



Food and Agriculture  
Organization of the  
United Nations

AgWA  
Partnership for agricultural water for Africa



Workshop to support the pre- and post-CAADP compact process for improved agricultural water management  
TCP/INT/3404

## Improving Agricultural Water Management in Africa

# EGYPT

## WORKSHOP REPORT

Support to the pre- and post-CAADP compact process for  
improved agricultural water management  
Thematic Workshop on policy and investment in AWM  
• FAO-AgWA • Cairo • Egypt



6-7 December 2015

### Contact Person

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## 1. Background and justifications

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The project “TCP/INT/3404: Support to the pre- and post-CAADP compact process for improved agricultural water management” aims at enhancing food and energy production in four African countries (Swaziland, Malawi, the Sudan and Egypt) by focusing on the improvement of Agriculture Water Management (AWM) and mainstreaming AWM in national frameworks and processes. The objectives of this project are in line with the Comprehensive Africa Agriculture Development Programme (CAADP), which provides a common framework for stimulating and guiding national, regional and continental initiatives for enhanced agriculture productivity in Africa.

COMESA has requested FAO’s technical support to “assist Egypt, Malawi, the Sudan, and Swaziland to foster agricultural water management (AWM) through the effective implementation of the CAADP compact and post-compact process, the refinement of national agricultural water development strategies, and the alignment to national strategies for food security strategies and programmes”. The project has the following outputs: (1) Evidence-based analysis and identification of AWM priorities at national level is conducted and national capacity is built in the Sudan in the context of the CAADP-compact process to tackle in particular knowledge, institutional, governance, regulatory and financial barriers to sustainable AWM; (2) Evidence-based analysis and identification of AWM priorities at national level is conducted and national capacity is built in Egypt in the context of the CAADP-Compact process to tackle in particular knowledge, institutional, governance, regulatory and financial barriers to sustainable AWM; (3) A broad National Agriculture Investment Plan (NAIP) is refined for Egypt to specifically re-emphasize AWM, detailing out specific programs that will achieve sector goals, objectives and targets as stipulated in the CAADP compacts; (4) Investments projects in agricultural water are defined for Malawi and bankable project documents are prepared to foster the investment flow into high-priority areas, based on the NAIP; (5) Partnerships in Egypt, Malawi, the Sudan, and Swaziland fostered around common AWM priorities at national level, including in cooperation with Pillar institutions; (6) increased regional integration, coordination, and partnership between AgWa and COMESA.

The two main outcomes to be presented and discussed in this workshop are the Institutional and Policy Analysis of Agricultural Water Management and the National Investment Profile. The authors of these outputs will present their reports which will subsequently be discussed by all participants. The feedback will be included in the finalization stage of these reports.

Another main outcome of this workshop is training in the use of the online Diagnostic Tools for Investment (DTI). AgWA, the Partnership for agricultural water for Africa has launched these DTI online in order to offer an integrated platform to systematically assess, at country level, trends in use of water resources, the policy and institutional frameworks and the investment needs and potential to boost the sustainable use of water. The tools work in synergy to provide a clear representation of all dimensions relevant to the use and management of water resources for agriculture development and hydropower generation

## 2. Venue and Organization

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This report refers to the 2-day Workshop organized by FAO and the Partnership for Agricultural Water for Africa (AgWA) as part of the CAADP compact process for improved agricultural water management. The workshop was organized in the frame of the project “TCP/INT/3404: Support to the pre- and post-CAADP compact process for improved agricultural water management” and targeted to all stakeholders involved in AWM, whether policymakers or farmer representatives. The workshop ran from Sunday 6<sup>th</sup> of December until Monday 7<sup>th</sup> of December 2015 at the Sofitel El Gezira hotel in Cairo, Egypt.

### 3. Participants and trainers

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#### 3.1. Participants

The 24 participants included representatives from governmental and non-governmental agencies and donors dealing with agricultural water resources management, farmer representatives, and representatives from relevant research or higher education institutions.



#### Name, institution and position of participants

Name	Position	Institution
Dr. Lebdi Fethi	AgWA Coordinator	FAO, Addis Ababa
Mr. Eise van Maanen	Water Economist	FAO, Rome
Dr. Hany Ramadan	Irrigation specialist	Agricultural Research Center (ARC)
Dr. Sayed Abdel Hafez	Irrigation specialist	ARC
Dr. Ragab Abdel-Azim	Irrigation design specialist	Ministry of Water Resources and Irrigation (MWRI)
Dr. Mohamed Soliman	Irrigation specialist	ARC
Dr. Mohamed Ismail	N/A	ARC
Dr. Saber Mahmoud	N/A	ARC/SWERI
Dr. Shaban Sali	N/A	ARC
Dr. Mohamed Abdel Tawab	N/A	ARC
Eng. Shawki Arafa	Irrigation specialist	Land Improvement Authority, under MWRI
Dr. Yousry Abdel Moula	N/A	ARC
Dr Hoda Mousa	N/A	ARC
Eng. Amani El Baz	N/A	GWS

