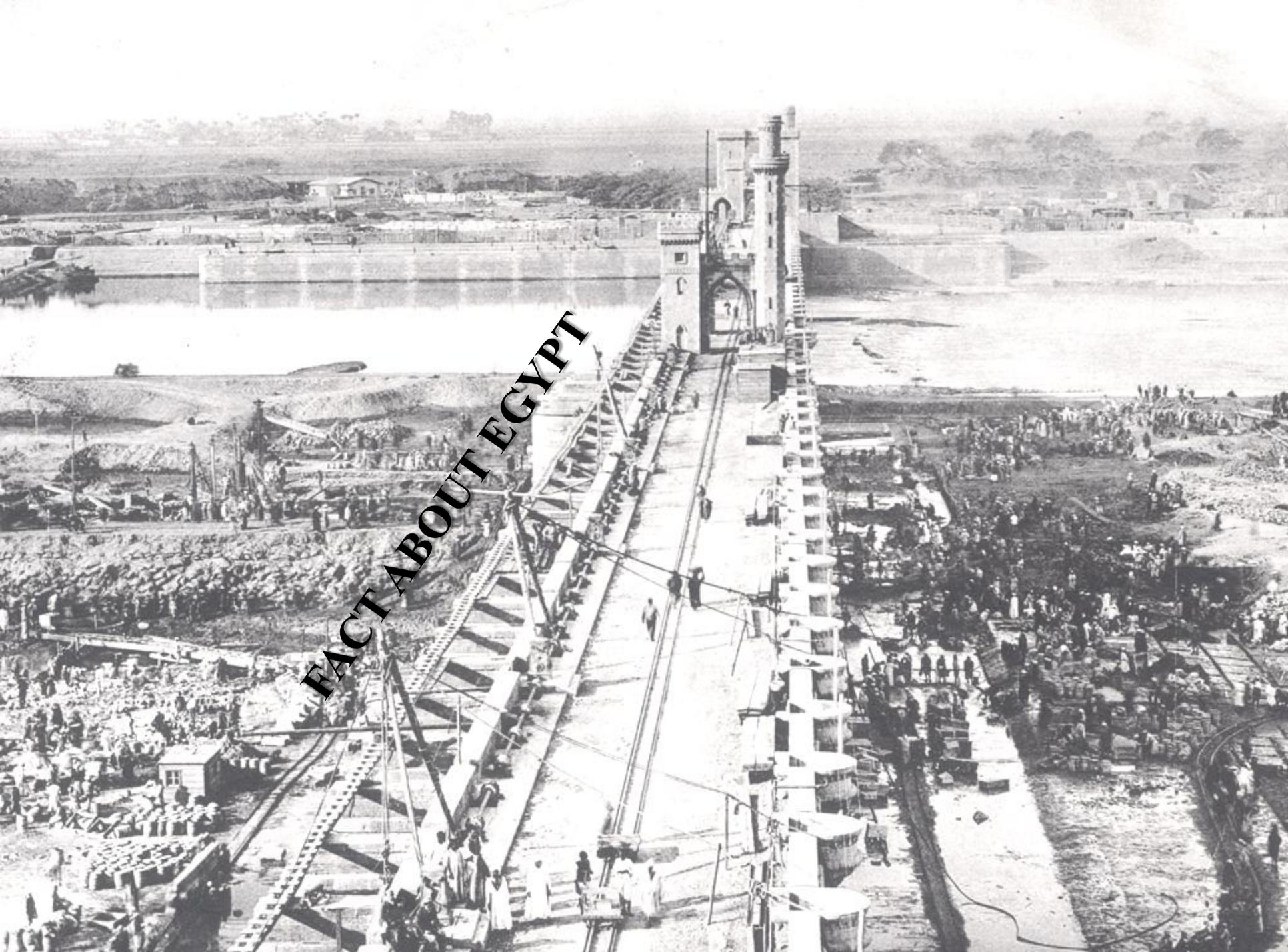




# DEVELOPMENT OF A COMPREHENSIVE M&E SYSTEM FOR PIM & IMT PROCESS

By  
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**Athens – Greece**  
**2<sup>nd</sup> – 4<sup>th</sup> of September 2013**



**FACT ABOUT EGYPT**

# EGYPT

Arab Republic of EGYPT

**Capital** – Cairo.

**Area** – 1,001,450 sq km

**Language** – Arabic

**Population** – 85 million capita



- This Population is concentrated on only 7% of the total area
- The cultivated area is about 4% of the total area

# Fayum the First Reservoir in the World

The first reservoir in Egypt, and the first in the world, was at Fayum

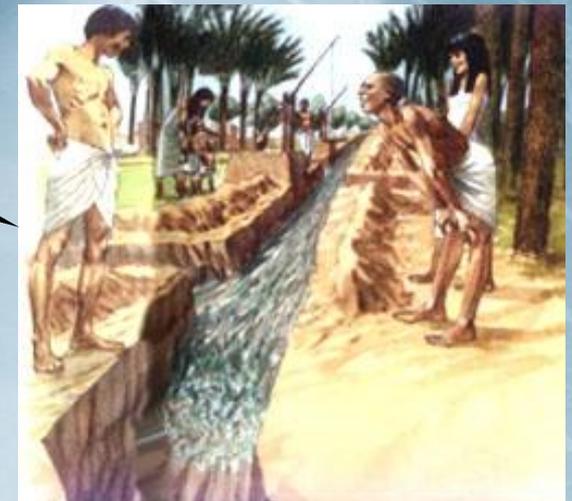
During flood season the Fayum became a lake. The Egyptians built about 20 miles of dikes around Fayum.

When the gates in the dikes were opened, the water flowed through canals and irrigated the fields

