

Egypt Water Governance Workshop and Rating Session Preliminary Results

A workshop and rating session to assess national water governance capacity and performance were held on 9 and 10 November 2009, respectively, in Cairo, Egypt, as part of the Regional Water Governance Benchmarking (ReWaB) project. Twenty-two and twenty-six participated and provided quality responses to the exercises at the events on day 1 and day 2, respectively. Both days, a few additional persons attended only part of the seminars. Two international ReWaB project members (Dr. Lautze and Dr. De Stefano) and two Egyptian facilitators (Drs. Gamal el-Kassar and Ragab Abdel-Azim) were in charge of the organization and development of both the workshop and the rating session. Participants are listed in Annex 1.

Overall Approach

The number of participants providing usable responses on each day is shown below. We defined usable responses to be those responses for which were completed in a working group at the workshop or rating session.

Strata	Workshop Participants	Rating Session Participants
Water resources	4	6
Irrigation	9	11
Other water using sectors	6	7
National policy makers	1	0
Advisors	1	2

The *workshop* consisted of three main parts: (1) an introduction to the project and the concepts of water governance, generally and with specific respect to Egypt, (2) completion of an exercise that describes the extent to which organizations carry out core water resources functions and (3) discussion. The *rating session* consisted of (1) rating of key features of water governance decision making, (2) rating of the effectiveness with which key water resources functions are carried out and (3) the collection of feedback from the participants on the project and the applied approach.

The workshop and rating session followed the agendas provided below. Arabic-speaking colleagues who were familiar with the concepts and approaches of the project (Drs. Gamal el-Kassar and Ragab Abdel-Azim) were helpful.

Workshop Agenda

9:00am-9:30am	Coffee/Tea and informal discussion
9:30am-9:45am	Opening by Dr. Hussein El-Atfy on behalf of H.E. Prof. Dr. Mohamed Nasr Allam Minister of MWRI
9:45am-10:10am	IWMI Presentation: Introduction to the project and explanation of basic concepts (Jonathan Lautze – IWMI)
10:10am-10:30am	IRG Presentation: ReWaB project components (Lucia De Stefano – IRG)
10:30am-11:00am	Q&A and discussion
11:00am-11:20am	Coffee Break
11:20am-11:45am	MWRI Presentation: Status of water governance application in Egypt (Tarek Kotb – MWRI)
11:45am-1.00pm	Participant Exercise: Organizations & Functions Matrix for Egypt
1:00pm-1:30pm	Discussion

Rating Session Agenda

9:00-9:30am	Sign-in and coffee/tea
9:30-9:45am	Introduction to the rating session and Q&A
9:45-11:00am	Instruction and completion of the governance ratings
11:00am-11:20am	Coffee break
11:20am-12:00pm	Functional effectiveness instructions and scoring
12:00pm-1:00pm	Feedback and constructive suggestions from groups
1:00pm-1:30pm	Discussion and final thoughts

Preliminary Results

The following text and tables show very preliminary results of exercises from the workshop and rating session. More detailed analysis of the results and a comparative assessment across countries will be undertaken in the coming weeks, once data from other countries is available.

Organizations and Functions Matrix

The organizations and functions matrix examines the extent to which major organizations in Egypt influence and implement water resources functions. The major functions are: organizing and building capacity in the water sector (Organizing), planning strategically (Planning), allocating water (Allocating), developing and managing water resources (Developing), and regulating water resources and services (Regulating). In each of these five functions, participants assigned a score assessing the degree to which an organization *influences* (influence) decisions on a particular function and *implements* (implement) a particular function. The scale ranged from 1 through 5, with 1 being the lowest level of influence or implementation and 5 being the highest.

	Organizing		Planning		Allocating		Developing		Regulating	
	influence	implement	influence	Implement	Influence	implement	influence	Implement	influence	implement
Irrigation Department (MWRI)	4.5	4.1	4.0	3.89	4.6	4.4	4.7	4.3	4.2	3.8
Groundwater Sector (MWRI)	3.2	3.0	3.7	3.2	3.8	3.3	3.4	3.4	3.8	2.9
Planning Sector (MWRI)	4.1	2.6	4.1	3.7	3.3	2.6	3.1	2.4	3.4	2.9
Drainage Authority (MWRI)	3.4	3.0	3.5	3.1	2.5	2.6	2.6	2.5	2.8	2.9
NWRC (MWRI)	3.8	1.9	2.8	2.5	2.5	1.7	3.0	2.1	2.7	2.2
Ministry of Agriculture and Land Reclamation	3.5	2.7	3.6	2.8	3.3	2.3	3.2	2.4	2.8	2.3
Ministry of State for Environmental Affairs	3.2	2.8	3.1	2.4	2.2	1.7	2.0	2.1	3.0	2.3
Ministry of Industry	2.9	2.1	2.8	2.4	1.6	1.5	1.6	1.9	1.7	1.9
Ministry of Housing and Utilities for New Communities	3.6	2.8	3.5	2.8	2.7	2.3	2.4	2.0	2.7	2.4
Potable Water Supply Holding Company	3.7	2.7	3.0	2.3	2.6	2.0	2.1	2.2	2.7	2.2
Ministry of Health	2.7	2.1	3.0	1.9	1.9	1.5	1.9	2.3	2.2	2.3
NGOs	2.5	2.3	2.1	1.9	1.9	1.7	1.5	1.4	1.8	1.8
Private Sector	2.2	2.3	2.1	1.5	1.6	1.6	1.6	1.3	2.0	1.4
WUAs	2.6	3.2	2.5	2.7	2.8	2.0	2.1	2.0	2.5	1.9

