



Key Qualification

Mr. Abdulla holds a Ph.D. in Water resources and environmental engineering. He has more than 25 years of national, regional and international experience in water resources, climate change and drought assessment and environmental engineering.

He joined the Civil Engineering Department at Jordan University of Science & Technology in year 1995. During the period 2000-2004, he was the Director Queen Rania Al-Abdullah Centre for Environmental Sciences and Technology (QRACEST) at Jordan University of Science and Technology (JUST).

He has about 25 years experience in both academic and professional streams. He is recognized by many countries in the region as a regional expert on climate change and hydrology and drought Assessment. In the last 25 years, Dr. Abdulla was involved in many studies related Greenhouse gases emission, climate change vulnerability, impact and adaptation, Hydrological studies for dams, Drought Assessment, Hydrological modelling (surface and groundwater), Water demand management.. Also, he has the ability to construct a rainfall-runoff model for any watershed located in the semi-arid and arid regions and developing software. In addition, he is good experience in using GIS software and other related software to water resources management such as SWAT, WEAP, HECRAS, SMADA and HEC-Hms etc.

He Supervised 32 graduate' Master Thesis on Climate change, Greenhouse gases emission and mitigation, flash floods, Wastewater, Water quality, Water Demand, Water Harvesting, Drought management and hydrological modelling. He is experienced in working and collaborating with international funding agencies including USAID, WHO, UNESCO, EU, UNDP, SIWI, GIZ, REC, FAO, UNCIEF, SIDA, IDRC, DAAD, Swiss Development Corporation (SDC). He has regional and international experience in water resource, climate change and environmental management in Jordan, West Bank, Syria, Yemen, Lebanon, Iraq, Tunisia, Saudi Arabia, Egypt, France, Denmark, Netherland, Canada, Germany, USA, Sweden, and Hungary.

Personal

Dr. Fayez A. Abdulla

Hydrology, Dam Engineering, Climate Change & Water Resources Engineering expert

Date of Birth: November, 07, 1962
Place of Birth: Bani Naim
Nationality: Jordanian
Marital Status: Married
Children: Five
Present Position: Professor at Civil Engineering Dept./JUST
Postal Address: P. O. Box 3030, Irbid 22110, Jordan
E-mail: fabdulla@just.edu.jo
Mobile Number: 00962795880016

Education

- 1- **Doctor of Philosophy (Ph.D)** in Civil Engineering/ Water Resources & Environmental Engineering, July, 1995, Environmental Engineering & Science Program, **University of Washington, Seattle, USA** Thesis Title: Regionalization of a Macro-scale Hydrological Model.
- 2- **Master of Science (M.Sc)** in Civil Engineering/ Water Resources & Environmental Engineering, July, 1987, **Jordan University of Science and Technology**, Irbid, Jordan. Thesis Title: Development of a Stochastic Single-Site Seasonal Rainfall Simulator (For Application in Irbid Region)
- 3- **Bachelor of Science (B.Sc)** in Civil Engineering/ Water Resources & Environmental Engineering, June, 1985, **Yarmouk University**, Jordan. Graduation project: Design and Analysis of Three Different Types of Wastewater Treatment Plants for Irbid City.

Experiences

- 1- **June 2013 to present:** Professor: Water Resources and Environmental Engineering, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan
- 2- **Feb 2011 to June 2013:** Professor, Civil Engineering, Imam Mohammed Ibn Saud Islamic University, Riyadh, Saudi Arabia
- 3- **August 2008 to Feb 2011:** Professor: Water Resources and Environmental Engineering, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 4- **Oct. 2000 to Aug. 2008:** Associate Professor: Water Resources and Environmental Engineering, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 5- **Sept. 2000 to Aug. 2004:** Director Queen Rania Al-Abdullah Center for Environmental Sciences and Technology (QRACEST) at Jordan University of Science and Technology (JUST).