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Eng. Ali Kamal	Horizontal Expansion & Projects specialist	ARC
Eng. Khaled Bekheit	N/A	ARC
Mr. Mohamed Yacoub	FAOR Assistent	FAO
Dr. Pasquale Steduto	FAOR of Egypt and Deputy Regional Representative at the FAO Regional Office for Near East and North Africa	Ministry of Agriculture
Dr. Enas Abbas Selah	Environmental Economist	ARC
Dr. Waleed Hassan	FAO consultant	ARC
Dr. Mohamed Mahmoud Abd Elgehil	N/A	MWRI
Dr. Hoda Mohamed Ragab	Irrigation specialist	MWRI
Dr. Abobaker Mohamed Ali	Deputy Director	FCRI
Dr. Essam Amier	Deputy Director of Field Crops	Research Institute for Agricultural Production

### 3.2. Trainers

	<p>FAO, Addis Ababa</p> <p><b>Lebdi Fethi</b></p> <p>AgWA Coordinator</p>
	<p>FAO, Rome</p> <p><b>Eise van Maanen</b></p> <p>Water Economist</p>

## 4. Programme

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The first day was mainly dedicated to the two main outputs of this project, i.e. the Institutional and Policy Analysis (IA) and the National Investment Profile (NIP). The first day consisted of 10 sessions of approx. 30 minutes. Both the NIP and IA were presented by the authors and subsequently discussed in groups by all participants in order to finalize this research. The project and AgWA were also presented by Fethi Lebdi.

The second day consisted of a training session in the use of the online version of the DTI; i.e. the Context tool, Institutional and Policy tool and the Financial tool. This day consisted of six sessions of approx. 45 minutes; each tool was presented after which the participants got assignments to directly bring this training into practice on the laptops in front of them.

On Sunday December 6<sup>th</sup> the workshop started with welcoming remarks from Pasquale Steduto (FAOR of Egypt and Deputy Regional Representative at the FAO Regional Office for Near East and North Africa) and continued with the presentations of Waleed Hassan and Enas Abbas Saleh on respectively the IA and the NIP. After these presentations by the authors there was room for a Q&A session.

After the lunch break all participants came together to discuss the outcome of the IA and NIP. The focus in both discussions was on the way forward using the knowledge acquired in this research. The main question asked was what should be done to improve AWM in Egypt and how FAO/AgWA can assist in this. This discussion concluded on a way forward around three pillars:

- 1) Most promising agricultural water solution (most promising technical and institutional solution) to reach potential of water and land resources on irrigated and rainfed area at national level;
- 2) Resilience to drought, in rainfed area in North-West coast;
- 3) Develop a capacity building project for Egypt such as AgWA is doing now with the Swiss Development Cooperation.

The training on the second day given by Eise van Maanen (FAO-Rome) consisted of theoretical sessions and practical sessions. The theoretical and practical sessions took place in a well-equipped room of the Sofitel El Gezira Hotel in Cairo. In groups with a maximum of three participants a laptop was shared to follow the lecture during the theoretical sessions and to practice during the practical sessions. Since this session is highly interactive all feedback on the functioning of the DTI was also discussed.

On Monday December 7<sup>th</sup> we closed the workshop with a lunch at the hotel in Cairo.

At the closing ceremony Eise van Maanen gave an overview of the workshop, and addresses of thanks and appreciation. The participants filled the evaluation forms in after the workshop.

	Day 1	Day 2
	<i>Presentation and discussion of NIP and IA</i>	<i>Training Online DTI</i>
Morning	Registration of participants Welcoming remarks Presentation of AgWA Presentation of the project	Introduction into online DTI Theoretical training session of Context tool Practical session of Context Tool Theoretical session of Institutional and Policy tool Practical session of Institutional and Policy tool

	Presentation of Institutional and Policy Analysis by Waleed Hassan  Presentation of National Investment Profile by Enas Abbas Saleh  Q&A session	Theoretical session of Financial tool Practical session of Financial tool Closing remarks and way forward
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*Lunch break*

	Day 1	Day 2
Afternoon	Remarks and introduction into discussion Group discussion on Institutional and Policy Analysis Group discussion on the National Investment Profile	

