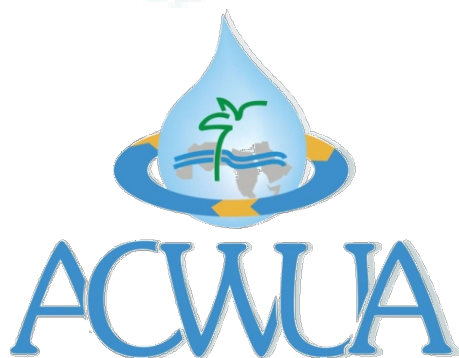


Water in the Green Economy in Practice: Towards Rio+20

Market Place (Group 1)
***The role of ACWUA in promoting exchange of
experiences***

Eng. Khaldon Khashman
Secretary General



Zaragoza, Spain
3-5 October 2011

Content

- Introduction
- Water Sector Situation
- Challenges & Constraints
- ACWUA platform
- Conclusions



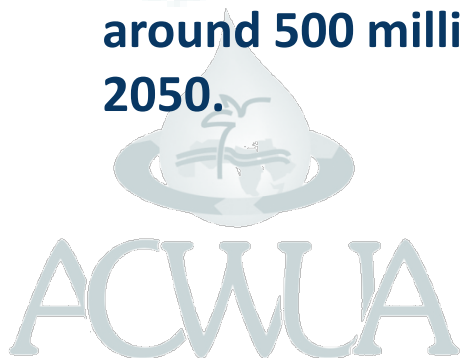
Introduction

- The available water sources throughout the world are becoming depleted
- This problem is aggravated by the rate at which populations are increasing, especially in developing countries
- Water & wastewater management workforce is considered among the Green Jobs supporting the Green Economy



1- Water Sector Situation

- The Middle East and North Africa Region (MENA) is the most water scarce region in the world.
- Worldwide, the average water availability per person is close to 7,000 m³/person/year, whereas in the MENA region, only around 1,200 m³/person/year is available.
- One half of MENA's population lives under conditions of water stress (140 m³/person/year in Jordan and below 100 m³/person/year in Palestine)
- With the population expected to grow from around 300 million today to around 500 million in 2025, per capita availability is expected to halve by 2050.



2- Challenges & Constraints

- **Scarce Water Resources**
- **Impacts of Climate Change**
- **Trans-boundary water issues**
- **Increasing Population Growth**
- **Increasing Water Demand in different sectors (Domestic, Agriculture, Industry, Institutional)**
- **Old Deteriorated Infrastructure**
- **Lack of water allocation policies**
- **Lending/Funding is not always available**
- **Public Sector is not capable for mega funding**
- **Lack of using High Technology**
- **Low attention to Human Resources**

2- Challenges & Constraints (Utility Level)

- High % of Non-Revenue Water
- Administrative Water Losses
- In proper Asset Management
- Low Cost Recovery
- Lack of Master Planning for limited water resources
- Lack of Energy Efficiency
- Lack of qualified human resources (Brain-Drain)
- Centralization
- As a result; water utilities didn't give enough attention to Best Practices

Therefore, the need rise for introducing best practices at Water and Wastewater Utilities through ACWUA



Vision Statement

ACWUA, as a regional center of excellence, will partner with water supply and wastewater utilities in Arab countries to provide best practice service delivery to their customers.

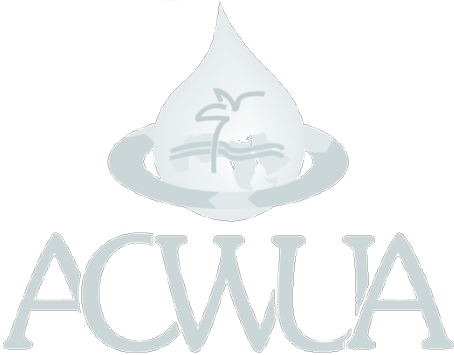
www.acwua.org



Mission Statement

- Serve as a regional platform for exchange of knowledge and best practice amongst member experts and professionals.
- **Develop resources, facilitate training programs and advocate for professional certification to enable member utility staff to perform their duties in a professional, reliable and cost-effective manner.**
- Promote standards of performance for the governance, management, operation and maintenance of water supply and wastewater utilities.
- Support the interests of ACWUA members Including the provision of advice and consultation in water legislation, policies, and sector management and reform.
- Develop, promote and disseminate publications and other knowledge products to meet the needs of members and other regional professionals.