- 6- **Sept. 95 to Sept. 2000:** Assistant Professor: Water Resources and Environmental Engineering, Department of Civil Engineering, Jordan .University of Science and Technology, Irbid, Jordan.
- 7- **Sept. 1991 to Aug. 1995:** Graduate Research Assistant, Environmental Engineering & Science Program, Department of Civil Engineering, University of Washington, WA, USA.
- 8- **Sept. 1989 to Aug. 1991:** Full time lecturer, Civil Engineering Division, Arab Community College. Taught courses entitled: Wastewater Treatment, Sanitary Engineering, and Water Resources.
- 9- **Sept. 1987 to Aug. 1989:** Site Engineer, Jordan Arab Army, Duties: Design and consultation for Water and wastewater projects.
- 10- **Sept. 1985 to Aug. 1987:** Graduate Teaching Assistant, Dept. of Civil Engineering, Jordan Univ. of Science and Technology

COURSES TAUGHT

Undergraduate level

- 1) Engineering static
- 2) Engineering Mechanics
- 3) Fluid Mechanics
- 4) Engineering Hydraulics
- 5) Engineering hydraulics and Hydrology
- 6) Fluid Mechanics and Hydraulic lab
- 7) Water Resources planning and management
- 8) Dam Engineering
- 9) Environmental Engineering
- 10) Environmental Engineering Design
- 11) Environmental Chemistry
- 12) Engineering Hydrology
- 13) Water and wastewater systems design
- 14) Hydrology & Groundwater
- 15) Construction Project Management
- 16) Engineering Economy
- 17) Environmental Engineering lab

Graduate level

- 1) Drought Management and Forecasting
- 2) Groundwater Modeling
- 3) Water Demand Forecasting
- 4) Water Resources Engineering
- 5) Open Channel Hydraulics
- 6) Surface and Subsurface Modeling
- 7) Water Conservation

- 8) Surface Hydrology
- 9) Hydraulic Structures
- 10) Applied Probability and Statistic for Civil Engineers
- 11) Applied Mathematics for Engineers

Consultation to international and national agencies

Relevant experience in water resources management, drought, hydrology and climate change

1. **Team leader** for the Green Climate Fund project for readiness and Preparatory Support for Jordan, Funded by United Nations Environment Program (UN-Environment), Oct-2018-July 2020.
2. **National Consultant** for FAO to prepare the full funding proposal to Green Climate Fund project "*Building resilience to cope with climate change in Jordan through improving water use efficiency in the agriculture sectors*" December 2019-April 2020
3. **National Consultant** to GIZ for "Developing a framework for climate vulnerability assessment and adaptive capacity at the local level in Jordan", June 2018- December 2018.
4. **National Consultant** for Jordanian Nuclear Power Energy Company 2017-2018.
5. **National Consultant** for ACTERRA France "Development of high resolution hydro-climate model for fostering cooperation on water management between the Palestinian, Israeli, and Jordanian water authorities" March 2017-December 2017.
6. **National Consultant** for World Food Programme (WFP) to prepare the "Strategic review on the achievement of sustainable development Goal 2 (Food Security, Nutrition and Sustainable Agriculture) in Jordan, August 2017-December 2018.
7. **National consultant** for Amsterdam Centre for World Food Studies of the VU University, Amsterdam (ACWFS) for the project "Let the sun shine; exploitation of the Water-Energy-Food nexus in the Middle East" April 2019-December 2019.
8. **National consultant** Conducting Environmental Impact Assessment Study for Zaatari Biogas Plant, FAO, 2017, 23,200 JD, Jan-2017-March 2017.
9. **National Consultant:** Preparing the hydrological study for raising Wala Dam through ENJICON company, for Jordan Valley Authority, Amman Jordan 2015
10. **National consultant** for the project "Capacity Building on Water Demand Management in Jordan and Tunisia" ("Project"). The project is managed by

REKK Energiapiaci Tanácsadó Kft. 2016. June –December 2016.