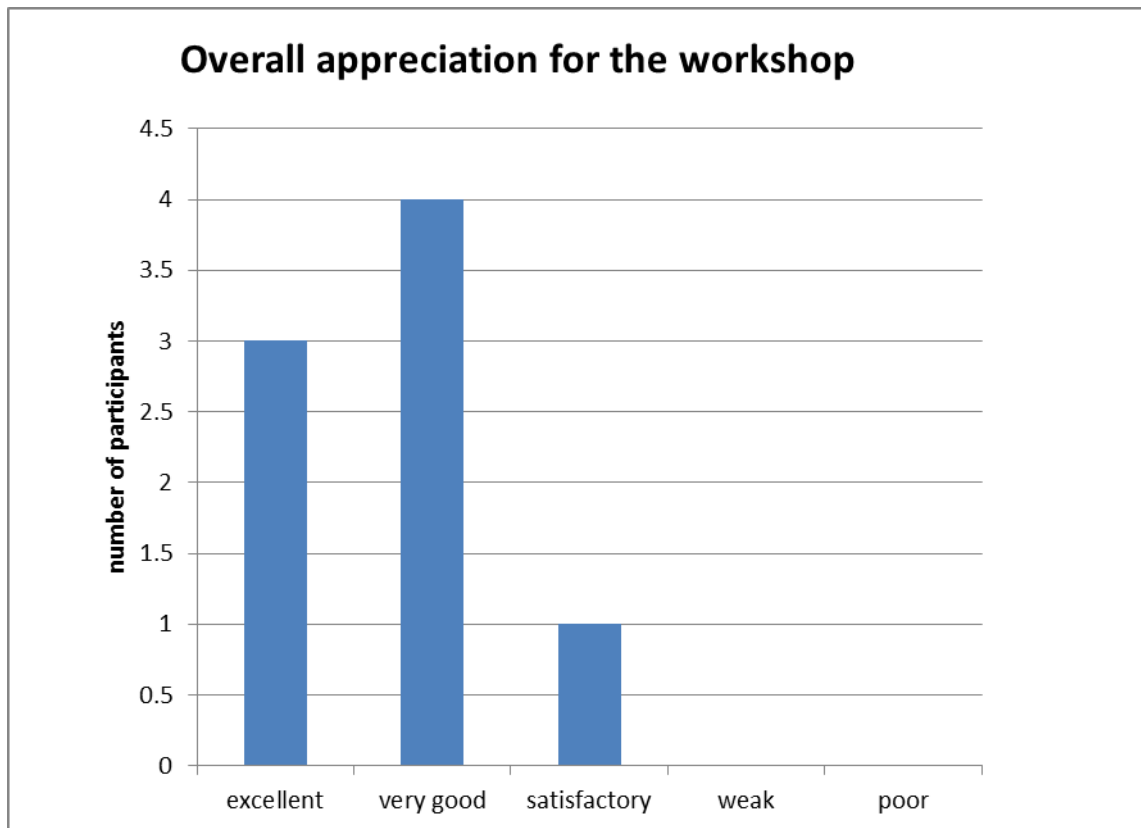
## 5. Evaluation

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An evaluation form (Annex 1) was distributed to the participants on the last day of the training course and anonymously completed.

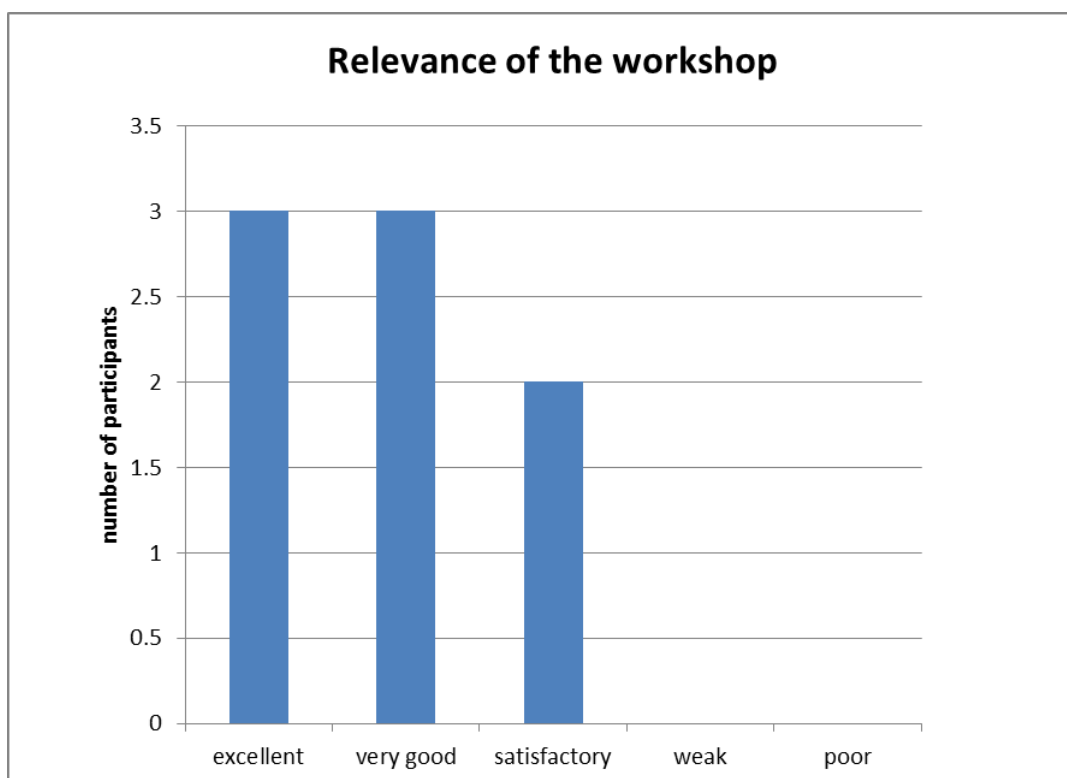
### 5.1 General aspects of the workshop

- Overall appreciation of the workshop



Comments:

