. the Governor, the Local People's Council, Alexandria University, Dr. Ahmad El-Guweily (chairman of the Egyptian Water Partnership), and Dr. Shaden Abd El-Gawad (Chairperson of the NWRC). The meeting was a success as it launched effective dialogue and responded to many queries raised by the participants concerning water for irrigation in the Northern parts of the Delta.



In his keynote speech H.E. the Minister emphasized the fact that the rise and fall of civilizations is dependant on adherence and commitment to certain ethical water values. The rise of ancient Egyptian civilization was due to systemic planning, management, and water engineering, as well as, sticking to the values of cooperation, participation, equity in distribution, solidarity in times of floods, and the "No pollution to the river" principle; to the extent that these values have been considered sacred. H.E. has also pointed out the importance of:

- Behavioral and moral approaches in dealing with water use and management.
- Ethical principles such as transparency and enhancing dialogue and its tools. This was exemplified in the establishment of Water Users Associations (WUAs) and Water Boards (WBs) within Egypt's irrigation system.
- Water for the poor and for marginalized people is a development priority.

**Meeting in Alexandria Continued, page 4**

## Dr. Mohamed Abdul Razzak, Director of UNESCO Cairo Office: "Perspectives on Water Ethics"

"Every human being has the right to adequate supplies of safe water for his use and survival. History has conveyed to us that water demand strategies of some ancient Arab civilizations demonstrated that rational utilization of water and living in harmony with the desert environment in regard to limited water availability, allows a society to flourish. But when the population increased disproportionately, and the water resources were misused, some civilizations vanished."

"Water has been taken for granted as an abundant and freely available resource. This way of thinking requires serious modification on the part of decision makers and water professionals, in order to properly evaluate water availability and prioritize use."

### EDITORS

- Dr. Magdy Hefny (Director)
- Dr. M. Rafeek Abd-Elbary
- Eng. M. Hammouda

### From the Editor:

**Why "Water Ethics Monitor"?**  
To interact with the readers and encourage them to share their thoughts and knowledge in accomplishing our common goals, it is decided to develop this newsletter, and we hope you will enlighten us with your feedback.

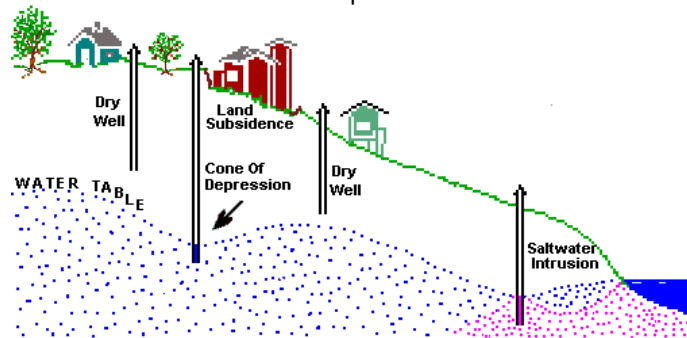
### Inside this issue:

Keynote Speech for H.E. the Minister to the Alexandria Forum on Water Ethics	1
Extracts From The Code of Ethics: "Groundwater"	2
Participation in Regional and International Meetings	2
Lessons Learned From Oman	3
Is There Ethics in Water Negotiations?	3
Generic Issues: Measuring Progress in Ethical Behavior of Water Management	4
Meeting in Alexandria (Cont'd)	4
Events to be announced	4

## Extracts From The Code of Ethics : “Groundwater”

On pages 28-30 of the Code, one of the most important ethical issues is handled. Ethical guidelines taken into account when managing groundwater are outlined. These guidelines include:

- To evaluate the capacity of the groundwater reserve to a fair precision, and to set the withdrawal limit that will not lead to over-exploitation.
- To guarantee long term utilization based on the preset rate of withdrawal.
- To evaluate the environmental impact (EI) of the GW withdrawal in a satisfactory way, and to balance between the anticipated adverse EI and the expected economic and social benefits.
- Taking into consideration that sooner or later the GW resource is going to be depleted; and plan as to that end.
- All the necessary data and guidelines -mentioned earlier- are to be available to all the stakeholders (Transparency).
- The utilization of the GW resource will be carried out by the direct beneficiaries, but supervised by official authorities.
- Digging new wells shall only be done through a permit issued from the competent authorities.



Effect of Groundwater Over-exploitation

On the other hand, some of the ethical issues concerning GW utilization were pointed out:

- Over-exploitation of GW resources.
- GW pollution.
- Lack of investments in GW development.

**The Code as a publication is out.**  
The Code came in 54 pages; and benefited from Egyptian experience, as well as Arab and International UNESCO references that provided guidance for its accomplishment. The Code aims at elaborating the concept of ethical use of water resources, and provides for guidelines and indicators of the extent of commitment to ethical behavior. The contents of the code include the following topics:

- Sources of Ethical Behavior;
- Principles & components of an Ethical behavior;
- Water Use Ethics;
- Ethics in water resources management;
- Ethical practice in water negotiations and dispute settlement .

## Participation in Regional and International Meetings



**The Egyptian-Swiss Workshop on Virtual Water** is convened (6<sup>th</sup> to 8<sup>th</sup> of June 2005), with the participation of senior scientists. According to the MoU “Virtual Water” (VW) is one of the priority areas for cooperative research and exchange of information within the strategy of applying Integrated Water Resources Management (IWRM) in Egypt. The Regional Center for Water Ethics was represented by Dr. Magdy Hefny in this workshop.