11. **National consultant for the project** “WATER PORt: Capacity building on water resources management in a changing climate in Jordan and Tunisia” (“Project”). The project is managed by the Regional Environmental Center (“REC”) (Hungary). The main task is to carry out services for the project.
12. **National consultant** Support for the pilot project “Promoting Inclusive Groundwater Governance in the Near East and North Africa the Food and Agriculture Organization of the United Nations (“FAO”). The project has a component to assess the drought, climate change and water situation in Azraq Basin. March-July 2016.
13. Assessing climate-change impacts on drought conditions in Jordan, project funded by Jordan University of Science and Technology, the project was developed during the two-year sabbatical leaves 2011-2013.
14. **National consultant** for the project “Intersectoral coordination for the implementation of the climate policy of the Jordanian Environment Ministry (GF-ICE). For “Developing a Gap Analysis and Strategic recommendations for the institutional set up of a sustainable mechanism for GHG inventory leading to an MRV system in Jordan” this consultancy is funded by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. August 2015-October 2015
15. International Consultant for the Regional Environmental for Central and Eastern Europe (REC). The task involves activities related to the Roundtable discussion on Water and Climate change in Arab Region, under the MENA Water World Cafe 2015 side event that will be organized by REC during the World Water Week 2015 in Stockholm, Sweden.
16. **International consultant** for Stichting Onderzoek Wereldvoedselvoorziening van de VU Universiteit, Amsterdam (SOW-VU); also known as Centre for World Food Studies of the VU University, Amsterdam for the regional project entitled “Towards concerted sharing: development of a regional water economy model in the Jordan River Basin Project” March 2013-August 2016. **The project has an activity on climate change and drought of Jordan River Basin.**
17. **National consultant** for Ministry of Water and Irrigation “Technical Assistance on Climate change Analysis and Downscaling”, September 2014 to April 2015
18. **National consultant** for UNDP-Jordan “Quantification of Uncertainty of Greenhouse gases inventory” Third National Communication report of Jordan” August 2014- September 2015. Project funded by UNDP-Jordan.
19. **National Consultant** for Engicon Company “Hydrological Studies for Raising Wala Dam Dam Project” January 2014-April 2015. Project funded by Ministry of Water and Irrigation.

20. **International consultant** Review of design of (20) dams in different areas at Kingdom of Saudi Arabia
21. **National Hydrologist for Orient Consulting Company (2010-2011)** Yarmouk River Basin Water Resources Assessment and Use. Funded by Jordan Valley Authority, Ministry of Water and Irrigation, Amman, Jordan.
22. **Team Leader** for the project entitled “Assessment of Direct and Indirect Impacts of Climate Change scenarios on water availability and quality in the Zarqa River Basin” The project is funded by UNDP (2009-2010).
23. **Team Leader** for the project entitled “Capacity Building of Northern Jordan Communities on Water Resources Vulnerability and Adaptation to climate change” funded by UNESCO (2010-2011) and implemented by Queen Rania Al_Abdullah Center for Environmental Sciences & Technology (QRACEST-JUST).
24. **Regional Consultant** for UNESCO (July 2009- January 2010), the assignment was to write a report on **"Climate change and drought risk management in Wadi Systems in Arab Region"**.
25. **National Consultant** for UNDP (2007) “Preparing a Joint Program Document for Jordan: Adaptation to Climate Change to sustain Jordan’s MDG Achievements”, funded by UNDP, 2 September – 2 October, 2007.
26. **International Consultant** (2007) for the European Union's Food Security Programme for the Yemen Republic to develop training course on “ Analyses and interpretation of hydro- and meteorological data to establish a watershed management plan “ Tihama Development Authority (TDA), Hodeidah, Yemen, 13 April – 24 April, 2007.
27. **National Team Leader** for the Vulnerability and Adaptation to climate change project (2007-2008) funded by the UNDP. The study involved the Yarmouk River and Zarqa River Basins. Impact of climate change on surface water resources and agriculture were assessed for both basins.
28. **National Consultant and Principal investigator** (2006) for the hydrological study of Wadi Kufranja Dam funded by Jordan Valley Authority, Ministry of Water and Irrigation, Amman Jordan.
29. **Climate Change Consultant** (2006) for the second phase of National Capacity Self Assessment for Global Environmental Management Project (NCSA) funded by the Global Environmental Facility (GEF).
30. **National Climate Change Consultant** for the project entitled “Piloting climate change adaptation to protect human health” (2006). The project is supervised by World Health Organization/CEHA and funded by GEF/UNDP.