- It is really one of the most successful workshops
- **Relevance to expectations of AWM development and investment in Egypt**



Comments:

- A great job was done in a short time (workshop of 2 days only)

▪ **Relevance to your job**



Comments:

- I am a water economist
- **What next do you expect after this workshop?**
  - Conduct such workshop with more detail and continue communicate with another investment projects in FAO like investment mapping project
  - I expect I would use the DTI to compare the case in Egypt as compared to other countries in the Nile Basin
  - More workshops on the practical applications
  - Should think in the projects which can affect the income in Egypt
  - Check the validity of the DTI software
  - Expect new projects implemented

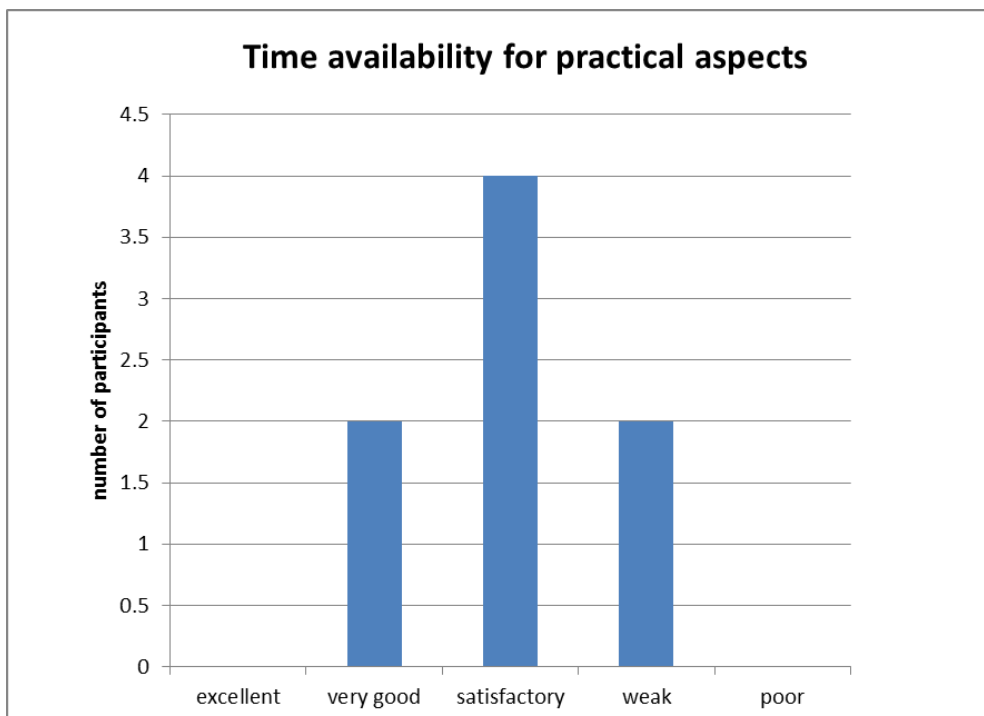


- Length of workshop, time availability for practical sessions

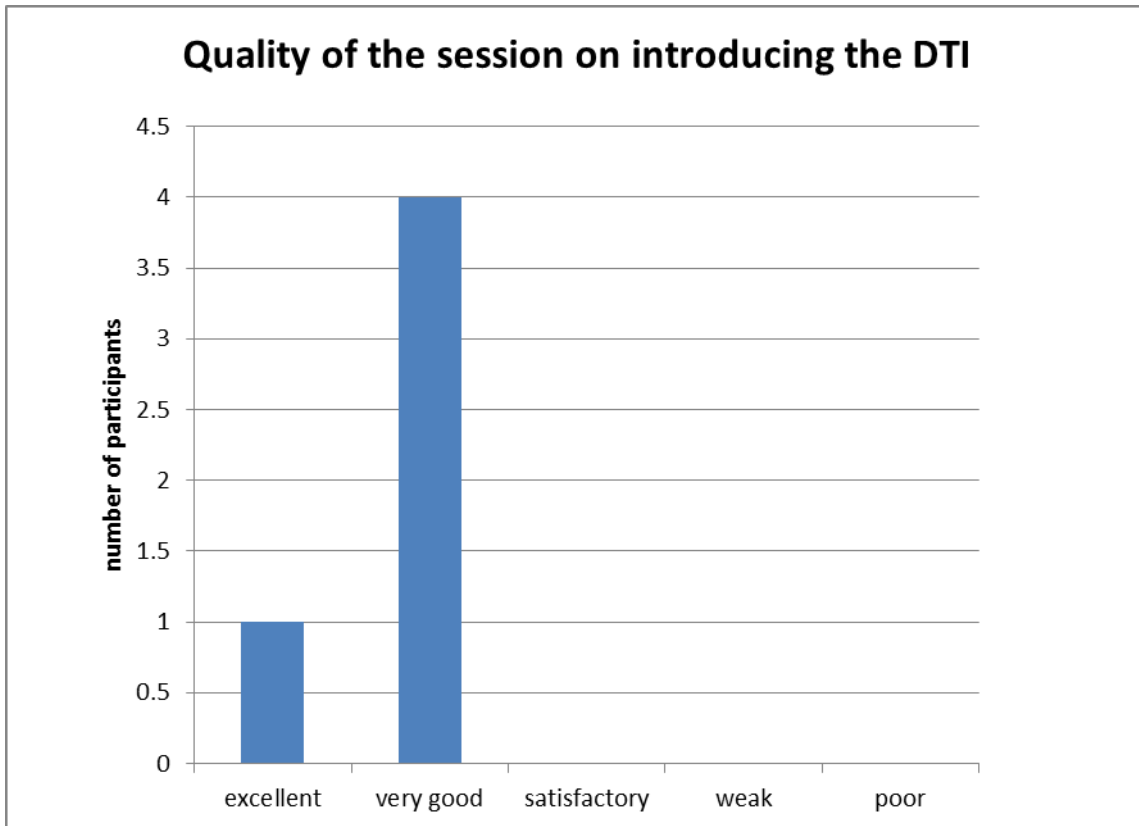


Comments:

- It's better to send the material before the attendance of the workshop
- Need more time and actual application of the model
- It was very short for the huge work done
- Too short

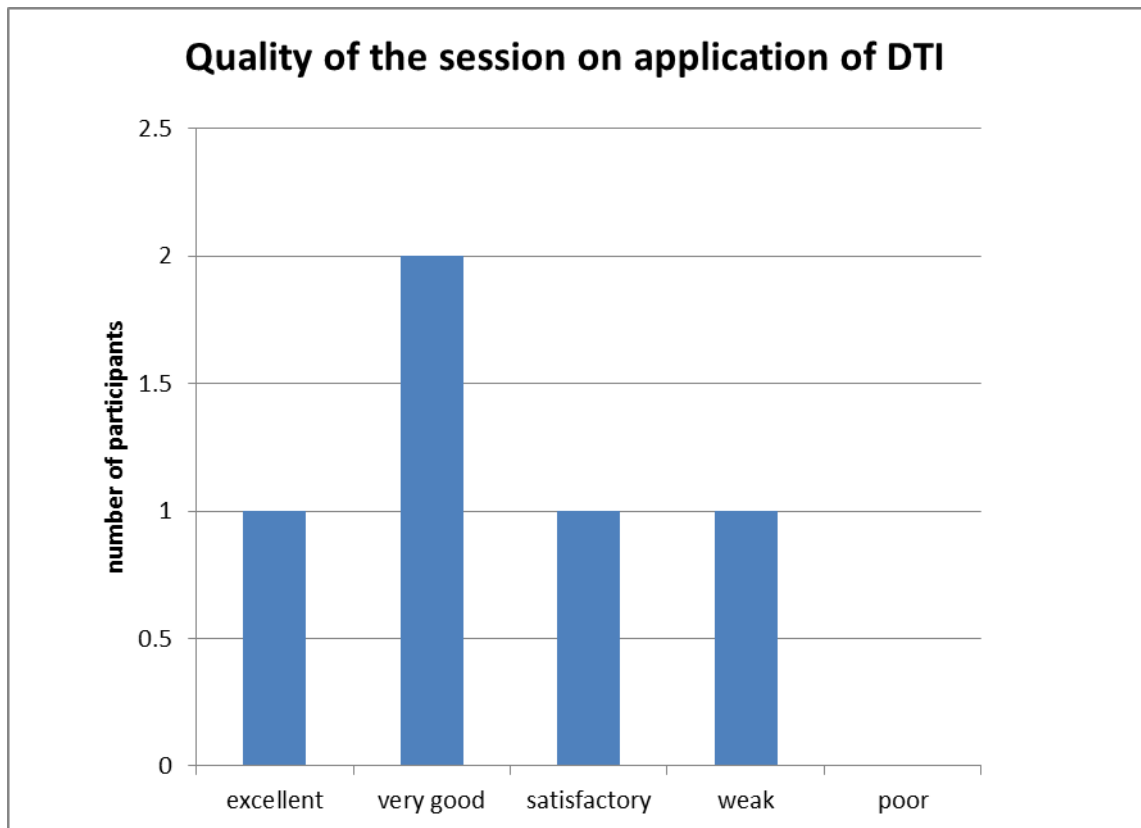


## 5.2 Training on DTI



### Comments:

- Time was the main constraint to get high benefits
- Need more practical exercise
- Adequate