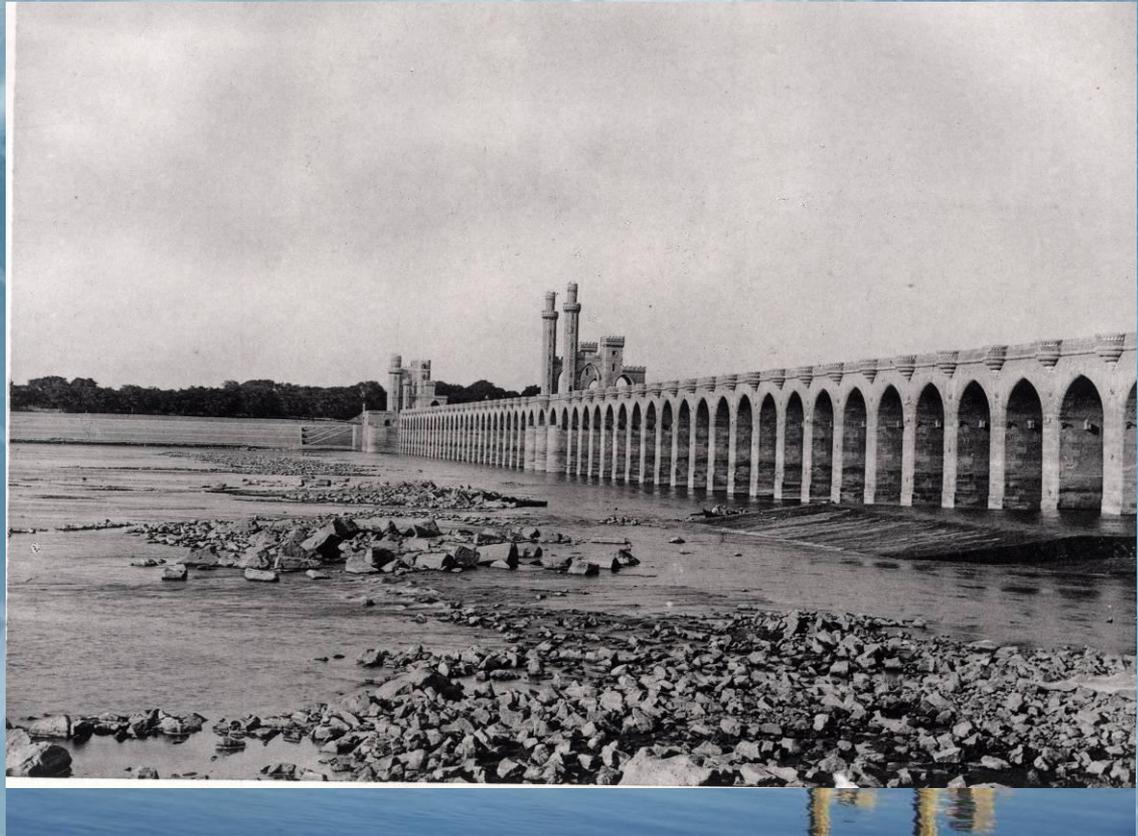
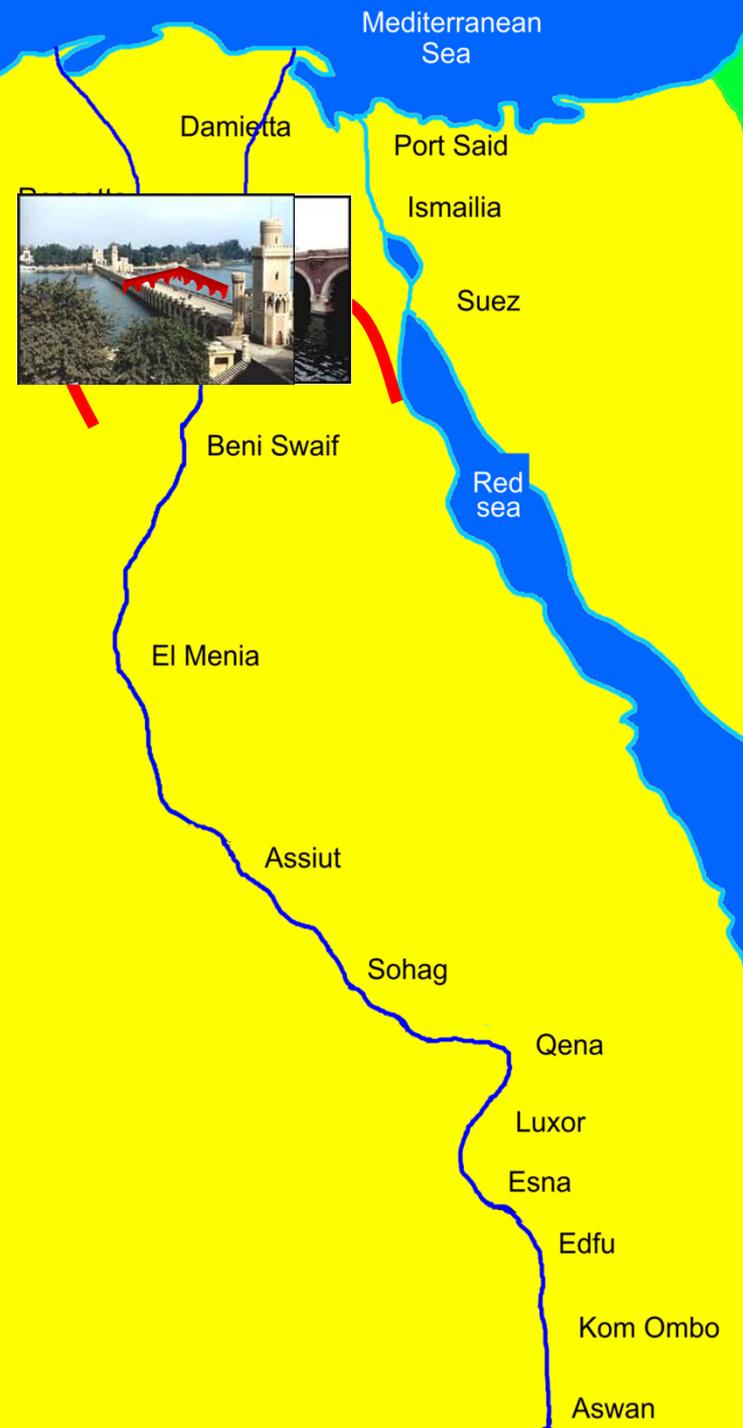
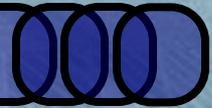
Digging canals to direct the Nile flood water to distant fields



Fayum



# Mohamed Ali Barrage

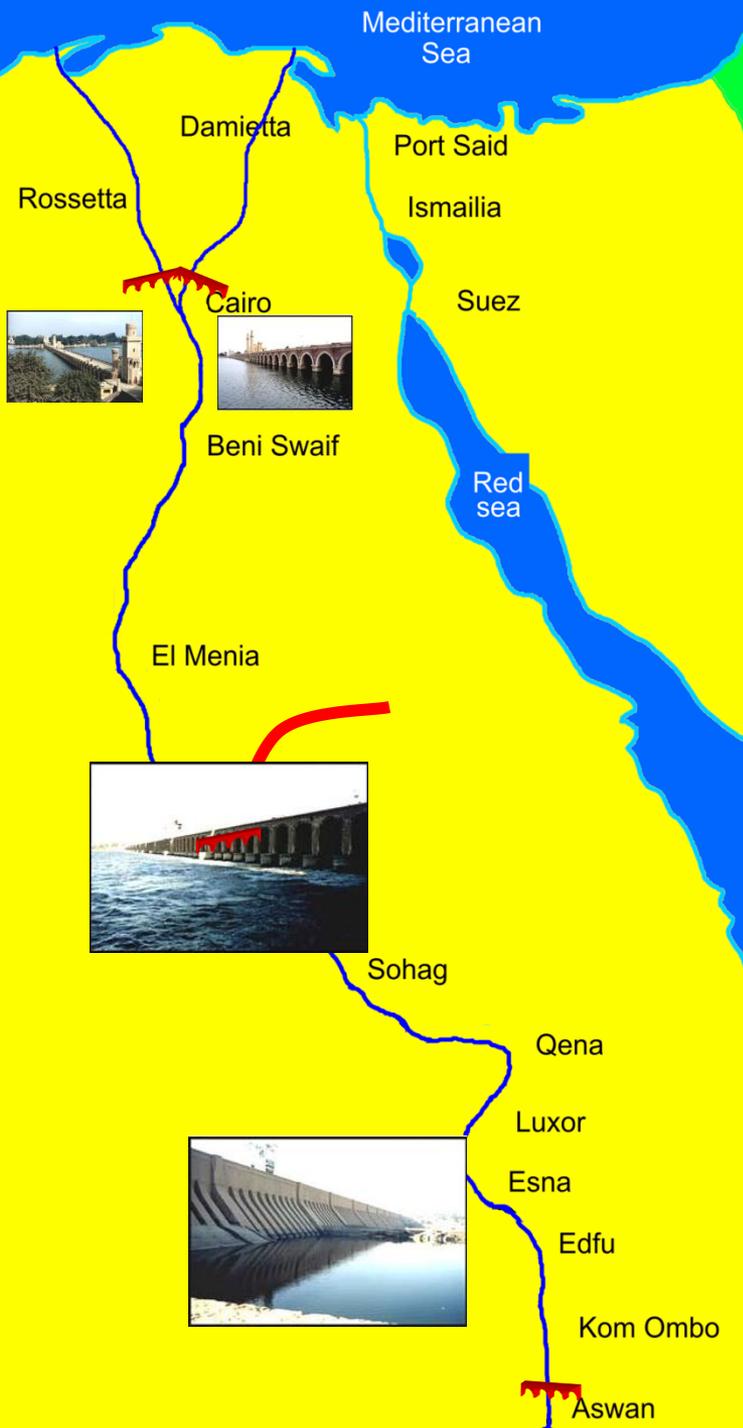


**1842**

*Years*  
**25**

D.S. of OAD (Km)	953.2
No. of Vents	61
Head (m)	2.3

# Assiut Barrage Construction



**1902**  
*Years*  
**4**

<b>D.S. of OAD (Km)</b>	<b>544.75</b>
<b>No. of Vents</b>	<b>111</b>
<b>Head (m)</b>	<b>4.3</b>

# Assiut Barrage Construction

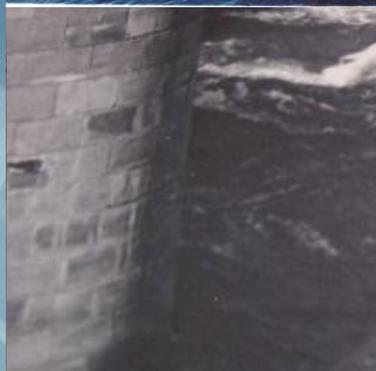
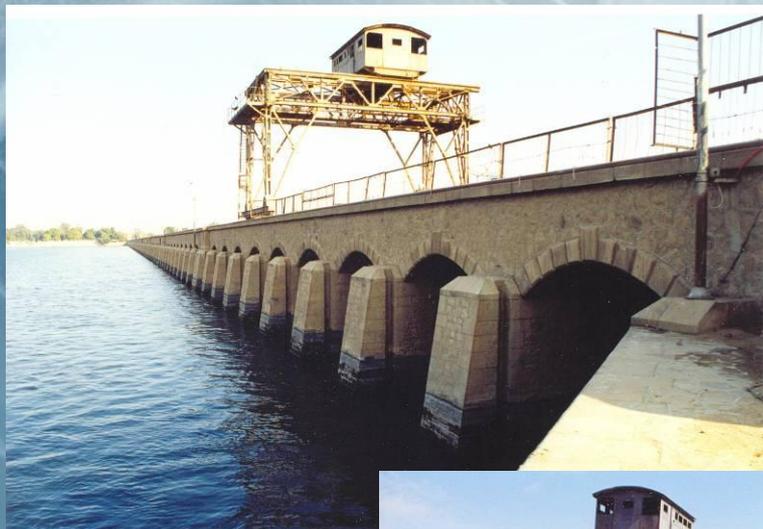


