ACWUA best practices tools in managing utilities

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Instituting Best Practices

- Developing and implementing NRW Diagnostic tool through FABRI Project funded by USAID to help Utilities reducing the NRW in Jordan, Lebanon, Egypt, Tunisia and Algeria through:
  - Develop Jordan water company (Miyahuna) 5 years NRW Strategic and Investment Plan 2017-2021.
- Implementing NRW Diagnostic tool through WMI Project funded by USAID
  - Developing Non-Revenue Water (NRW) reduction strategy for Jordanian water sector
  - Conducting knowledge sharing training programs and workshop to present the Non-Revenue Water (NRW) reduction plan for Jordanian utilities and exchange the local and regional experiences in management NRW regional and international levels .

Instituting Best Practices

- Participating in SWIM_H2020 Consortium Project (funded by EU) to identify of the Non-Revenue Water (NRW) and intervention for Leakage Reduction in Blaeda – Algeria.

Instituting Best Practices

- Participating in MiyahCon Consortium Project (funded by EU) to promote Sustainable Management of Water Services and Resources in Countries Affected by the Syrian Crisis. ACWUA implemented NRW Diagnostic Tool and a taskforce Android/Web mobile application during the project in Lebanese water utilities .

- Developing O&M mobile application for the 3 Lebanese water Establishment (North, South and Beqaa).

Instituting Best Practices

- Developing and Expanding Certification to cover Business Management, and Operational Excellence "DECOE". The certification programs of Non-Revenue Water (NRW) were developed by ACWUA Institutional System Development (ISD) experts and other ACWUA experts, based on the fourth edition of Water Office of Sacramento University / California publication. These programs were revised and accredited by International Water Association (IWA) experts and World Bank (WB) experts and Technical Vocational Skills Development Commission / Ministry of Labor- Jordan (TVSDC) (Physical, Commercial, GIS application and strategic planning for (NRW).

Instituting Best Practices

Energy Efficiency:

ACWUA in cooperation with GIZ developed Energy Efficiency Reader and Guidelines for water and wastewater faculties to reduce the energy consumption and energy cost

- Two pilots were implemented in Wadi AlMujib pump station- Jordan and Jal El Dib pump station- Lebanon (funded by USAID).

- Trainer of trainers (TOT) was carried, and Training programs were developed..
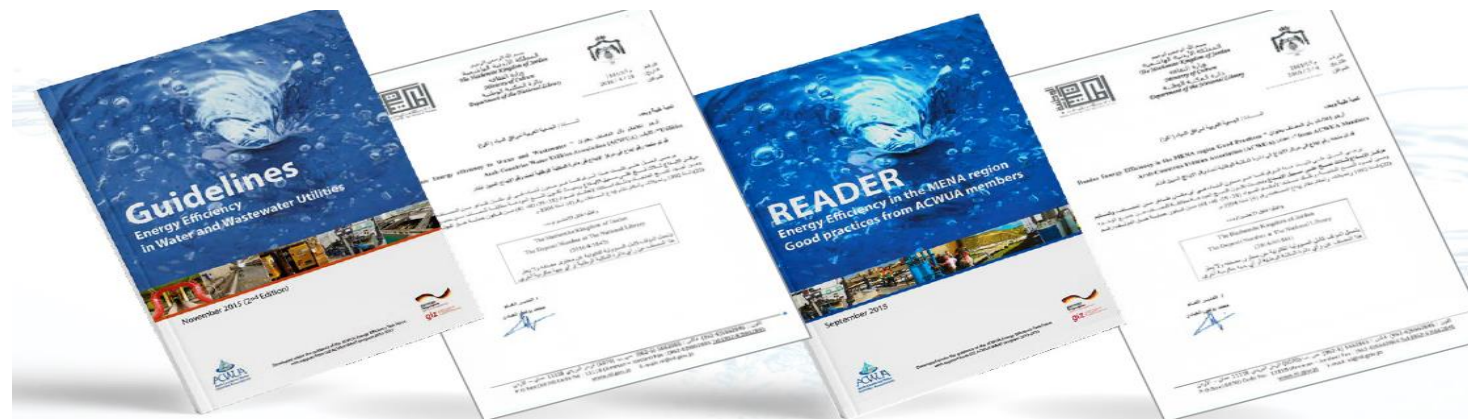
Instituting Best Practices

Technical Sustainable Management (TSM Arab):

ACWUA developed TSM Arab in cooperation with GIZ , HCWW in Egypt and DWA:

- Developed manuals about the requirements of Technical Sustainable Management in water and wastewater treatment facilities based on TSM Egypt requirements for water and wastewater stations (ISO 24512:2007 clause 6.4.3.4, ISO 9001:2007 cluse 5.6.1).

- Experts from different countries were certified to be auditors.

- Four facilities were audited and certified for the TSM requirements in Jordan (Zara Maeen and Zay) , Egypt and Tunisia.

