



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)).

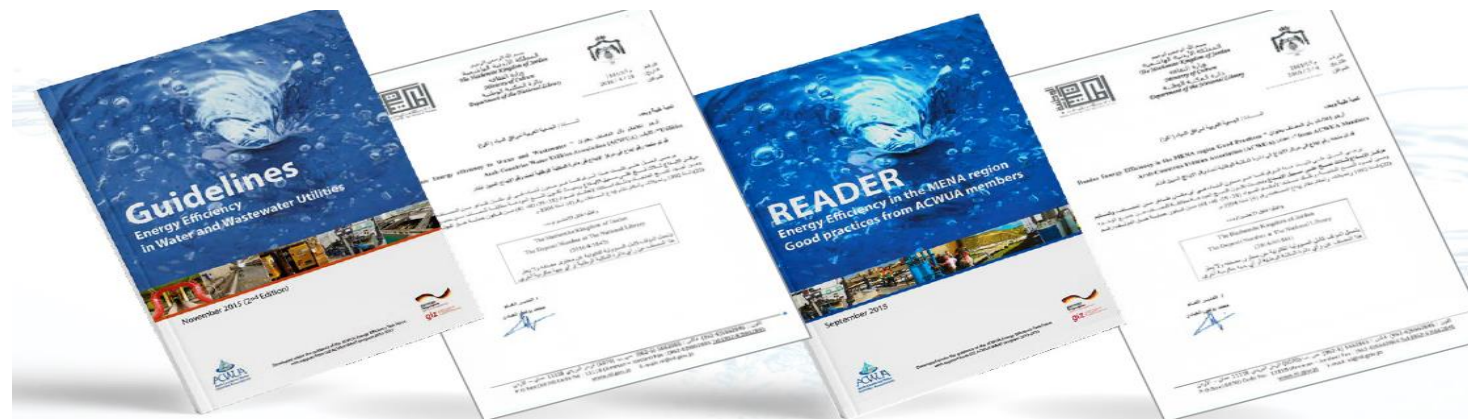


Instituting Best Practices

Energy Efficiency:

ACWUA in cooperation with GIZ developed Energy Efficiency Reader and Guidelines for water and wastewater facilities 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

Certified trainees

586

Uncertified trainees

136

TOT trainees

15

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




هيئة تنمية وتطوير المهارات المهنية والتقنية
 Technical and Vocational Skills Development Commission

الرقم: ١٤/٣١/٢٠١٦
 التاريخ: ٢٠١٦/١٢/١٤

السيدة الجمعية العربية لمراقبة المياه ACWUA
 الموضوع: تجديد اعتماد البرامج التدريبية

بعد التفتيح:،
 إشارة إلى طلب الاعتماد المقدم من قبلكم، واستناداً لإحكام قانون هيئة رقم (٦) لسنة ٢٠١٦م والأنظمة والتعليمات المعمول بها ونظراً لتحقيقكم لمطابقات وشروط الاعتماد،
 قررت الهيئة الموافقة على تجديد اعتماد البرامج التدريبية:

الرقم	اسم البرنامج	الرقم	الاسم	الرقم	اسم البرنامج	الرقم	الاسم
1	موظف ومعدات تشغيل المضخة اليدوية	19	معدن المهارات	1	مخالف لوائح - محطات نقالة المياه	8	1
2	معدن المهارات	20	مخالف لوائح - محطات نقالة المياه	2	مخالف لوائح - محطات نقالة المياه	9	2
3	مخالف لوائح - محطات نقالة المياه	30	المخالف لوائح	3	مخالف لوائح - محطات نقالة المياه	10	3
4	مخالف لوائح - محطات نقالة المياه	31	المخالف لوائح	4	مخالف لوائح - محطات نقالة المياه	11	4
5	مخالف لوائح - محطات نقالة المياه	32	معدن المهارات	5	مخالف لوائح - محطات نقالة المياه	12	5
6	مخالف لوائح - محطات نقالة المياه	35	المخالف لوائح	6	مخالف لوائح - محطات نقالة المياه	13	6
7	مخالف لوائح - محطات نقالة المياه	25	المخالف لوائح	7	مخالف لوائح - محطات نقالة المياه	23	7
8	مخالف لوائح - محطات نقالة المياه	26	المخالف لوائح	8	مخالف لوائح - محطات نقالة المياه	24	8
9	مخالف لوائح - محطات نقالة المياه	27	معدن المهارات	9	مخالف لوائح - محطات نقالة المياه	14	9
10	مخالف لوائح - محطات نقالة المياه	37	المخالف لوائح	10	مخالف لوائح - محطات نقالة المياه	15	10
11	مخالف لوائح - محطات نقالة المياه	38	المخالف لوائح	11	مخالف لوائح - محطات نقالة المياه	22	11
12	مخالف لوائح - محطات نقالة المياه	33	معدن المهارات	12	مخالف لوائح - محطات نقالة المياه	16	12
13	مخالف لوائح - محطات نقالة المياه	41	المخالف لوائح	13	مخالف لوائح - محطات نقالة المياه	17	13
14	مخالف لوائح - محطات نقالة المياه	42	المخالف لوائح	14	مخالف لوائح - محطات نقالة المياه	18	14
15	مخالف لوائح - محطات نقالة المياه	43	المخالف لوائح	15	مخالف لوائح - محطات نقالة المياه	19	15
16	مخالف لوائح - محطات نقالة المياه	34	معدن المهارات	16	مخالف لوائح - محطات نقالة المياه	34	16
17	مخالف لوائح - محطات نقالة المياه	35	المخالف لوائح	17	مخالف لوائح - محطات نقالة المياه	35	17
18	مخالف لوائح - محطات نقالة المياه	36	المخالف لوائح	18	مخالف لوائح - محطات نقالة المياه	36	18