**The Expert meeting on “Conflict Resolution on Water Resources” training course tailored to the Arab Region:** Within the framework of its Natural Sciences Programme and more particularly its programme entitled “From Potential Conflict to Cooperation Potential” (PCCP), UNESCO

is organized an expert meeting that was held at Notre-Dame University - Louaizé— Beirut— during the period 13-15 July 2005. This expert meeting entitled “Conflict Resolution on Water Resources Training Tailored to the Arab Region” aimed at reviewing the PCCP course on conflict prevention and cooperation in international water resources, and amending and tailoring the existing training course to the Arab region situation. Dr. Magdy Hefny was a member of the expert panel in this meeting. The meeting aimed at:

- Putting UNESCO resources at the disposal of those institutions that are following the same directions in the field of education, peace and cooperation building;
- Sharing UNESCO’s expertise with such institutions;
- Joining forces between UNESCO and those institutions in order to optimize one other’s efficiency.

**The Workshop on “Water Governance in the Nile Basin Countries”**, organized by UNESCO and EPF school of engineering Paris, 25-27 July 2005, within the framework of the NCHP programme. the participants from MWRI included Dr. Abd El-Fattah Metawei-Head of the Nile Water Sector, Dr. Dalal Elnaggar-Director of the Regional Center for Training and Water Studies, and Dr. Magdy Hefny— Director of the RCWE. It was stressed that ethical and cultural content is basic to deal with Water Governance in the Nile Basin. The Workshop also aimed to exchange knowledge by presenting some of the success stories in water governance in Latin America. It is expected that a follow up workshop is to be held at the end of September on “Enhancing Women Role in Water Governance in the Nile Basin Countries”, starting with an Egyptian case. Followed by cases from other Basin Countries.

**The Arab Experts are honored presenting themselves to H.E. President Emil Lahud, The President of Lebanon**



## Lessons Learned From Oman

### Criteria for Sustainable Groundwater Abstraction

#### Description

**The Issue:** Groundwater is a precious resource in Oman, which is designated “National Wealth” by Royal Decree. The concession agreement between Petroleum Development Oman (PDO) and the government gives PDO the right to explore and use groundwater. As the field is maturing, PDO is moving to enhanced oil recovery techniques, such as water flood and steam injection, both of which need large quantities of water. PDO also uses water to support its camp operations.

**The Challenge:** The local legislation did not have a guideline for water abstraction for oil industry operations (including camp operations), which meant that inappropriate use of groundwater was possible and did occasionally occur. It was necessary to put control over PDOs abstraction of fresh water. As there was no prior experience in valuing groundwater to decide if abstraction for supporting oil exploration was socially optimal, PDO prepared a guideline for water abstraction, which is currently being used to assess all new and existing water abstraction requirements.

**The Solution:** The core of the guideline is a decision tree which screens the proposed water abstraction requirements against 6 criteria: - Quantity of water required (as percentage of sustainable aquifer yield) - Quality of water required - Depth from which water is to be abstracted - Quality of soil on the top of the proposed abstraction area - Presence of community on the top of the proposed abstraction area - Alternative users (PDO’s use as % of total abstraction) The objective of this guideline is to prevent in-appropriate use of ground water.

**The Outcome:** The technique has so far been put in practice for four major water resource use decisions in PDO. In each of the cases, the guideline provided a rational basis for decision-making.

#### Lessons learned

The water abstraction guidelines have assisted in making resource utilization decisions within a sustainable framework that assures that the decisions will be socially optimal. Major changes in water use practices did occur as a consequence of the implementation of the guidelines. It is however important that the guidelines are applied consistently, so that decisions which are favorable to the industry as well as not favorable are accepted by management. If not, it will soon lose credibility in the eyes of the other stakeholder Good quality data is a must to get sound decisions

#### Importance of case for IWRM

The decision tree integrates a number of quantitative parameters (water quality, water depth) with social indicators (presence of community, alternative users) and potential uses (quality of topsoil) so as to arrive at a decision. The decision tool itself is designed in a way to lead to engagement with stakeholders during the process of data collection and decision-making. The approach therefore is fully transparent and meets the criteria set for considering an abstraction decision compatible with sustainable development.

**This decision tree is a good practice to mark for other Arab countries; and shows that a code of conduct for groundwater use could be and important tool for realizing major changes not only in policies but also in human behavior.**

**Source:** GWP, IWRM Toolbox, Case Studies

Dr Muralee Thummarukudy, E-mail: [Muralee.R.Thumarukudy@pdo.co.om](mailto:Muralee.R.Thumarukudy@pdo.co.om)

## Is There Ethics in Water Negotiations?

Yes, ethics here is about reaching win-win agreements. All evidences show that parties to an agreement have to be satisfied with what they gain and to sense that the balance of gains between them is fair. A win-win agreement is long lasting and has its dynamics to create more externalities of peace and harmony among riparians. Towards this objective, the following workshops took place:

**Beirut, Lebanon (13 - 15 July 2005):** An expert meeting for tailoring a special training course on “Conflict Resolution on Water Resources” that was convened. Among Other Things it addressed issues of ethical behavior in water negotiations.

**The Regional Center for Training and Water Studies, 6<sup>th</sup> of October City (26 - 30 of June 2005):** Another initiative was held by the RCWE by holding a workshop on “International Waters Negotiation and Dispute Resolution”. Three distinguished lecturers facilitated the work of the workshop, namely: Dr. Magdy Hefny—director of the RCWE, and Dr. Simon Mason, and Ms. Judith Niederberger—ETH, Zurich University. The oral and written evaluation by the participants has confirmed that the Course has been a great success.



*The approach is fully transparent and meets the criteria set for considering an abstraction decision compatible with sustainable development.*



**We Will Not Lecture You**

**Workshop Motto**