**1902**  
Years  
2

D.S. of OAD (Km)	1046.7
No. of Vents	50
Head (m)	4



# Esna Barrage Construction



**1903**

**Years**  
4

D.S. of OAD (Km)	160
No. of Vents	120
Head (m)	2.5

# Naga Hammadi Constrictioning



**1912**

**Years**  
3

D.S. of OAD (Km)	359.45
No. of Vents	100
Head (m)	4.3

# Delta Barrage Construction



**1933**

Years

6

D.S. of OAD (Km)

953

No. of Vents

34, 46

Head (m)

3.8

# Delta Edfu dam Target Construction



**1939**

Years  
7

D.S. of OAD (Km)	1159
No. of Vents	46
Head (m)	2.7

# Zefta Barrage Strengthening Option



**1951**  
Years  
?

D.S. of OAD (Km)	1046.7
No. of Vents	50
Head (m)	4

# Zefta High dam construction



**1954**  
Years  
8

D.S. of OAD (Km)	-6.5
Storage( $10^9$ m <sup>3</sup> ) At wl(182.00)	162

# Damietta barrage construction



**1968**

Years

5

D.S. of OAD (Km)

1164

No. of Vents

5

Head (m)

2.7

# Dam New Barra Barraget Cons



**1988**

Years

4

D.S. of OAD (Km) 167.85

No. of Vents 11

Head (m) 9.1

# New Nag Hammadi Barrage consists



**1994**  
Years  
6

D.S. of OAD (Km)	
No. of Vents	
Head (m)	



**PARTICIPATORY  
IRRIGATION  
MANAGEMENT  
(PIM)**



## WHAT'S IS PIM?

It is the participation of all parties relevant to water management either GOs or NGOs.

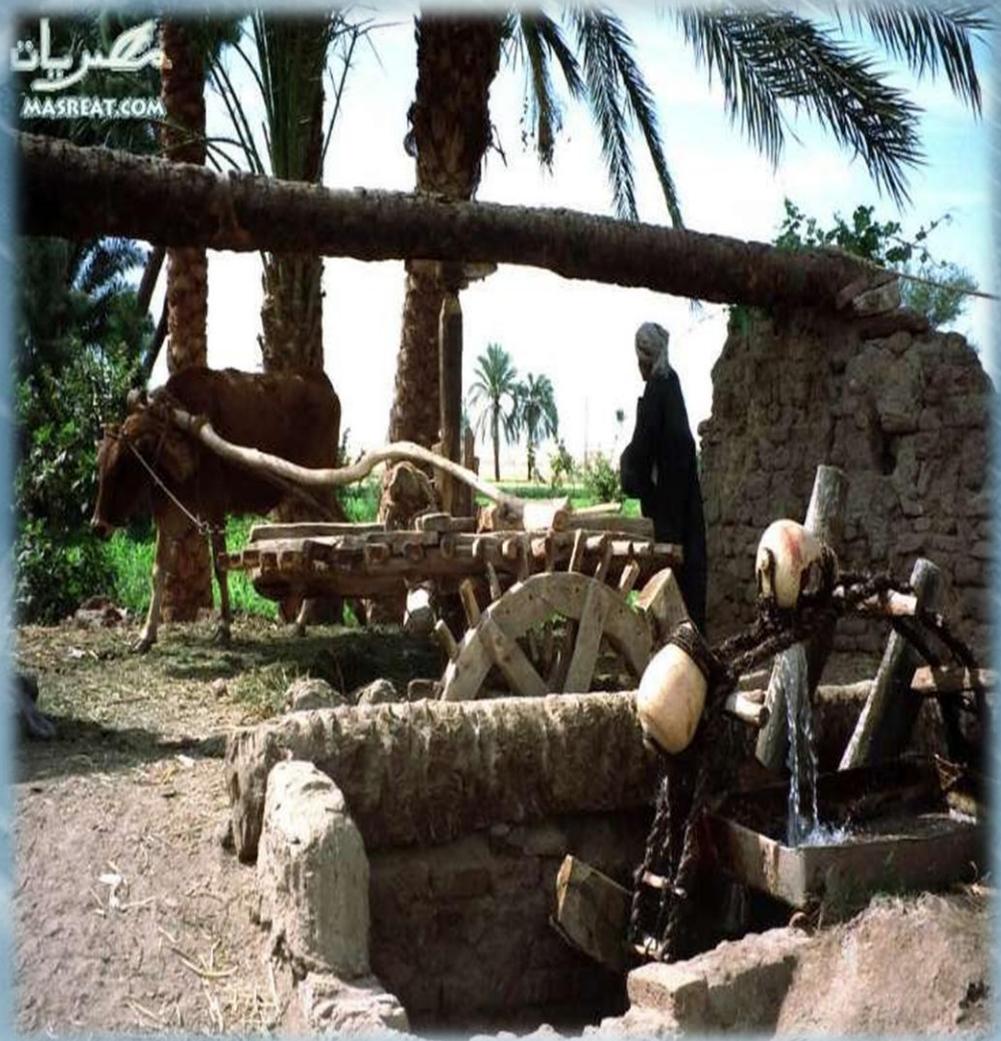
The model of PIM aims at a participatory management where some functions are transferred to the farmers' organizations while others are retained by the government agencies



The concept of participation in irrigation has been known early in Egypt.

The usage of runnels was a good application of PIM, as the farmers have used this means of lifting water since 1955. The policy of the government in Egypt at that time was to lower the level of water in the canal, in order to make it hard for the farmer not to lift more than his requirements.

The farmers shared the costs of runnels and its maintenance.



The background of the slide features a large, circular, blue-tinted image of a water tap or faucet, with water droplets visible. The image is overlaid with a grid of white lines that create a perspective effect, receding towards the right side of the frame. The overall color palette is a range of blues, from light to dark, with white and yellow accents for the text.

# **WATER USERS ASSOCIATIONS (WUAs)**

# Types of Participation

- Governmental
- Private sector
- Civil society (including WUOs)

# Roles & Responsibilities of WUAs

- Administrative and financial
- Operation and maintenance
- Improve water quality
- On farm water management
- Conflict resolution
- Communication with relevant stakeholders
- Participation in projects implementation
- Water allocation and distribution
- M&E



# Current Organizations in Egypt

<b>Water Users organizations</b>	<b>Description</b>	<b>Current status of establishment in governorates</b>
Water User Unions (WUUs)	On mesqas in new lands	
Water Uses Associations (WUAs)	On mesqas in old lands	On Mesqas on old lands (have not been started over all governorates)
Branch Canal Water Users Associations (BCWUAs)		On-going (have not been started over all governorates)
District Water Boards (DWBs)		under planning