31. **Team leader** of the project “Reservoir Management for the Southern Systems of Jordan”, 2002-2004. Funded by the USAID. During this project hydrological studies and reservoir simulation programs will be developed for three watersheds (Tannur Dam, Wala Dam and Mujib Dam). These studies will be used for **better** management of the system.
32. **JUST Coordinator** for “Skills Enhancement and Support to Decision-Makers in Jordan’s Water Sector”, 2002-2004. Funded by USAID. The objectives of this project are to enhance the skills of decision-makers of Ministry of Water and Irrigation (MWI), Water Authority of Jordan, and Jordan Valley Authority.
33. **Team leader** for JUST and the Northern Region. “Water Efficiency and Public information for Action”. 2001-2002. Funded by USAID and implemented by AED (USAID). The main objectives of this project is to improve and expand public education on the water shortage situation in Jordan and promoting ways in which individuals and public and private sector institutions can conserve and manage scarce water resources.
34. **National Consultant:** Management of saline soil using Remote Sensing and Geographic information Systems (GIS) In Jordan Valley, Funded by the Higher Council of Science and Technology (HCST), Amman, Jordan, 2000.
35. **National consultant** Development of GIS-Hydrological model for Managing water Resources in the Zarqa River Basin, Funded by the Higher Council of Science and Technology (HCST), Amman, Jordan, 2000.
36. **National Consultant** Development of GIS based model for solid waste landfills sitting in Amman Zarqa Region. Funded by the Higher Council of Science and Technology (HCST), Amman, Jordan, 2000.
37. **National consultant:** Drought Assessment and Management in Jordan using Geographic Information Systems (GIS), research proposal funded by the King Hussein Environmental Management Training Program and the Canadian International Development Agency, 1998-2000.
38. **National Consultant:** Economic evaluations of different wastewater treatment technologies in Jordan, research Proposal funded by the King Hussein Environmental Management Training Program and The Canadian International Development Agency, 1998-2000.
39. **Consultant and member of the National Committee** for Dam: Duties preparing reports related to hydrology, hydraulics and environment related to dams. While serving in this committee the following activities are performed
 - Updating the hydrology studies for Al-Fedan Dam
 - Updating the yield study for Al-Wehdah Dam (the largest in Jordan)
 - **Drought Assessment study for Yarmouk River Basin**
 - Development of a Hydrological model for Yarmouk Basin
 - **Drought Assessment study for Wala Basin**

- Updating the operation study for the King Talal Dam
 - Updating the operation study for the Jordan valley system
 - Reviewing progress report for the three dams under construction Mujib, Wala, and Tunnur Dams
 - Study the feasibility of the recharge of Wala Wells to the groundwater
40. **National Consultant** Hydrological and meteorological data investigation and analysis for the Jordan Badia, Funded by Jordan Badia Research and Development Program, 1997-1999.
41. Impact of climate change on the water resources budget of the Zarqa River basin, research proposal funded by the Dean-ship of Scientific Research at JUST, March 1999.
42. **Team leader** for the Vulnerability and adaptation of the water resources of Jordan to Climate change. This project is funded by the UNDP. Main activities: Assessment of Climatic trends in different locations including part of the Jordan Valley (Zarqa River System), developing a water balance model for the Zarqa River System, developing a groundwater model for the Azraq Groundwater System (1999-2000, Al-hamel Engineering office)
43. **National Consultant:** Participating in the study of the effect of climate change on the Agricultural Sector in Jordan. The study covers part of the Jordan Valley mainly the Zarqa River System. December 1999- April 2001.
44. **National Consultant** for phase 1 of the climate change project (the waste sector) 1996

ENVIRONMENTAL RELATED EXPERIENCES

1. **Project leader** for “ Medical Waste Management Project for Northern Jordan”, 2003-2005. Funded by USAID. The main objective of the project is to implement and enhance the operation of the pilot project of medical waste management facilities at Jordan University of Science and Technology to handle the medical waste generated at the northern region.
2. **Chairman of the first National Conference** entitled “Towards a Healthy Environment for Children”. July 8-9, 2003. This conference was under the Patronage of Her Majesty Queen Rania Al-Abdullah. The conference was conducted through the collaboration between the Regional Center for Environmental Health Activities/World Health Organization/ Eastern Mediterranean Region and Queen Rania Al-Abdullah Center for Environmental Sciences and Technology.
3. **Project coordinator** for Jordan Team “Enhancing Sustainability through Energy Efficiency and Renewable Energy Technology”. 2002-2004. Funded by US Department of State.