Parliament	2.4	1.9	2.1	1.8	1.8	2.0	1.3	1.3	1.7	2.2
Courts	2.7	2.5	2.0	1.9	1.5	1.9	1.5	1.4	1.8	1.4

“Universities” were included by 6 people as an additional organization that is relevant

Water Governance Decision-making Challenges

The first rating exercise focused on assessment of selected features of decision-making in Egypt in the context of five generic water sector challenges: (1) increasing demand for drinking water, (2) declining groundwater levels, (3) strategic planning for a national water policy, (4) regulating water quality in rivers, aquifers and waterways, and (5) matching supply and demand in agriculture (see Annex 2).

The decision-making features that were assessed were

- Participation
- Transparency
- Integrity
- Rule of law
- Responsiveness

A set of between 2 and 5 questions were used to elicit a characterization of each feature for a particular challenge. Shown below are the aggregate scores for each feature in each challenge. Also shown are the averages by challenge and by feature. The scale ranged from 1 to 4, with 1 being the lowest level of the feature and 4 being the highest level.

	Participation	Transparency	Integrity	Rule of Law	Responsiveness	Average
Challenge1: Drinking Water	2.7	2.3	2.9	3.2	2.7	2.8
Challenge2: Ground Water	2.8	2.4	2.6	3.1	3.1	2.8
Challenge3: Planning	2.8	2.9	2.6	3.3	3.4	3.0
Challenge4: Water Quality	2.6	2.4	2.5	3.1	2.9	2.7
Challenge5: Matching supply- demand	2.8	2.8	2.5	3.1	3.0	2.9
AVERAGE	2.7	2.6	2.6	3.2	3.0	

At a broad level, the results of this exercise indicate two things. First, the strength of the five water governance features was relatively consistent across the specific challenges, suggesting water governance in Egypt is dealt with fairly uniformly across a range of water management issues. Second, rule of law and responsiveness come through as stronger water governance decision-making features relative to participation, transparency and integrity. True understanding of these scores, however, will only come once they are placed in context through comparison with other countries or at different points in time.

Functional Effectiveness

Functional effectiveness questions were used to assess how effectively key water resources functions were carried out in practice (see Annex 3). Participants were asked to assign a score for the present (year 2009) as well as one point in the past (year 2000). The results, shown below averaged for all participants, indicate that overall effectiveness improved substantially from the year 2000 the present. A four-point scale (1 through 4) was used, where 4 indicates high effectiveness and 1 indicates low effectiveness.

Question	Year 2000	Today
Roles and responsibilities of each department or agency are clearly defined	2.40	3.38
Policy goals for the water sector are clearly defined	2.40	3.46
The water sector is provided with sufficient funds to function properly	2.36	2.69
National governmental agencies consult each other when <u>taking decisions</u> that impact multiple sectors	2.00	3.04
National governmental agencies cooperate <u>in the implementation</u> of their policies where appropriate	2.04	2.88
Regional governmental agencies are consulted when decisions that affect their region are taken	2.12	3.00
Governmental agencies are staffed with sufficient and trained personnel to perform the assigned tasks	2.25	2.92
Future water supply and demand forecasts are based on good quality data	1.96	2.96
Water resources data are collected regularly, continuously throughout the country	2.52	3.19
Current strategies for long-term matching of supply and demand have been effective at matching supply and demand	2.60	3.12
Rules and procedures for assigning and recording water rights are clearly defined and functioning	2.00	2.38
Rules and procedures for transferring water rights are clearly defined and functioning	1.67	2.14
Disputes among water users are resolved effectively	2.00	2.92
Government agencies are effective at forecasting seasonal supply and demand and matching the two	2.40	3.12
Government agencies effectively operate public water infrastructure	2.60	3.31
Government agencies effectively maintain public water infrastructure	2.16	2.85
Current incentives and sanctions (including water pricing) are effective at achieving long and short term supply/demand matching	1.65	2.29
Government agencies are effective at enforcing withdrawal limits that are established	2.24	2.92
Official water quality standards in waterways are met	2.24	2.46
Aquatic ecosystems are protected to the level specified by the government	1.88	2.44
AVERAGE	2.17	2.87