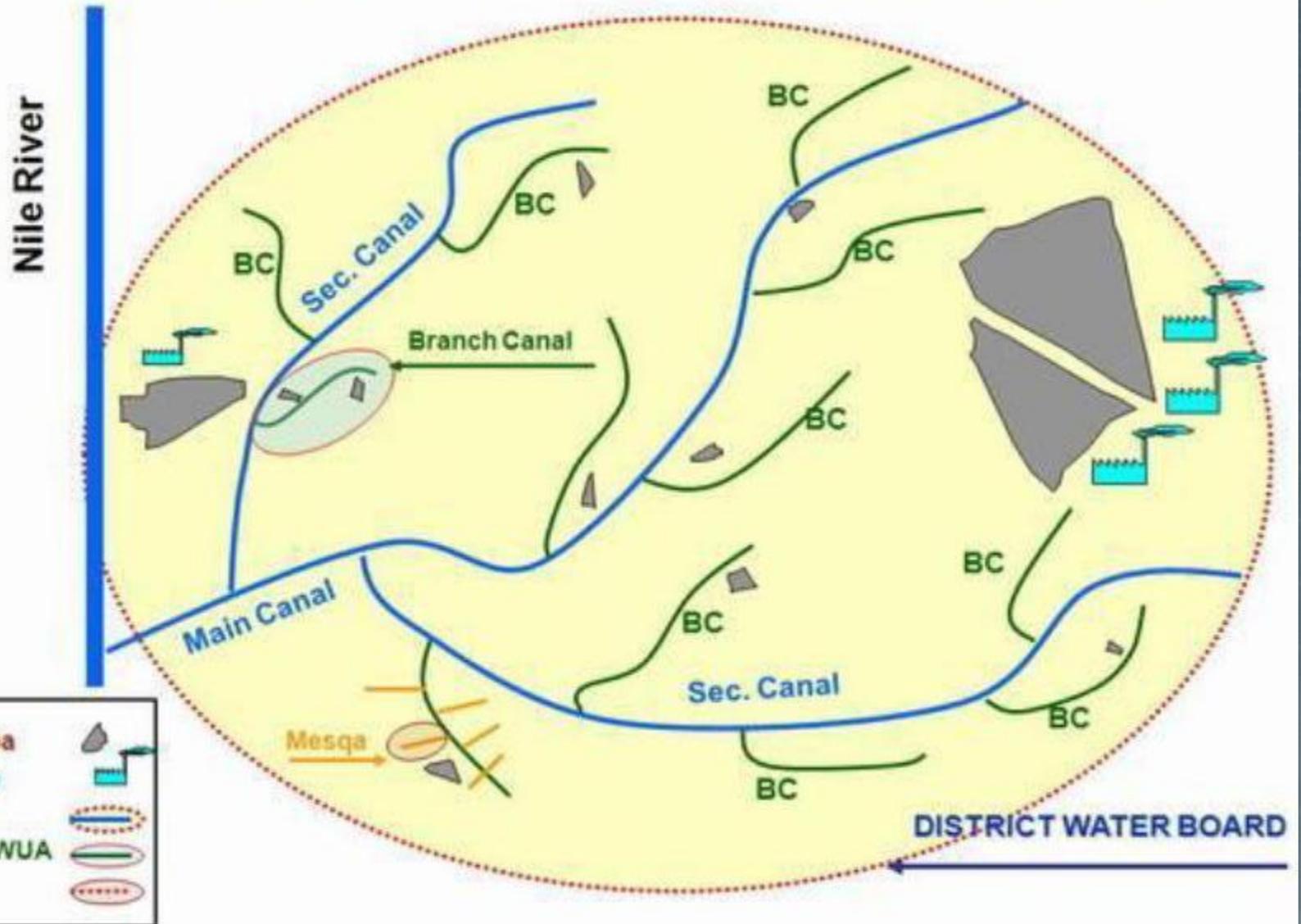
(DWBs)

District Water Boards

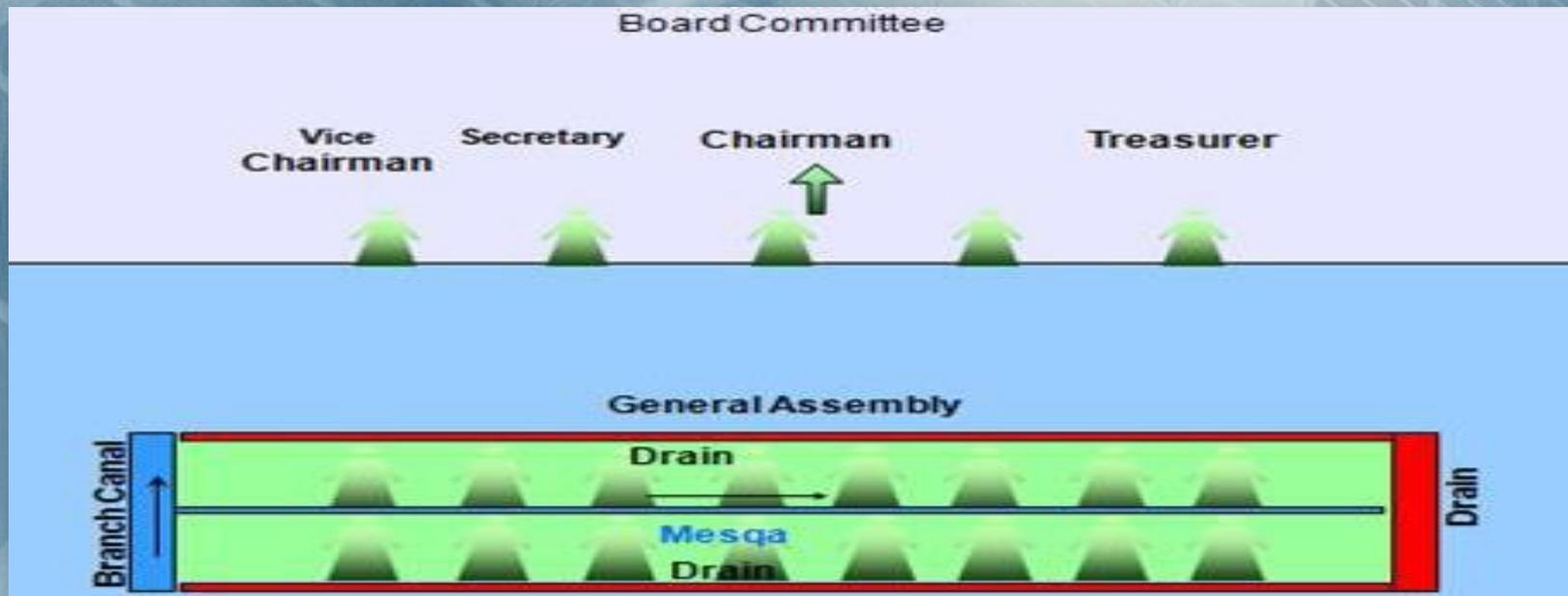
under planning

On-going (have not been started over all governorates)

# Different levels of water users organizations



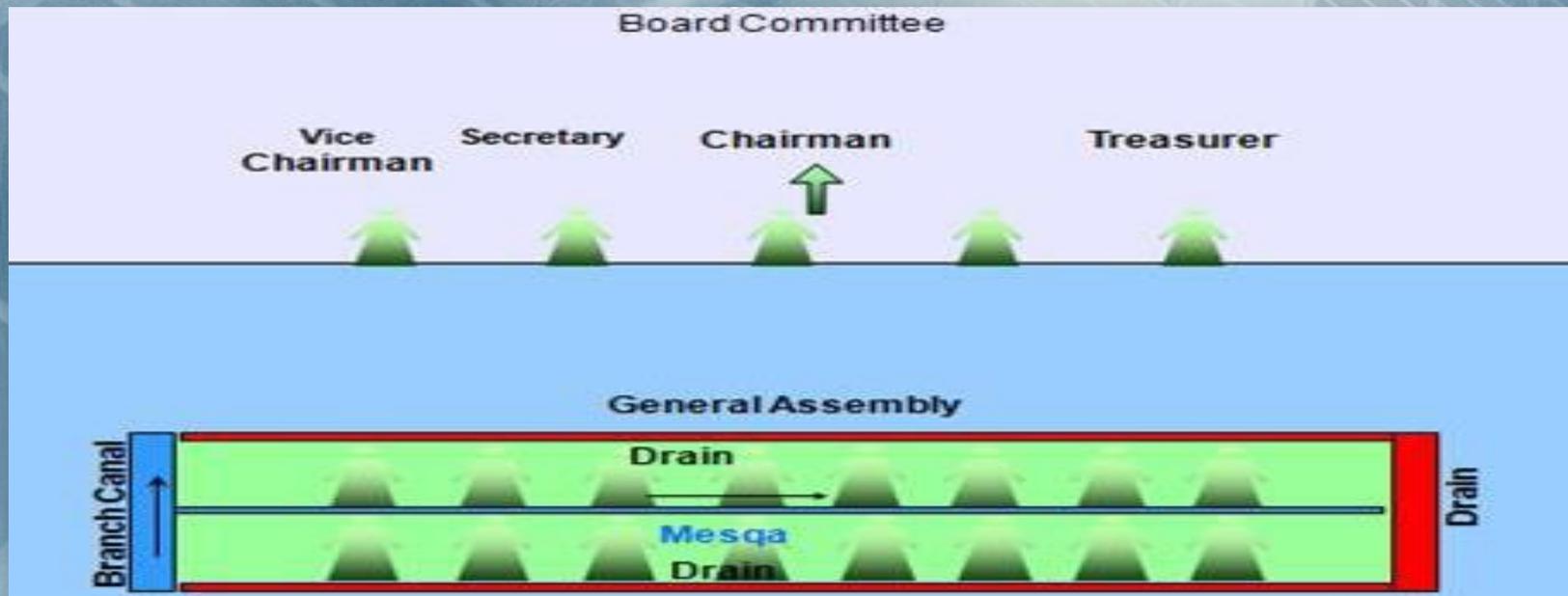
# Mesqa Water Users Association (WUA)



It is a private organization owned and controlled by members for their benefits in improving delivery of water and the use of water for increased agricultural production and higher incomes.