4. **Attended the Environmental Technology Training in Geographic Information Systems (GIS) Phase II** at the Brevard Teaching and Research Laboratories in coordination with the Partnership for Environmental Technology Education (PETE) of the United States and Jordan University of Science and Technology's (JUST) Center for Environmental Science and Technology (CEST) under a grant program to train international faculty members sponsored by the United States Information Agency's (USIA). Palm Bay, Florida, U.S.A., September 12, 1999 through September 26, 1999.
5. Attended the train-the-trainer workshop entitled "Integrating an Environmental Management System (ISO 14001) Into Your Workplace", coordinated by the University of Florida, Center for Training, Research and Education for Environmental Occupations (TREEO Center) in coordination with the Partnership for Environmental Technology Education (PETE) of the United States and Jordan University of Science and Technology's (JUST) Center for Environmental Science and Technology (CEST) under a grant program to train international faculty members sponsored by the United States Information Agency's (USIA). Washington D.C., U.S.A., July 2, 1998 through July 3, 1998
6. Attended the Environmental Technology Training in Geographic Information Systems (GIS) and Global Positioning Systems (GPS) Phase I at the Brevard Teaching and Research Laboratories; Palm Bay, Florida, U.S.A., July 4, 1998 through July 26, 1998.
7. Attended a specialized training workshop on "Stack emission and source sampling" By Walter Smith and Association, Raligh North Carolina, U.S.A., February 14 through February 18, 2005.
8. Participating in the International Coral Reef Initiative (ICRI) the Red Sea and Gulf Aden Regional Work Shop, Aqaba, Jordan, 21-25 September, 1997.

Organized workshops, Training Courses and Facilitator

1. **Fayez Abdulla**, Organizing national workshop on "Results-Based Management for NDA staff" within the Green Climate Fund Readiness Program - Strengthening NDA of Jordan project, Amman, Jordan, 9-11, Feb. 2020.
2. **Fayez Abdulla**, Participating in workshop "The water-energy-food nexus, from concept to implementation", 9-11 November, 2019, VU University Amsterdam, Netherlands.
3. **Fayez Abdulla**, Attending Regional Workshop on Supporting Implementation of the Nationally Determined Contributions in Agriculture and Water, 9-11, September, 2019, Cairo, Egypt.

4. **Fayez Abdulla, organizing** "Consultation Workshop on the GCF's NDA Profile, No-Objection Procedures, and Country Programme", within the Green Climate Fund Project for Readiness and Preparatory Support for Jordan, 19-20, Nov., 2019, Amman, Jordan.
5. **Fayez Abdulla** organizing workshop on "Introduction to Resource Mobilization", within the Green Climate Fund Project for Readiness and Preparatory Support for Jordan, 19-20, Nov., 2019, Amman, Jordan, 7-9, August, 2019.
6. **Fayez Abdulla**, organizing workshop on "Introduction to Project Management" within the Green Climate Fund Project for Readiness and Preparatory Support for Jordan, 31 July-1 August, 2019, Amman, Jordan.
7. **Fayez Abdulla**, Attending GCF Readiness and Preparatory Support Programme Jordan Minutes of the Programme Launch and Informational Workshop, 29 – 30 August 2018, Amman, Jordan.
8. **Fayez Abdulla** participating in Jordan Zero Hunger Strategic Review Stakeholders consultation workshop, 31 January 2018, Amman- Jordan.
9. **Fayez Abdulla** participating in the "Launch event" Jordan Zero Hunger Strategic Review, World Food Programme, Thursday 13, December 2018, Amman, Jordan.
10. **Fayez Abdulla**, Economic Productivity of Water Use Workshop, WATER SUM Project, 14-15, February 2018. Presenting the following papers i) Water productivity in the agricultural sector in Jordan, ii) Jordanian economic activity from the perspective of the virtual water footprint., iii) Jordanian Water Strategy on What Progress, obstacles, challenges and the way forward.
11. **Fayez Abdulla**, participating in "National Adaptation Plan Focus Group Meeting", Thursday, 11, October, 2018, GIZ, Amman, Jordan.
12. **Fayez Abdulla**, Capacity Building on Water Demand Management (WDM) in Egypt, within the activities of WATER SUM Project-Water Resources Management Good Practices and Knowledge Transfer, Regional Environmental Centre, Cairo Egypt, 17-18, January, 2018.
13. **Fayez Abdulla**, Capacity Building on Water Demand Management (WDM) in Egypt, within the activities of WATER SUM Project-Water Resources Management Good Practices and Knowledge Transfer, Regional Environmental Centre, Cairo Egypt, 17-18, January, 2018.
14. **Fayez Abdulla**, Regional Workshop on Water Resources and Demand Management in Changing Climate, WATER SUM project, Water Resources Management Good Practices and Knowledge Transfer WaterPORT Project Component, March 28-31, **Djerba**, Tunisia. Presenting the following papers: i) Waster Water Reuse in Jordan, ii) *Vulnerability Assessment in Jordan, revision and further improvement*, iii) Vulnerability assessment for Arabian countries on water resources and Groundwater (North Africa counties), iv) Traditional Adaptation measures in the MENA Region, v) Adaptation measures identified/recommended, case for Jordan.
15. Attending NAP Training and Stocktaking Workshop for National Adaptation Plan (NAP) Process in Jordan. Hosted by the Ministry of Environment in cooperation with Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH, 27 Feb -2 March 2017, Dead Sea.
16. **Fayez Abdulla**, participating on the workshop on "Development of High-