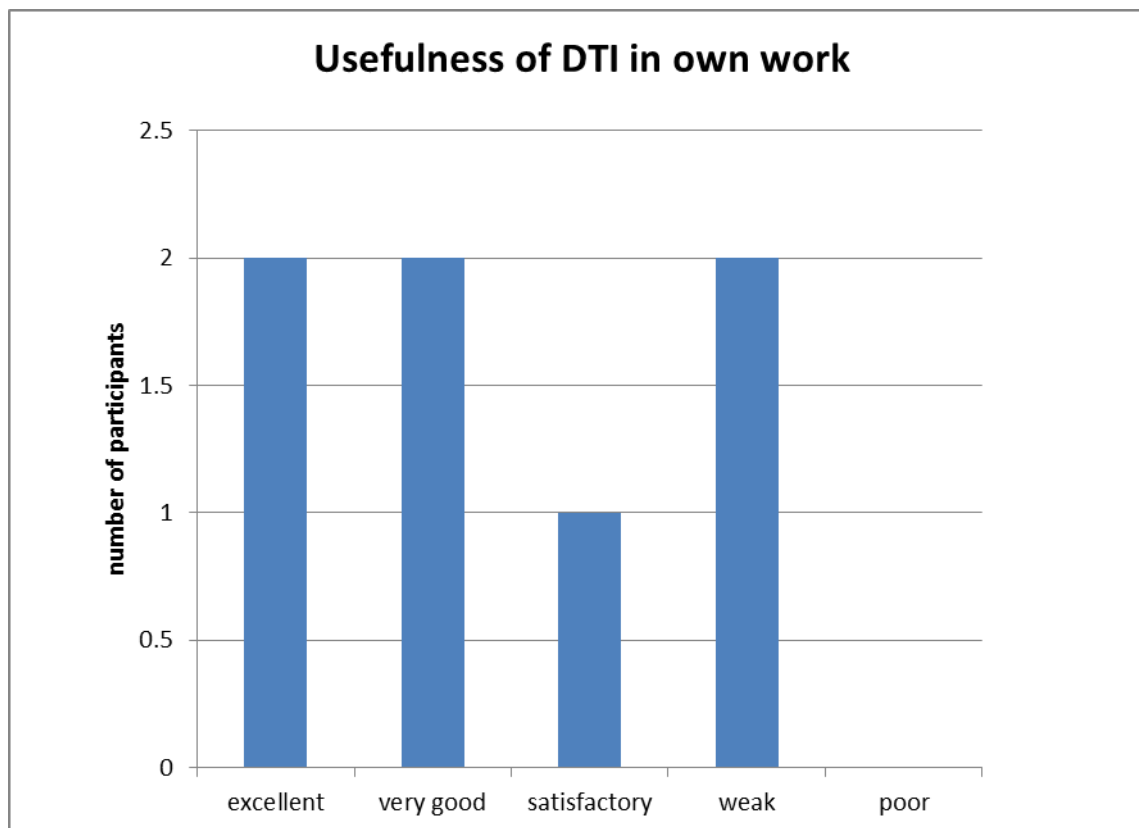


Comments:

- Very short
- The time was not enough for me to use the DTI myself but, it is very interesting
- Need more clarification and exercises