Annex 1

Participant Name	Organization
Dr. Hussein El-Atfy	Irrigation Department, MWRI
Prof. Mohamed Abdel Motaleb	Planning Sector, MWRI
Prof. Madiha Mostafa	Groundwater Sector, MWRI
Eng. Ibrahim Harhash	Drainage Authority, MWRI
Dr. Amal Khalid	Drainage Authority, MWRI
Eng. Abdel Shakour Abdallah	Irrigation Sector, MWRI
Eng. Mohamed El-Beltagy	Irrigation Department, MWRI
Dr. Mohamed Abdel Moniem	Irrigation Department, MWRI
Mr. Abdel Wahab Hadidi	Ministry of Agriculture
Dr. Abd El-Ghany El-Gendy	Agro-Economic Research Institute, MWRI
Dr. Mos'ad Kotb	CIAC
Dr. Ahmed Essa	Soil and Water Research Institute, MWRI
Eng. Abdallah Domah	Irrigation Advisory Service, MWRI
Eng. Ibrahim Mahmoud	IIIMP, MWRI
Eng. Mohamed El-Alfy	WSSRA, MHUNC
Eng. Adel Al-Madbouly	Irrigation Improvement Sector, MWRI
Eng. Atef El-Kashef	CDIAS, MWRI
Dr. Tarek Kotb	IIIMP, MWRI
Dr. Hamdy Khalifa	Agricultural Research Center, MALR
Eng. Mohamed Ghaniem	Technical Office, MWRI
Dr. Mohamed Anwar	West Delta Project, MWRI

Dr. Akram El Ganzoury	Environmental Research Institute, MWRI
Dr. Mohsen El-Arabawy	IRU, MWRI
Dr. Essam Khalifa	MWRI
Eng. Mamdouh Raslan	HCWSS, MHUNC
Dr. Ikhlas Gamal El-Deen	Central Department for Water Quality
Mr. Yehia Sa'ed El Said	Freshwater Quality Section
Eng. Nabila Bahaa	Irrigation Department
Prof. Mohamed Nour El-Din	Ein Shams University
Dr Ahmed Abou El-Soud	MOEA, MOE
Prof. Sameh Abdel Gawad	Cairo University
Prof. Baha El-Din Saad	MWRI
Mohamed Seddik	MHUNC
Dr. Mostafa Ghaith	IWRU, MWRI
Eng. Khalid Bekhat	IIIMP, MWRI
Eng. Ahmed Sqil...	Ministry of Agriculture
Dr. Reda Abdelhandy Rady	MWRI
Dr. Ashraf Saleh Mohamed Amin	Ministry of Interior
Dr. Ragab Abdel Azim	Irrigation Sector, MWRI

Key Challenge 1: Increasing demand for drinking water

To satisfy increased drinking water demand, there are options to increase overall use of surface water, groundwater and desalinated water and to re-allocate water from existing uses. There are also options to increase efficiency of water use. Key decisions must be made in selecting the appropriate mix of these and other options.

Key Challenge 2: Declining groundwater levels

To reduce groundwater water table decline, there are several options. For example, you can recharge the aquifer by adding surface water, you can reduce withdrawal per hectare, and you can reduce withdrawal per hectare and cease irrigation extension. Selecting the appropriate balance of these and other measures requires that key decisions be made.

Key Challenge 3: Strategic planning for a national water policy

Generally, governments define and develop their national water-related priorities in national water policy documents and mid- to long-term water resources plans. Different approaches can nonetheless be utilized to in the process of identifying and ordering the priorities, goals and objectives contained in national water policies and long-term water resource plans. Please consider the process of developing water policies and plans.

Key Challenge 4: Regulating water quality in rivers, aquifers and waterways

Ensuring water quality is important to minimize adverse health effects, to ensure the quality of agricultural production and to sustain healthy aquatic ecosystems. Decision-making related to regulation of water quality includes the definition of quality standards, the formulation and application of rules to meet those standards (e.g. the establishment of pollutants emission permits), the implementation of projects to reduce pollution and the enforcement of the laws to limit pollution.

Key Challenge 5: Matching Supply and Demand in Agriculture

The agricultural sector withdraws and consumes the vast majority of water in most countries. At the beginning of the irrigation season decisions need to be made about how to share the available water among existing agricultural water users (private small and large farms, irrigation districts or government irrigation projects). These decisions are a major challenge since demand often exceeds supply. Please consider the process of allocating water to the different agricultural water users within the constraints of the annual availability of water resources.

Annex 3

Functional Effectiveness Assessment

Thinking broadly about the ministries and departments involved in managing water resources in your country, please consider how well the following list of key water resources functions are performed. Please consider also how well the functions were performed currently as well as how well they were performed at one point in the past (year 2000).

Please use the following rating scale and place a number in each of the boxes in the matrix shown below. As you can see, a higher score reflects a higher level of performance.

4 Yes, in all or almost all cases

3 Generally yes, but not in all cases

2 Only in some cases

1 No, in all or almost all cases

NA No answer/I do not know