أتم تأليفه والتدريب عليها لمدة سنتين اعتباراً من تاريخ ٢٠١٦/١٢/١٤ لغاية ٢٠١٨/١٢/١٤.

وفيما يلي الاحترام والتقدير:

نواف زكريا استشارية
 وزير العمل
 رئيس مجلس تنمية وتطوير المهارات
 المهنية والتقنية

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ص.ب. ٩٥٩٥٣٣ عمّان ١١٩٥٩ الأردن
 هاتف: ٩٩٥٢٤٩٦-٦٧٩٦٢١١-٦٣٠٣٩٩٤٢١١-٩٠٠٠ فاكس: ٦٥٤٧٢٨١
 البريد الإلكتروني: Public Ministry of Labour, Jordan & Building
 King Abdallah II (The Al-Busayra) - P.O. Box 959533




مجلس التشكيل والتدريب والتعليم المهني والتقني
 مركز الاعتماد وضبط الجودة
 Center of Accreditation & Quality Assurance

Ref: ١٤/٣١/٢٠١٦
 Date: ١٤/٣١/٢٠١٦

Arab-German Water Utilities Association (ACWUA)
 General Secretary
 Amman - Jordan

Subject: Accreditation for Training Programs

Reference is made to your request via application dated 8/03/2017 to obtain the accreditation for your training programs.

Based on article (11/C) of the Charter of Accreditation and Quality Assurance by law number (30) for the year (2002) and on the CAQA director recommendation, I would like to inform you my approval to grant you the accreditation for the Water and Wastewater Systems Program that is listed below for two years.

No	Program Name	No	Program Name
1	Operator 2 - Waste Water Collection	19	Supervisor - Non Reverse Water Distribution
2	Operator 3 - Water Distribution	13	Operator 1 - Water Lake
3	Operator 4 - Water Distribution	14	Operator 2 - Water Lake
4	Operator 1 - Waste Water Treatment Industrial Plant	12	Operator 3 - Water Lake
5	Operator 2 - Waste Water Treatment Industrial Plant	10	Operator 1 - Waste Water Lake
6	Operator 3 - Waste Water Treatment Industrial Plant	17	Operator 2 - Waste Water Lake
7	Operator 4 - Waste Water Treatment Industrial Plant	15	Operator 3 - Waste Water Lake
8	Operator 1 - Non Reverse Water Distribution	19	Supervisor - Radiation units analysis for water
9	Operator 2 - Non Reverse Water Distribution	20	Operator 1 - Water Safety system
10	Operator 3 - Non Reverse Water Distribution	21	Operator 1 - Water Safety system
11	Operator 4 - Non Reverse Water Distribution	22	Operator 1 - Water Safety system

Best Regards,
 Minister of Labour
 Ali Al-Ghamdi

م. علي العبد
 مدير عام
 المجلس التشكيل والتدريب والتعليم المهني والتقني

المجلس التشكيل والتدريب والتعليم المهني والتقني
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 هاتف: ٩٩٥٢٤٩٦-٦٧٩٦٢١١-٦٣٠٣٩٩٤٢١١-٩٠٠٠ فاكس: ٦٥٤٧٢٨١
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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

Training programs certified by ACWUA



Capacity Building & Certifications

Training programs certified by ACWUA



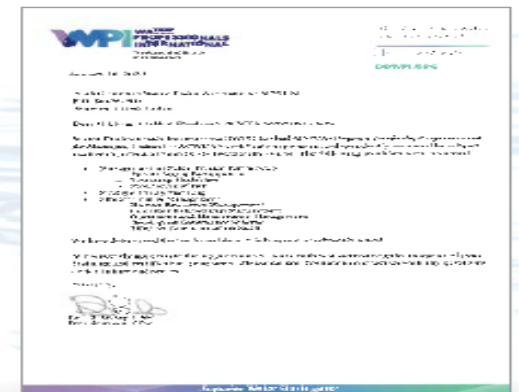
Capacity Building & Certifications

A. ACWUA Water Governance Managerial Tools 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