- resolution hydro-climate model for fostering cooperation on water management between water authorities, Roadmap for Vulnerability Assessment, Phase II, GIZ and Ministry of Environment, June, 2017, Dead Sea, Jordan.
17. Fayez Abdulla, participating in the workshop on "NAP Training Stocktaking workshop, National Adaptation Plan (NAP) Process in Jordan, Dead Sea, Jordan, GIZ and Ministry of Environment, March, 2017
 18. Andras Kis, **Fayez Abdulla**, Hani Abu Qdais, "National workshop on IWRM and adaptation to climate change, held in Jordan on May 26-27, 2016, Regional Environmental Center, Hungary.
 19. **Fayez Abdulla**, "Methodology **Framework for Climate Change Vulnerability and Adaptation**", National Workshop on IWRM and Adaptation to Climate Change, Dead Sea, Jordan, 26-27, May, 2016.
 20. **Fayez Abdulla**, **Review of Climate Change Impacts on Water Resources and Its related Sectors in Jordan**, National Workshop on IWRM and Adaptation to Climate Change, Dead Sea, Jordan, 26-27, May, 2016
 21. Facilitator for 1st capacity Building on Water Demand Management (WDM) in Jordan, within **WATER SUM Project Water Resources Management Good Practices and Knowledge Transfer - Water PORt project component 5-6** December, 2016, Dead Sea, Jordan.
 22. **Fayez Abdulla**, Introducing the draft Assessment Report and interactive discussion with stakeholders, National Workshop on Water Resources Management in a Changing Climate, Water and Climate Change Practice Framework Assessment, October 24-25, 2016, Dead Sea, Jordan
 23. **Fayez Abdulla** and Hani Abu Qdais, Organizing training workshop for Civil Society on "Integrity in Water Resources Management", Jordan University of Science & Technology, 23-26 March, 2015, Irbid Jordan
 24. **Fayez Abdulla** and Hani Abu Qdais, Organizing training workshop for Water Facilities Operators on "Integrity in Water Resources Management", Jordan University of Science & Technology, 15-18 Nov., 2015, Irbid Jordan.
 25. **Fayez Abdulla** Organizing training workshop for Women organization on "Integrity in Water Resources Management", Jordan University of Science & Technology, 15-18 July, 2015, Irbid Jordan.
 26. **Fayez Abdulla** Organizing training workshop for High Decision Makers on 6+"Integrity in Water Resources Management in Middle East", Jordan University of Science & Technology, 14-15 December, 2015, Dead Sea, Jordan.
 27. **Fayez Abdulla** and Hani Abu Qdais "National Consultation Workshop on Water Governance and Water Integrity Risk Assessment" Water Integrity Capacity Building Programme for MENA, Amman, June, 12th 2014
 28. **Fayez Abdulla** organizing and participating in "Workshop on Development of Statistical Downscaling of Climate Change Scenarios, December, 2014, Amman, Jordan.
 29. **Fayez Abdulla**, attending the Workshop on "spatial data management: creating a harmonized data platform for the water economy model" 18 - 28 August, 2014, Amsterdam, Netherlands.
 30. (Water Sum), Regional Kick-off Conference, June 11-13, 2015, REC Conference Center, Szentendre-Hungary.