The organizational structure of WUA is comprised of: 1-General Assembly (GA) Comprising of all the farmers. 2-The Board Committee (BC), it is the executive body of Mesqa WUA, it is responsible for the day- to-day management of the association activities, Its member is 2 if the total no. of users ranges between 6 and 9, not less of 5 if the total no. is 10 or more.

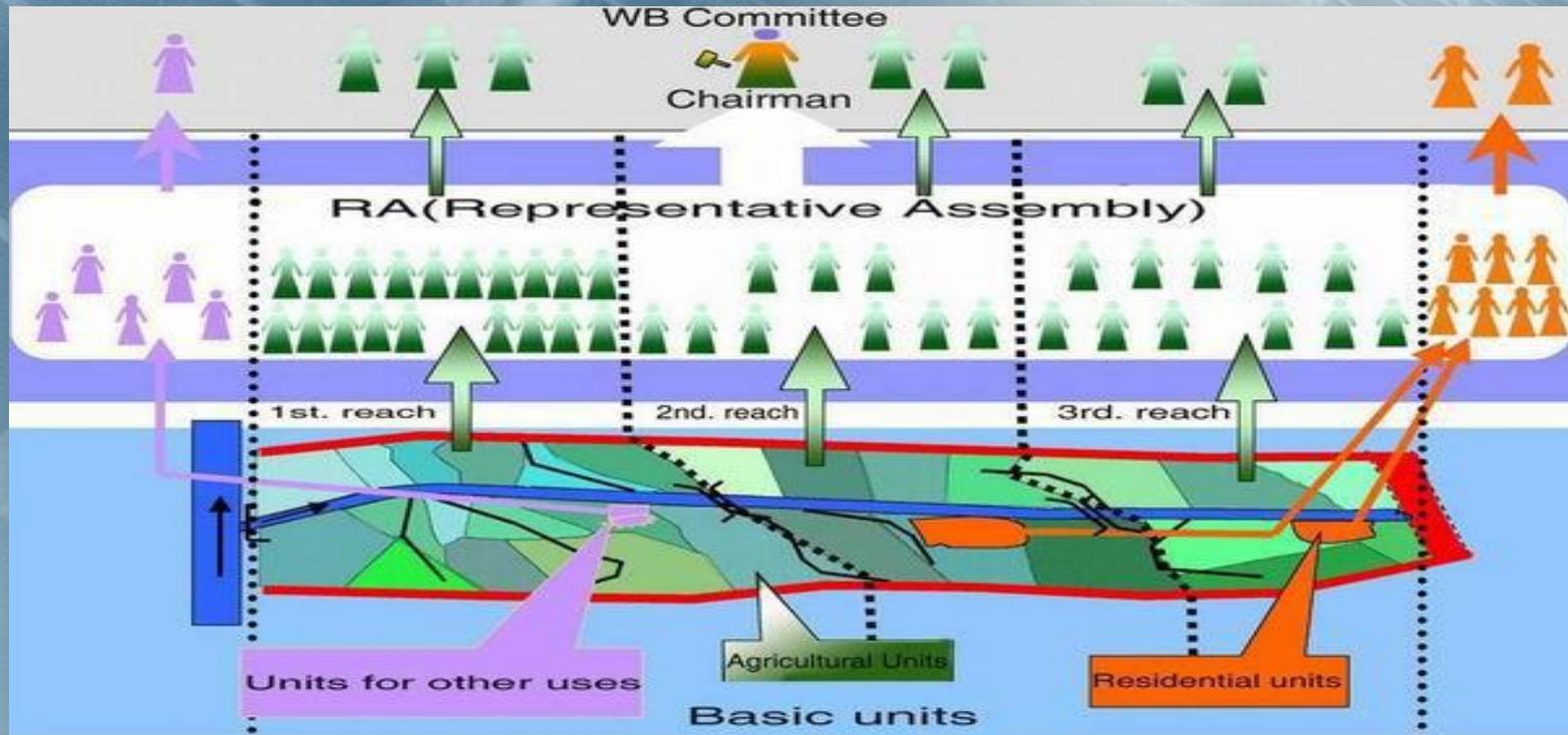
# Mesqa Water Users Association (WUA)



## LEGAL FRAME WORK OF WUA

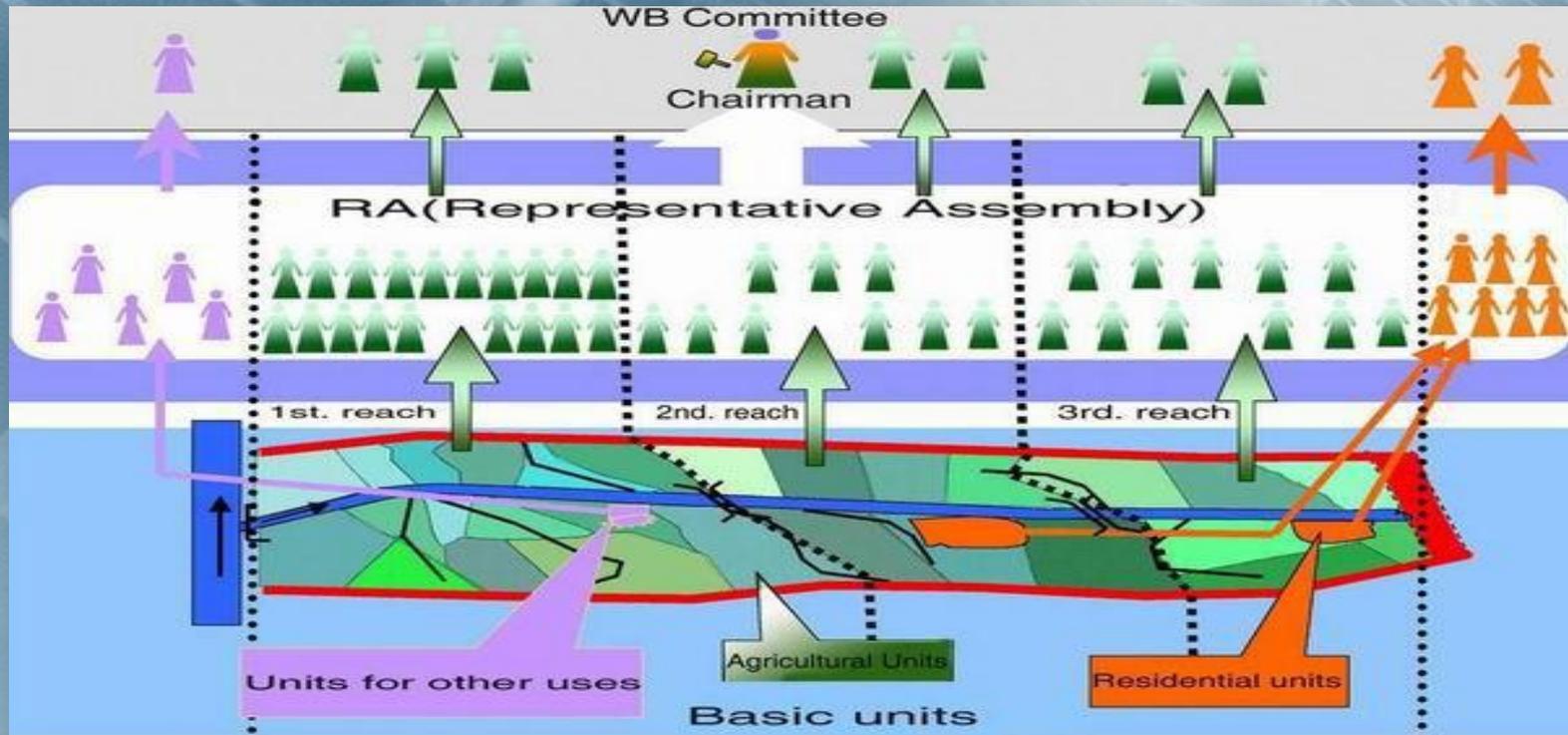
The legal framework of WUA is the law no. 213 for year 1994 and ministerial decree no. 14900/1995