ACWUA as Exchange Platform for Water & Wastewater Utilities in the Arab World



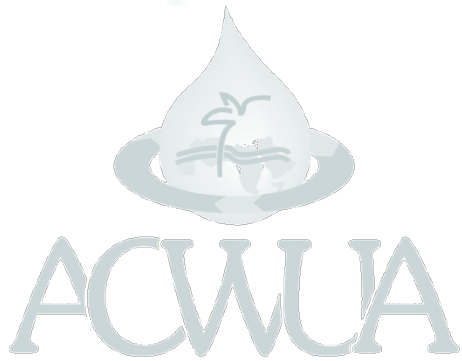
Teaming up with Arab water & wastewater utilities for a better service delivery for all users...

| ACWUA members | |
|---|----|
| Water Utilities | 93 |
| Associated (Private Sector Companies) | 8 |
| Associated (NGOs and Academic Institutions) | 8 |
| Individual | 91 |
| Arab Countries Members | 17 |

- 4 Conferences
- 4 Train of Trainers
- 7 Training programs conducted so far
- Quarterly newsletter



* Iraq has joined ACWUA recently



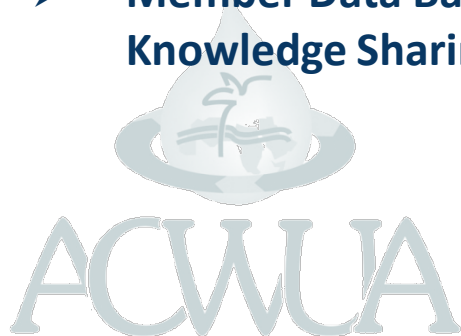
ACWUA's approach as a tool for capacity building in water and wastewater utilities

Knowledge Management Plan

- Technical Working Groups
- Training Courses
- Best Practice Manuals and Operational Guides
- Specialty Best Practice Conferences
- Annual Conference and Exhibition
- Member Data Base Network and Knowledge Sharing Systems

Communications Plan

- Membership Newsletter
- Technical Journal
- Policy and Position White Papers
- ACWUA Website
- Press Releases



ACWUA Technical Working Groups (TWG)

Management of Utilities

- Cost Recovery
 - Non Revenue Water
 - Water for the Poor
 - Energy Efficiency
- Asset Management

Management of Water Resources

- Governance
- Master Planning
- Protection of Resources
- Adaptation to Climate Change
- IWRM

Utilities Reform

- Autonomy/
Commercialization
- Public-Public
Partnership
- Private-Public
Partnership

Capacity Building & Training

- Training Strategy
- Certification

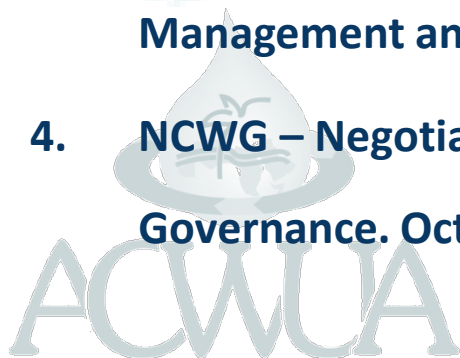
Water & Health

- Domestic Water Supply
- Waste Water Treatment
and Re-use

Benchmarking

Regional Water Utility Performance (WUP) Training Programs in cooperation with GIZ- for Top and Middle Management levels

1. **KPIB – Key Performance Indicators and Benchmarking for Water Utilities, Alexandria July 2010 and December 2010 within (AWW)**
2. **ELC – Effective Leading and Communication in Managing Water Utilities, Amman November 2010**
3. **QMS – Enhancing Business Performance of Water Utilities Through Quality Management and Standards. May 2011**
4. **NCWG – Negotiation and Cross Sectoral Coordination for Good Water Governance. October 2011**



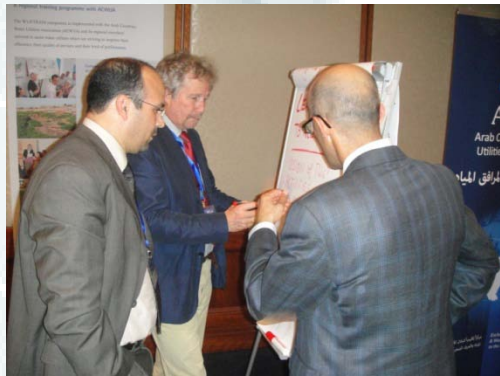
Effective Leading and Communication in Managing Water Utilities, Amman, Jordan November 2010



Quality Management and Standards for Water Utilities, Cairo, May 2011



Benchmarking and KPI's for water utilities, Amman, December 2010



ACWUA Forum – Wastewater Reuse in the Arab Region at IFAT ENTSORGA 2010: in cooperation with DWA and GIZ



Achievements-Training & Capacity Building

ACWUA in cooperation with Engicon O&M and DWA is implementing a list of specialized training programs for water utilities management (WUM-CBP) at operational levels