31. Presentation on: Statistical Downscaling of Climate change for Different Regions in Jordan, Regional Coordination on Improved Water Resources and Capacity Building, closing workshop, 6-7 May, 2015, Dead Sea-Jordan
32. Presentation entitled “Research Priorities on climate change and its health impact” in a regional workshop on Adaptation Strategies to Protect Health Under Climate Variability and Change in Water Stressed Countries in EMR, Organized by CEHA/WHO, Amman _ Jordan, 11-14 December 2006.
33. Presentation entitled “Hydrological concepts for agricultural engineers” in the regional training program “Wastewater Reuse in Agriculture: Management & Practical Aspects Demonstration of Safe Water reuse, Irbid-Jordan, 8 December 2006.
34. Participation and team member of project “Towards concerted sharing: Development of a regional water economy model in the Jordan River Basin”, Kick-off Meeting 11-12 February, 2013, Amman-Jordan.
35. Participating in Training Workshop on: Calibration stages of the water economy model, Centre for World Food Studies, VU University Amsterdam, 1 - 12 June, 2015, Amsterdam-Netherlands.
36. Training workshop on: Mathematical Modeling tools for water resources management, JUST, 18-29 August, 2013, Irbid-Jordan.
37. Attending and participation in “Training Workshop on: spatial data management: creating a harmonized data platform for the water economy model”, Centre for World Food Studies, VU University Amsterdam, 18 - 28 August, 2014, Amsterdam-Netherlands
38. Abdulla F. A (2010) “**UNCCD Desertification and Land Degradation : Alignment of national, sub-regional and regional action programmes**” paper presented in the Training Workshop on Integrated Drought Preparedness and Management in Iraq In collaboration with the National Drought Mitigation Center, Lincoln, USA, Amman-Jordan, 13 – 15 February, 2010
39. Abdulla F. A (2010) “**Sustainable Methods for Improving Water and Land Productivities under Water Scarcity and Drought Situation**” paper presented in the Training Workshop on **Integrated Drought Preparedness and Management** in Iraq In collaboration with the National Drought Mitigation Center, Lincoln, USA, Amman-Jordan, 13 – 15 February, 2010
40. Abdulla F. A. and Hammouri N. (2009). Water Sector: Analysis of the sector and the potential for adaptation, National Inter-Ministerial Dialogue on Climate Change Workshop, 11th and 12th November, 2009, Amman-Jordan.

41. Abdulla F. A (2009) Impact of climate change on the hydrological processes in the Arab Countries. Presented at The Twelfth International Training Workshop in Wadi Hydrology: Integrated Watershed Management in Wadi Systems Using DSS 2-6 Aug 2009 Amman – Jordan
42. **Fayez Abdulla** organizing and participating in "stakeholders workshop for Zarqa River Basin vulnerability Assessment", UNDP, Amman, Jordan, July, 2017.
43. **Fayez Abdulla** and Hani Abu Qdais "National Alumni Workshop on Water Integrity" 23-24-July, 2017, Dead Sea, Jordan.
44. **Fayez Abdulla**, participating in the "NAP Training & Stocktaking Workshop and Official Launch of the NAP Process in Jordan, 27 February - 2 March 2017, Dead Sea, Jordan.
45. **Fayez Abdulla**, participating on the workshop on "Development of High-resolution hydro-climate model for fostering cooperation on water management between water authorities, Roadmap for Vulnerability Assessment, Phase II, GIZ and Ministry of Environment, June, 2017, Dead Sea, Jordan,
46. **Fayez Abdulla**, participating in "National Adaptation Plan Focus Group Meeting", Thursday, 11, October, 2018, GIZ, Amman, Jordan.
47. Fayez Abdulla, Capacity Building on Water Demand Management (WDM) in Egypt, within the activities of WATER SUM Project-Water Resources Management Good Practices and Knowledge Transfer, Regional Environmental Centre, Cairo Egypt,17-18, January, 2018.
48. Fayez Abdulla, participating in the workshop on "NAP Training Stocktaking workshop, National Adaptation Plan (NAP) Process in Jordan, Dead Sea, Jordan,GIZ and Ministry of Environment, March, 2017
49. Andras Kis, **Fayez Abdulla**, Hani Abu Qdais, "National workshop on IWRM and adaptation to climate change, held in Jordan on May 26-27, 2016, Regional Environmental Center, Hungary.
50. **Fayez Abdulla**, "Methodology **Framework for Climate Change Vulnerability and** Adaptation", National Workshop on IWRM and Adaptation to Climate Change, Dead Sea, Jordan, 26-27, May, 2016.
51. **Fayez Abdulla**, **Review of Climate Change Impacts on Water Resources and Its related Sectors in Jordan**, National Workshop on IWRM and Adaptation to Climate Change, Dead Sea, Jordan, 26-27, May, 2016
52. Facilitator for 1st capacity Building on Water Demand Management (WDM) in