# Branch Canal Water Users Associations (BCWUAs)



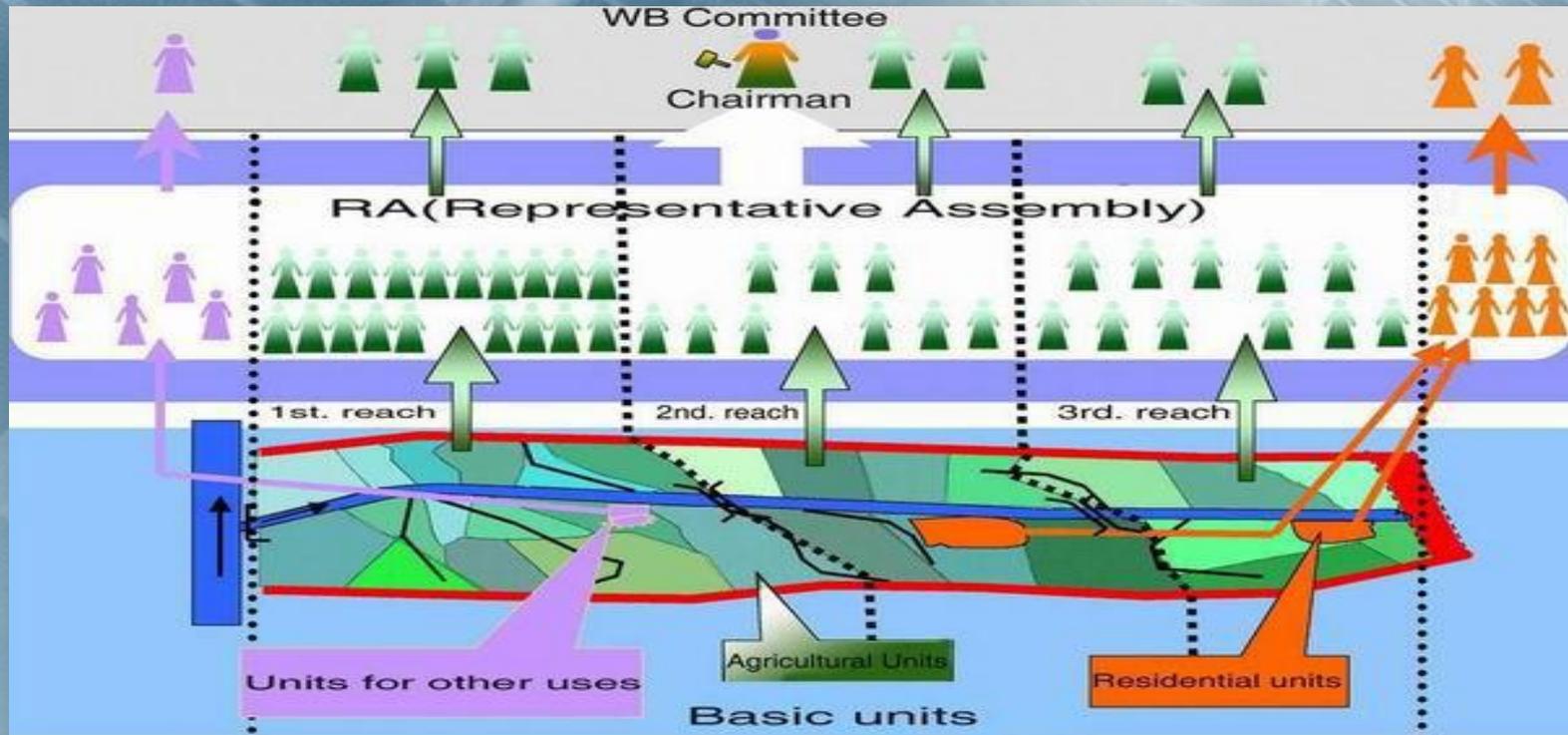
It is a user management organization, responsible for both irrigation and drainage as well as water quality in a specific command area for achieving equitable distribution of clean water among its users.

# Branch Canal Water Users Associations (BCWUAs)



The aim is to involve irrigation users in planning, design, construction, operation and maintenance, administrative and financial, On-Farm water management, conflict resolution, communicate with relevant stakeholders, participation in projects implementation and policy matters of the irrigation system.

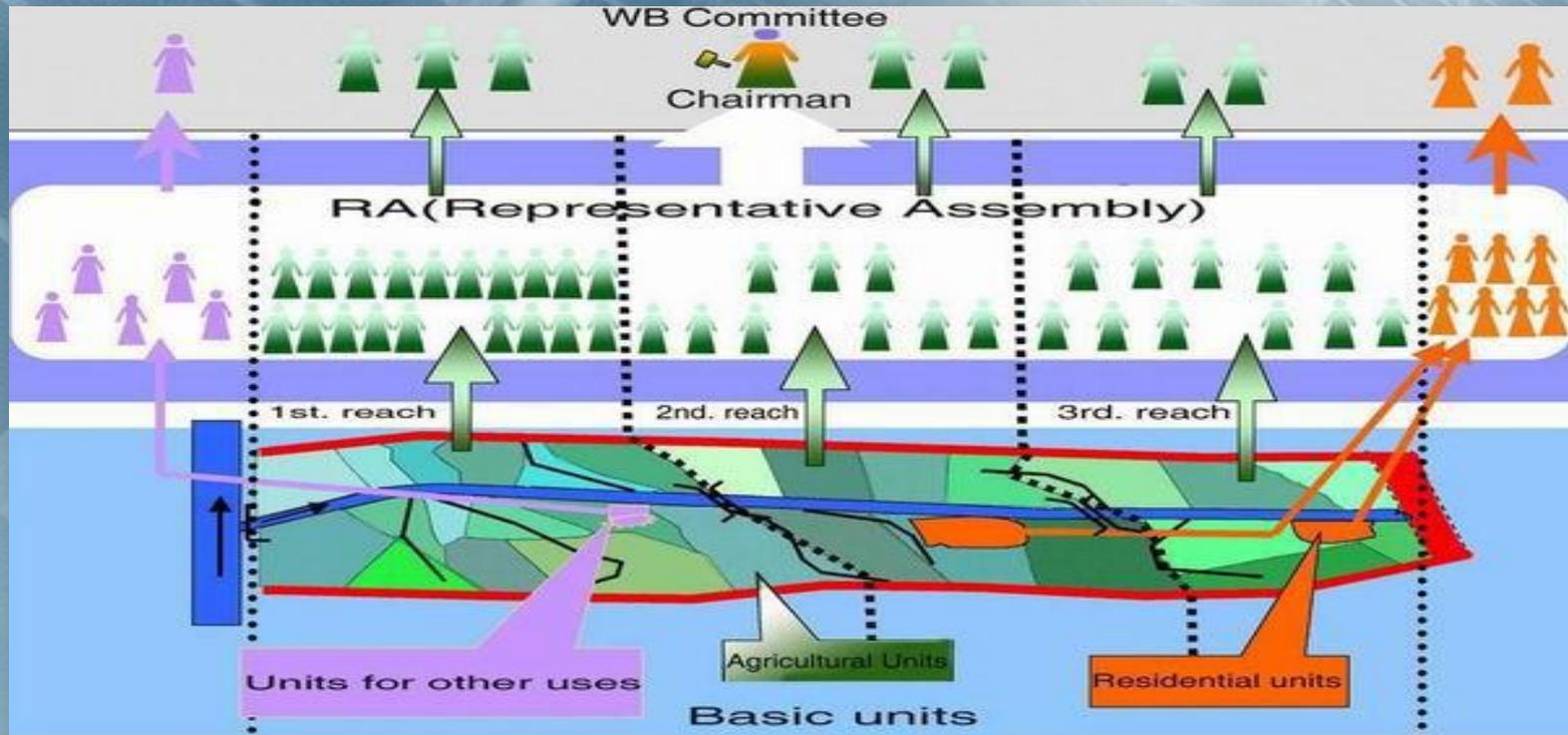
# Branch Canal Water Users Associations (BCWUAs)



## LEGAL FRAME WORK OF BCWUAs

The legal framework is reflected by ministerial decree, internal regulation and memorandum of understanding. The existing irrigation and drainage law has been modified and now is under revision. The new law will give the different water users organizations (WUOs) the legal entity.