Instituting Best Practices

Water Tap :

Develop and implement Water Tap Manual (Transparency - Accountability and Participation):

- The Tap concept was implemented on number of utilities in Jordan, Egypt, Morocco and Tunisia.

Public Awareness:

- Develop a Reader- Good Practices in Public Awareness experience in the MENA Region: Jordan, Lebanon, Egypt, Palestine, Egypt, Tunisia, Morocco and Yemen.

Instituting Best Practices

Wastewater Reuse:

- Conduct needs assessment, develop a training materials, conduct training courses and field trips. In addition to developing and E-learning platform and videos within ReWater MENA Project. E-learning Platform | ReWater MENA – on reuse of treated wastewater (elearning-rewatermena.org).

Capacity Building & Certifications

- ACWUA frequently conducts a deep training needs survey and analysis, the survey covers water and wastewater utilities, expert members and private sector. Building on the results a continuous updating for the training and certification programs to match the new technologies in the world was adopted. The training and certification programs cover the needs of people working the water and wastewater sector in all operational and managerial levels.

- The certification programs were developed by ACWUA Institutional System Development (ISD) experts and other ACWUA experts based on the fourth edition of publication from Water Office of Sacramento University / California.

- Training program certified by Technical and Vocational Skills Development Commission (TVSDC) / Ministry of Labour Jordan and Water Professional Internationals (WPI) - Florida / USA.

- The trainee who passes the exam held by TVSDC will be able to have a completion certificate and license as operator in the field of the training he/she attended by TVSDC and WPI .

Capacity Building & Certifications

- ACWUA certification programs were revised and accredited by:
  - Water Professional Internationals (WPI) - Florida / USA
  - Umwelt Bundesamt (UBA)/ Federal office for environment (Germany)
  - International experts from IWA and World Bank
  - Technical and Vocational Skills Development Commission / Ministry of Labor- Jordan (TVSDC)

The total numbers of trainees and certified people in the region and up to date are:

1432	586	136	15
Certified trainees	Uncertified trainees	TOT trainees	ISD trainees

Capacity Building & Certifications

Training program certified by Technical and Vocational Skills Development Commission (TVSDC) / Ministry of Labour Jordan and Water Professional Internationals (WPI) - Florida / USA

Capacity Building & Certifications

A. Water Systems Certification Programs:

01 Water Treatment | 4 Levels.

02 Water Distribution | 4 Levels.

03 Water Quality & Laboratories Management | 3 Levels.

04 Water Safety Plan (WSP) | 3 Levels.

05 Non-Revenue Water | 4 Levels.

Capacity Building & Certifications

B. Wastewater Systems Certification Programs for O&M teams:

01 Wastewater Collection systems | 4 Levels.

02 Wastewater Treatment | 4 Levels.

03 Industrial Waste Water Management (IWWM) | 4 Levels.

04 Wastewater Quality & Laboratories Management) | 3 Levels.

Capacity Building & Certifications

Training programs certified by ACWUA

Capacity Building & Certifications

Training programs certified by ACWUA

Capacity Building & Certifications

A. ACWUA Water Governance ManagerialTools Training Programs

01 Water Governance concept and principles.

02 Climate change vulnerability assessment, Adaptation and mitigation.

03 Water Allocation.

04 Water Accounting.

05 WEAP-MODFLOW as a Decision Support System (DSS) for integrated water. resources management

06 Project Management Professional (PMP) Exam preparation.

07 Relationship Management.

08 Health and Safety.

09 Total Safety Management for water and wastewater facilities (TSM Arabia).

B. Water Utility Leadership Empowerment Training Programs

01 Management of Public Private Partnership (PPP).

02 Financing modalities.

03 Strategic Utility Planning.

04 Efficient Utility Management.

05 Risk Management.
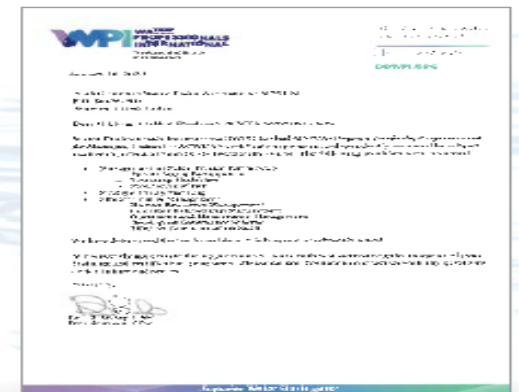
Capacity Building & Certifications

C. GIS Applications Training Programs

01 Applying local government information model for water utility (Esri standard).

02 How to correct, upgrade customer information and GIS data by conducting comprehensive customer survey project.

03 Facilitate editing GIS water utility data using water network editing tools.

04 GIS introduction and workflows.

05 Using Geographic Information System for Water Networks Maintenance & Operations.

06 Designing Routes using GIS maps for Meters Collectors.

07 Minimize water loss by using GIS.

D. Wastewater Systems Programs for Professionals

01 Sanitation Safety Plan.

02 Decentralized WWTP.

Thank You