- Basic Level: Non Revenue Water Management
- Medium Level: Non Revenue Water Management
- Advanced Level: Non Revenue Water Management
- Operations & Maintenance of Water Pumping Stations
- Operations & Maintenance of Water Distribution Networks
- Operations & Maintenance of Water Treatment Plants
- Operations & Maintenance of Wastewater Treatment Plants
- Operations & Maintenance of Sewage Networks
- Operations & Maintenance of Sewage Pumping Stations
- Basic Course: GIS for Water Utilities
- Advanced Course: GIS for Water Utilities
- Planning & Design for Water and Wastewater Systems



Achievements-Training & Capacity Building

- **Operation and Maintenance for Wastewater Treatment Plants was conducted in 2-7 April 2011**
- **GIS application for water utilities course conducted in June 2011**
- **Non-Revenue Water Management, October 2011**



Achievements-Conferences & Workshops

- **1st Best Practices Conference** on Standards of Operation and Maintenance Procedures in the Arab region (SOMPs) at the Dead Sea, Jordan, October, 2008
- **2nd Best Practices Conference** on Capacity Development for Water and Sanitation Utilities in the Arab Region in Alexandria, Egypt, November 2008
- **3rd Best Practices Conference** (Non-Revenue Water in the Arab Region: Solutions for Drinking Water Loss Reduction) Rabat, Morocco, January 2011
- **The Arab Water Week** (Cost Recover at Water & Wastewater utilities) Amman, Jordan, December 2010
- **4th Best Practices Conference** (Water and Wastewater Utilities Reform: Changes and Challenges) from 7-8 December 2011 in Sharm Al Sheikh, Egypt



ACWUA 4th Best Practices Conference

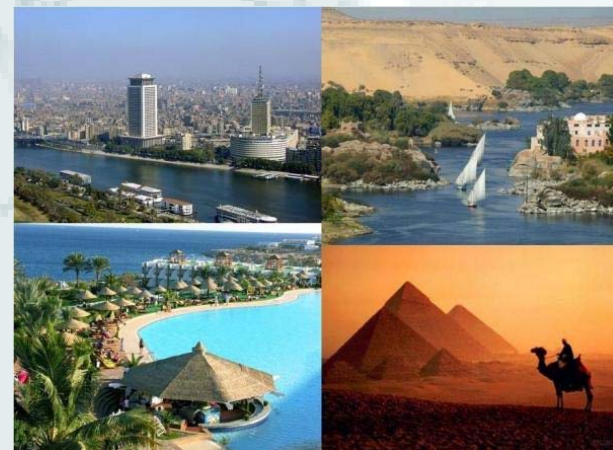
7-8 December 2011 in Sharm Al Sheikh, Egypt

Key themes:

1. The paradigm shift in managing water utilities
2. Challenges prohibiting a successful utility reform
3. Capacity building in water utilities reform
4. Best practices in water utilities reform

Conference Topics:

- Water sector reform
- Autonomy
- Commercialization
- Performance Contracting
- Management Contracts
- Accountability
- Reform vs. Efficiency
- Pro poor-utilities reform
- Private Sector Participation
- Public-Private-Partnership
- Public-Public-Partnership
- Capacity building and organizational development
- Triggers for water utilities reform
- Utilities reform and customers satisfaction
- Regulatory and institutional framework for utilities reform



Lessons Learnt

- **Water and wastewater utilities staff are active workers protecting water resources and the environment.**
- **ACWUA provides training programs and build up the capacity of utilities staff to acquire new knowledge, technologies and best practices according to international levels.**
- **ACWUA members (beneficiaries) utilize this new knowledge and apply it on their daily work.**
- **Water and wastewater utilities performance will enhance, thus, will be reflected in their productivity and increase their resources and improve economic conditions.**
- **In return, social benefits will be reaped on utility, community and individual levels.**
- **Shifting into Green economy...**

Future Outlook

- **ACWUA is working with donors, professional organizations and private sector to provide capacity building programs for middle and top management levels at water and wastewater utilities**
- **To adopt international specifications & standards (manuals) according to the utility needs and local conditions**
- **Water & wastewater management workforce is considered among the Green Jobs supporting the Green Economy**
- **This will secure sustainability of ACWUA as active organization working towards Green Economy**



Key messages to be taken to Rio20

- ✓ **Creating and enhancing an enabling environment for policies, regulations and institutional reforms to identify the inter-organizational relations and responsibilities.**
- ✓ **Developing training programs on water & energy efficiency and reallocation of resources which is related to Green Economy.**
- ✓ **Improving technology selection and investment for developing water resources.**
- ✓ **Develop Public-Private Partnership models which emphasizes the outmost contribution from each stakeholder.**
- ✓ **Implementation of Demand-Driven programs with active community participation (i.e. helping graduates from rural areas in Morocco to run water facilities, program with ONEP)**

Thank You!

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