# Branch Canal Water Users Associations (BCWUAs)



## LEGAL FRAME WORK OF BCWUAs

The existing irrigation and drainage law no. 12 for year 1984 has been modified and now is under revision. The new law will give the different water users organizations (WUOs) the legal entity.



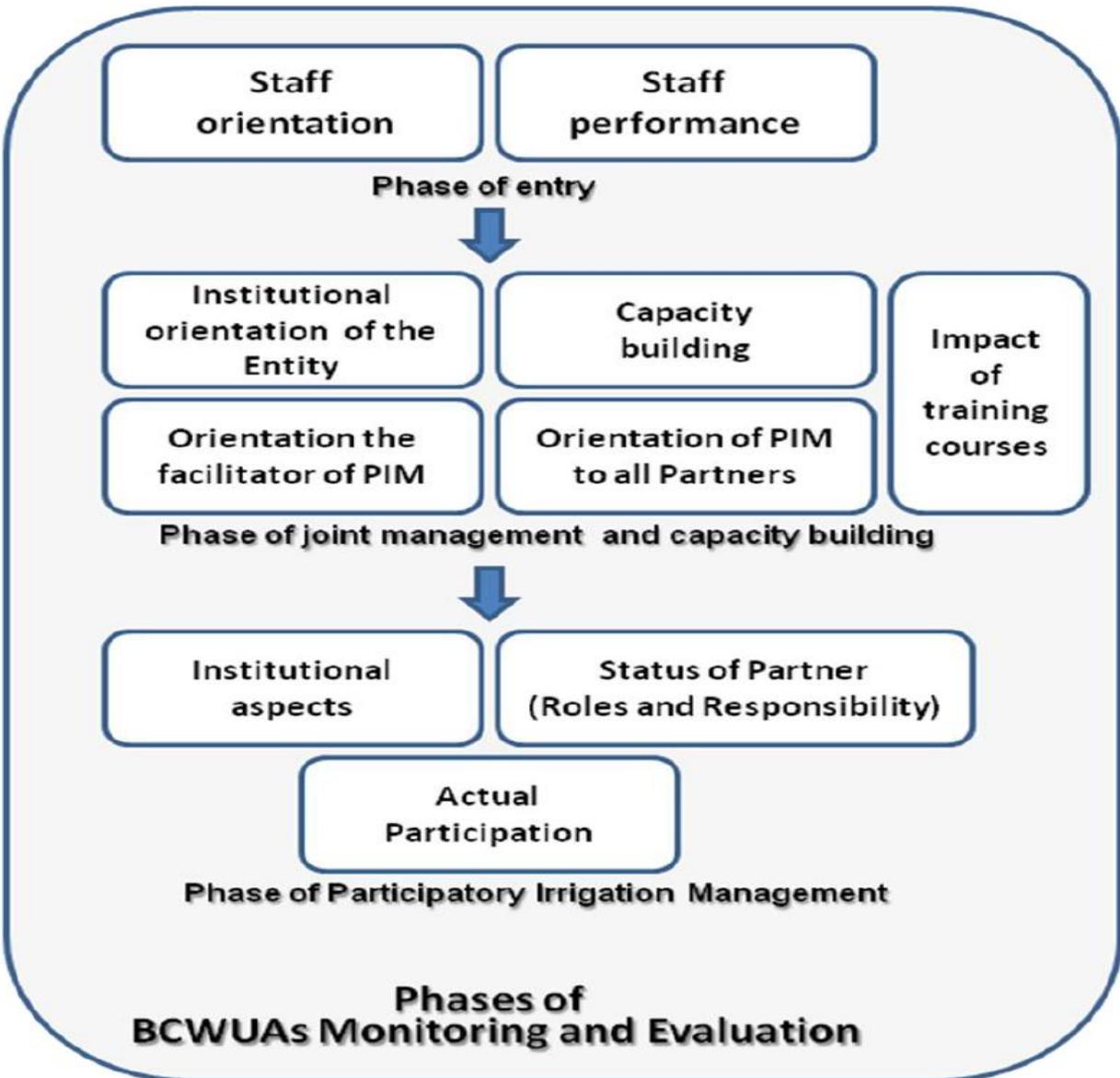
# **MONITORING & EVALUATION FRAMEWORK**

Evaluation is choosing a fair benchmarks and performance indicators to identify efficiency entities (structure), whether governmental or nongovernmental (civil society). The target performance should be measurable and can be expressed by various means as (numbers, percentages, yes/no ..... etc.).

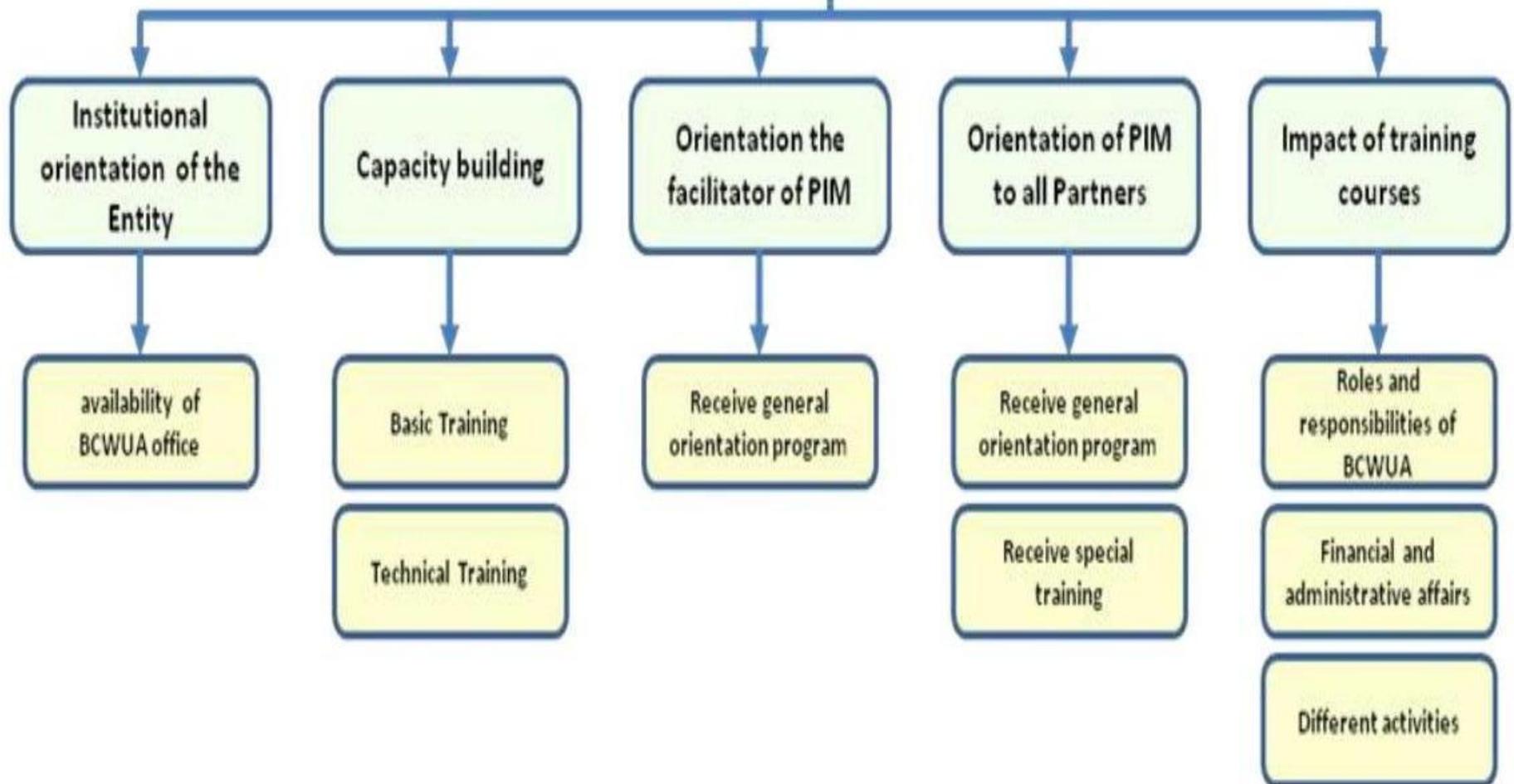
The evaluation of the mentioned phases elements is undertaken throughout breaking down such elements into group of categories. Each category constitutes of a list of indicators in the form of questionnaire / check list.