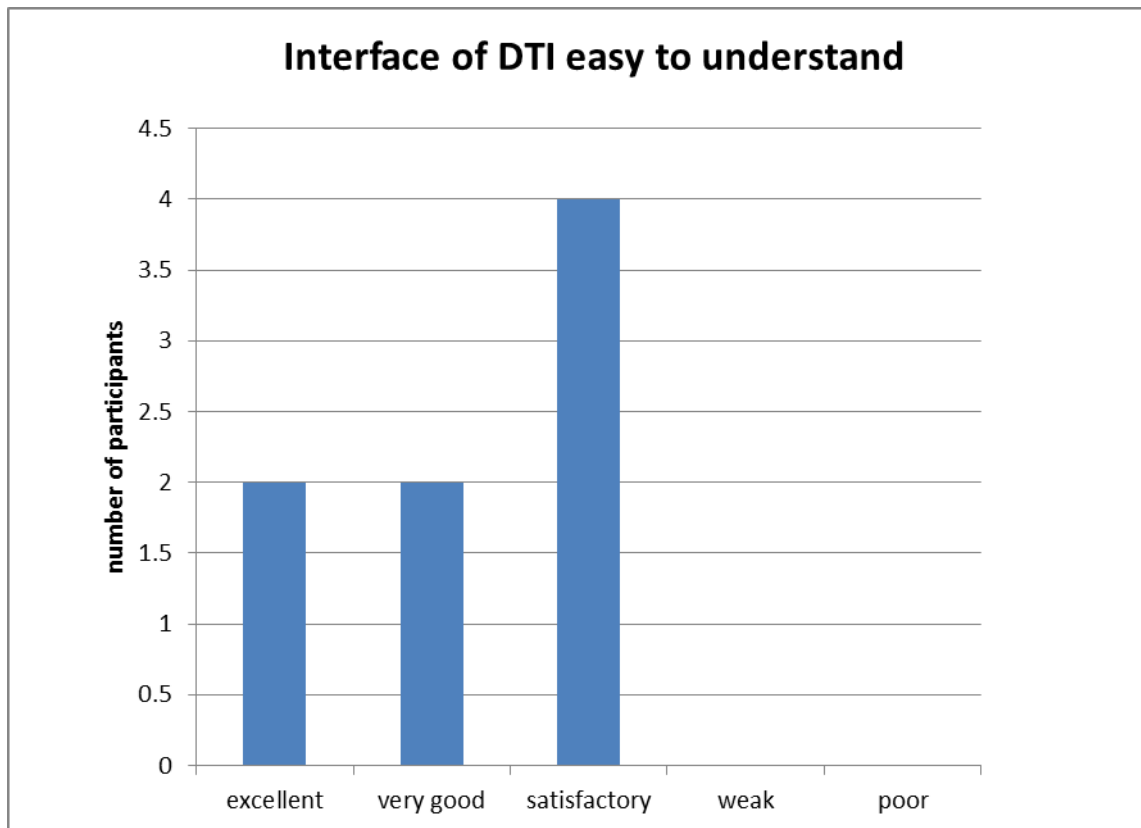
### 5.3 DTI software

- Usefulness



Comments:

- Need this approach in investment map project with FAO with some modifications (need to include marketing indicators)
  - 100% yes
  - Need more application
- Interface



Comments:

- For economists, it is easy to understand
- Needs more time and examples and good computers

**5.4 Most difficult part of the software to understand/use**

- Economic expressions
- Crop section, need more detailed data
- The definitions, I think it takes more time to understand. However, they come detailed enough to understand
- The economic part and the shortage of time to have more practice
- Crops (inputs)

**5.6 What were the best things of the course**

- New approach
- Group discussion on institutional and policy analysis and the national investment profile
- Interesting, new approach for analysis in Egypt, applicable once data is available
- Both reports were very good
- Practical application
- Presentations clear enough
- Discussion and software

**5.7 What were the weaknesses of the course**

- The time for practical sessions, not enough
- Session of introduction online DTI is perfect, training in online DTI webtool needs more practical and applied training

- The short time allocated to this training was really one of the weaknesses of this session
- Time is tight
- Not enough representatives from different entities from both MWRI and AGLR
- Availability of clear-cut database
- Needs more practical training

### 5.8 Additional comments

- Hope to keep in touch for any questions during implementation, this tool and all updates in this field
- Thanks to Dr Fethi, Dr Eise and of course Dr Maher
- Good workshop, there are a great need for another workshop, for the application of the software

### Comments by the conductors of the workshop

The overall impression was good. The list of participants targeted high-level people within policymaking institutions. Therefore we could have an interesting discussion on both the IA and the NIP and could formulate bankable projects (see the synthesis of the discussion in the ANEX). The second day there was a training in the online use of the DTI which was only scheduled for the morning session. Unfortunately, we could not start at the scheduled time and incurred some delay. Overall impression of the participants during the training of the second day was very interested by this approach.

## 6. Pictures



**Hany Ramadan (director ARC) and Pasquale Steduto (FAOR of Egypt and Deputy Regional Representative at the FAO Regional Office for Near East and North Africa)**



**Representatives of the ARC Egypt**



**In pink Enas Abbas Selah, the consultant who worked on the NIP**



**Fethi Lebdi presenting AgWA in the Sofitel El Gezira hotel**



**Participants listening carefully**





**Waleed Hassan presenting the outcome of the IA**



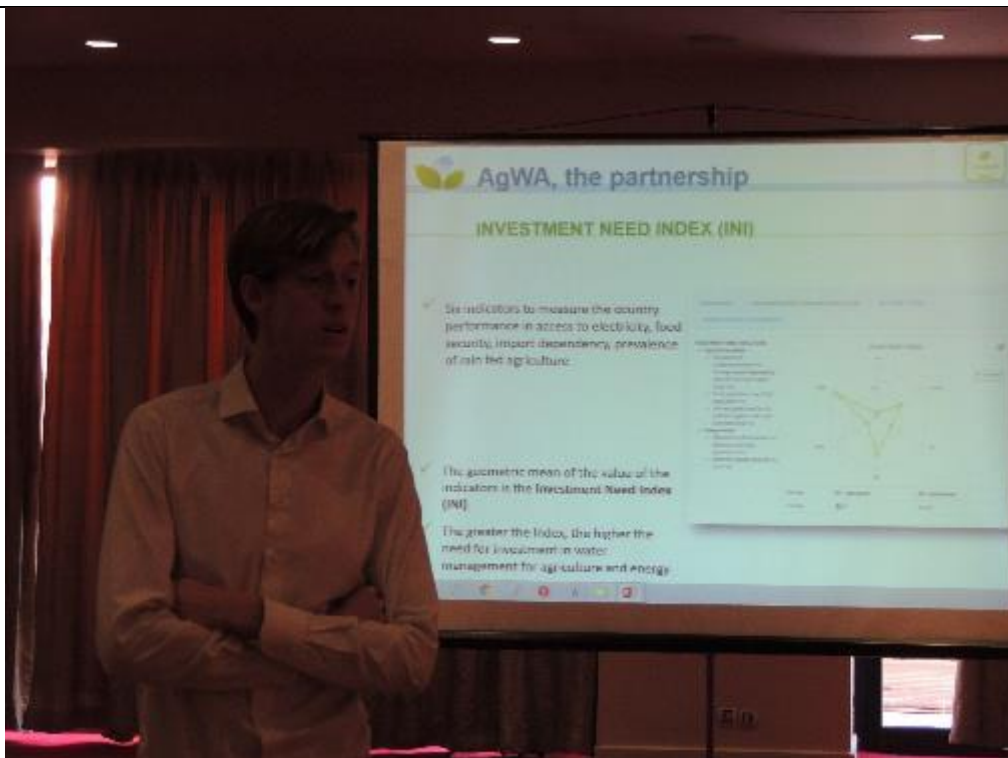
**Enas Abbas Saleh, the consultant who wrote the NIP**