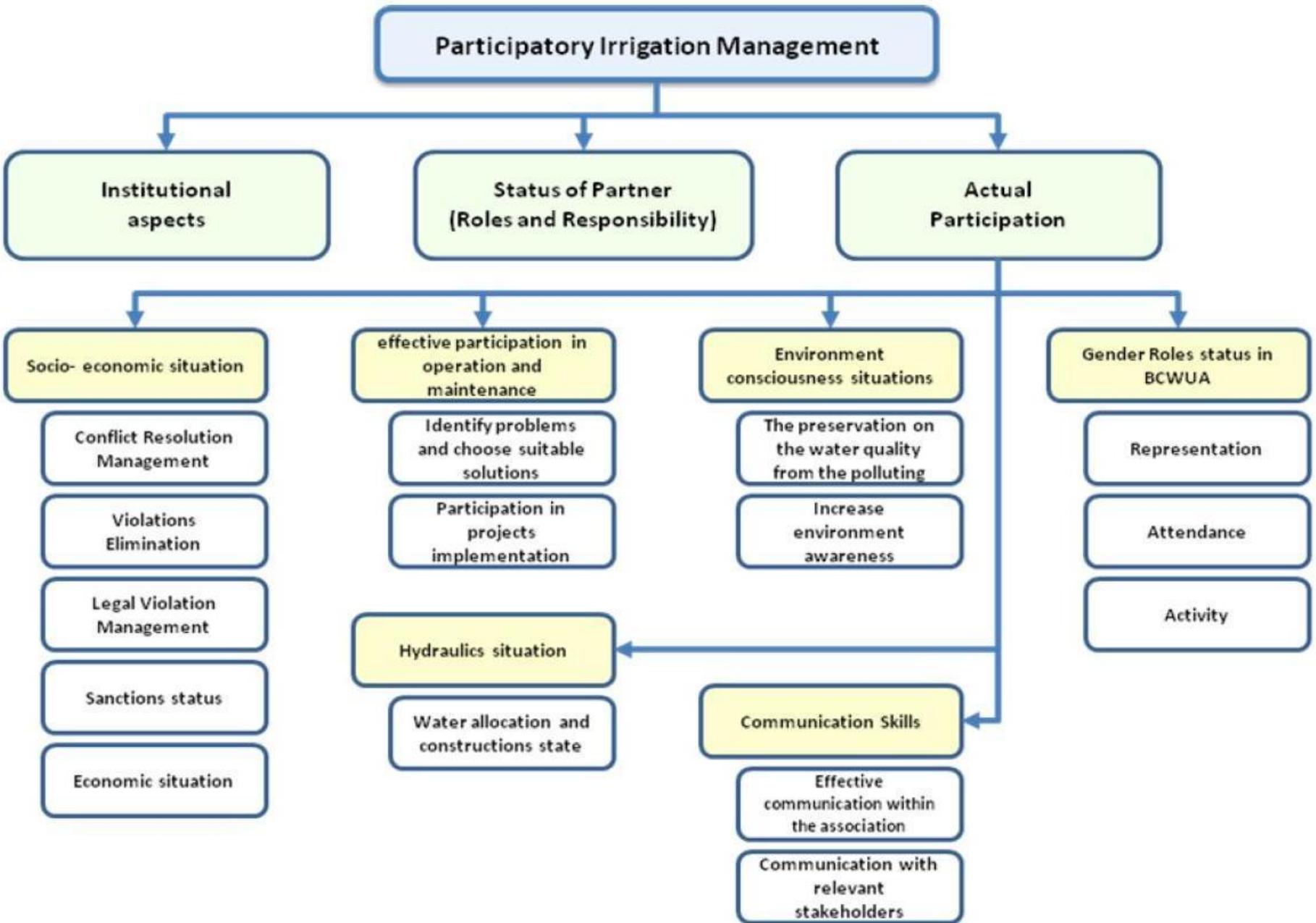
The data are being collected at the level of local offices (Irrigation Districts), which, furthermore, analyses such information to reveal both weakness and strength points in these organizations and its performance, where the target in future vision is activation of water user association.

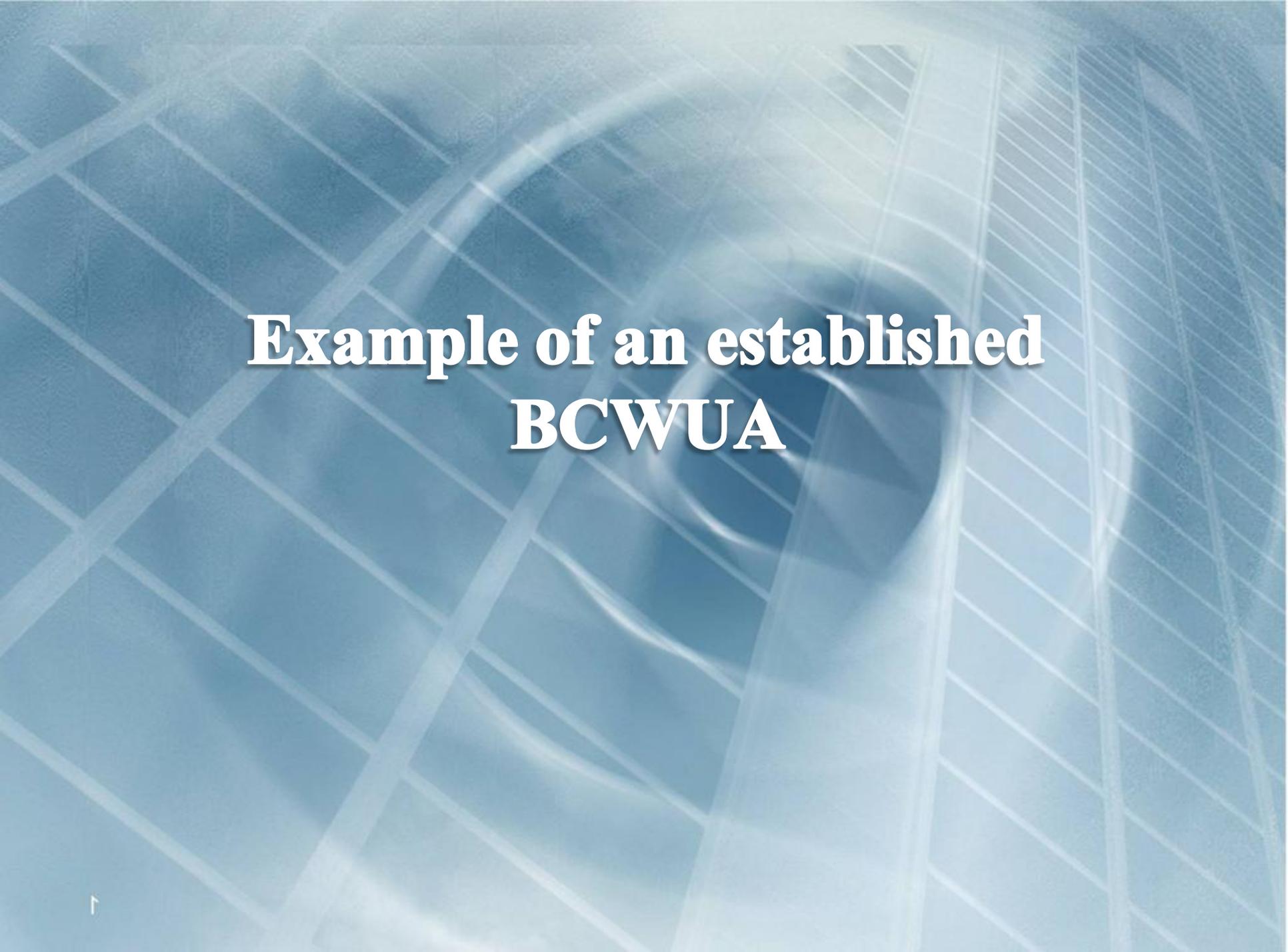




## joint management and capacity building







**Example of an established  
BCWUA**



# **El-Rash El-Gharby Canal WUA**

# Information about the BCWUA

**Establishment year** – 2001

**Board Committee** – 11 members (10 male + 1 female)

**Executive Committee** - 52 members (49 male + 3 female)

## Achievements of BCWUA

**Establishment** of the BCWUA by their own money.

**Attendance** of many institutional building capacity training courses

**Maintenance** of the branch canal, including dredging of the canal and constructing of a pump.



after



before

# Achievements of BCWUA

**Positive environmental role** throughout an effective co-ordination with the city council for purchasing a tractor to collect the human disposal away from the canals.

**Visits** for knowledge transference to either Egyptian governorates or foreign countries (Spain, Italy .. etc).

**Membership** in the Egyptian Water Partnership, World Water Partnership, International Organization for Rivers' Basins .. etc.





**THANK YOU**