**Waleed Hassan, the consultant who worked together with ARC and the MWRI to write the IA**



The group discussions on the reports in small groups



Eise van Maanen discussing the Investment Need Index during the second day training in the use of the DTI



Group photo at the end of the workshop

## ANNEX I. Evaluation form

	<p><b>Promoting investment in Agricultural Water Management in Egypt</b></p> <p><b>FAO/AgWA</b></p> <p><b>Sofitel El Gezirah</b></p> <p><b>6-7 December 2015</b></p>
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## Evaluation form

Rating key

**1-Poor / 2-Weak / 3- Satisfactory / 4-Very good / 5-Excellent**

## 1. General aspects

Question	Rating 1 to 5	Comments
Overall appreciation of the workshop		
How relevant was the workshop to your expectations for AWM development and investment in Egypt?		
Main recommendation for AWM development and investment in Egypt for the short and long term (Please write comments)		
How relevant was the workshop to your job?		
What next you expect after this workshop (please write comments)		
How was the length of the workshop (1.5 days)?		
How was the time		
How was the time availability for practical points?		

## 2. Individual sessions of DTI workshop

Session	Quality of the sessions		Comments
	Theory	Exercises on PC	

Introduction to DTI			
Data, Applications, Conclusions, way ahead			

**3. DTI software**

Question	Rating 1 to 5	Comments
Will DTI be useful in your work?		
Is the DTI interface easy to understand?		

**4. Which is the most difficult part of the software to understand/use?**

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**5. What were the best things about the session?**

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**6. What were the weaknesses of the sessions?**

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**7. Additional comments**

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## ANNEX III. Synthesis of the discussion groups

### I. Synthesis from discussion on Institutional and Policy Analysis

- Necessary for 1 million feddan plan: formulate a plan for groundwater sustainability plan, quantity and quality.
- 10 000 WUAs in Egypt, so Egypt needs capacity building for water users. So 'capacity building for water users'.
- Egypt suffers from pollution, pollution control is essential. Focusing on awareness, updating and enforcement of laws, encourage private sector to manage solid waste. Ask private sector to join to minimize pollution from solid waste.
- Rehabilitation of irrigation infrastructure, of course no possible to do all of Egypt. But select pilot projects and to see whether Egypt is there.
- Enhance the role of the private sector in AWM
- Improve cooperation between MALR and MWRI
- Agricultural union versus the agricultural public entities
- Eliminate overlapping between different stakeholders and institutions, more training and knowledge transfer, eliminate overlapping responsibilities also in same Ministry, support NGOs and civil society in the field of AWM
- Enhance woman participation.
- Enhance Principal Bank for Development and Loans.
- Regulations revise and reviewed.
- Enforcement of law, no unified system to enforce law.
- Stegthening the role of NGOs in protecting the environment, there is no responsibility and role now for civil society.
- FAO/AgWA needs to provide capacity building.

#### **What's most missing:**

Harmonization of interest among Ministries.

Technical skills.

Land reclamation (35 percent of land is affected), need to work on land reclamation to keep up with overpopulation.

Drainage system, fishing farms use drainage water but polluted. They go back to farming but soil is infertile.

Implement pilot projects with the most promising innovative techniques, and through spill-over effects have this technology spread over Egypt.

Agricultural mechanization

Water harvesting techniques in the North, there is potential but there's a shortage of budget.

No clear cut plan for drought management, but this is a huge problem in Egypt. No clear roadmap for drought management. We need to differentiate between water scarcity and drought management.

Need for investment is high. Drought is only concerning rain-fed agriculture. Drought is no also source of migration.

AgWA should visit and see what the necessities are.

Three pillars:

1. Most promising agricultural water solution (most promising technical and institutional solution) to reach potential of water and land resources on irrigated andrain-fed area at

national level.

2. Resilience to drought, in rain-fed area in North-West coast.
3. Develop a version of the Switzerland project for Egypt.

## **II. Synthesis from discussion on National Investment Profile**

Mainly the validity of the data and structure of the report were discussed.

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