- Jordan, within **WATER SUM Project Water Resources Management Good Practices and Knowledge Transfer - Water POrT project component 5-6** December, 2016, Dead Sea, Jordan.
53. **Fayez Abdulla**, Introducing the draft Assessment Report and interactive discussion with stakeholders, National Workshop on Water Resources Management in a Changing Climate, Water and Climate Change Practice Framework Assessment, October 24-25, 2016, Dead Sea, Jordan
 54. András Kis, **Fayez Abdulla**, Hani Abu Qdais, workshop on "Economic Analysis Water productivity", Regional Environmental Center, WATER SUM Project, Jordan, 14-15 February, 2018
 55. **Fayez Abdulla** and Hani Abu Qdais, Organizing training workshop for Civil Society on "Integrity in Water Resources Management", Jordan University of Science & Technology, 23-26 March, 2015, Irbid Jordan
 56. **Fayez Abdulla** and Hani Abu Qdais, Organizing training workshop for Water Facilities Operators on "Integrity in Water Resources Management", Jordan University of Science & Technology, 15-18 Nov., 2015, Irbid Jordan.
 57. **Fayez Abdulla** Organizing training workshop for Women organization on "Integrity in Water Resources Management", Jordan University of Science & Technology, 15-18 July, 2015, Irbid Jordan.
 58. **Fayez Abdulla** Organizing training workshop for High Decision Makers on 6+"Integrity in Water Resources Management in Middle East", Jordan University of Science & Technology, 14-15 December, 2015, Dead Sea, Jordan.
 59. **Fayez Abdulla** and Hani Abu Qdais "National Consultation Workshop on Water Governance and Water Integrity Risk Assessment" Water Integrity Capacity Building Programme for MENA, Amman, June, 12th 2014
 60. **Fayez Abdulla** organizing and participating in "Workshop on Development of Statistical Downscaling of Climate Change Scenarios, December, 2014, Amman, Jordan.
 61. **Fayez Abdulla**, attending the Workshop on "spatial data management: creating a harmonized data platform for the water economy model" 18 - 28 August, 2014, Amsterdam, Netherlands.
 62. **Fayez Abdulla**, Facilitator for the "Regional Workshop on Water on water resources and demand management in Changing climate" within **WATER SUM Project Water Resources Management Good Practices and Knowledge Transfer - Water POrT project component 28-30 March 2017**

63. **Fayez Abdulla**, Facilitator for National Workshop “Promoting Inclusive Groundwater Governance in the Near East and North Africa” the Food and Agriculture Organization of the United Nations (“FAO”). **17 August, 2016, Dead Sea, Jordan**
64. **Fayez Abdulla**, Facilitator for the National workshop on water resources management in a changing climate in Jordan, " within **WATER SUM Project Water Resources Management Good Practices and Knowledge Transfer - Water PORt project component**, held on October24-25, 2016, Dead Sea, Jordan
65. Facilitator for National Workshop on Integrated Water Resources Management (IWRM) and Adaptation to Climate Change, within **WATER SUM Project Water Resources Management Good Practices and Knowledge Transfer - Water PORt project component**, held on May, 26-27, 2016, Dead Sea, Jordan.
66. Facilitator for National Workshop on *“Developing a sustainable institutional system for GHG emissions inventory and MRV” Ministry of Environment/Climate Change Directorate, Dead Sea, November 02 thru 04, 2015*
67. **Facilitator for National Workshop on "Development of Statistical Downscaling of Climate Change Scenarios"** Ministry of Water and Irrigation, 14-16, December, Amman, Jordan.
68. **Facilitator for** Round table discussion on "Water and Climate change in Arab Region, under the MENA Water World Cafe 2015 side event that was organized by REC during the World Water Week 2015 in Stockholm, Sweden
69. **Facilitator for Round Table Discussion** on **“World Café 2016 / Water, Growth, Stability” Working Group 2: Water related mitigation and adaptation measures to climate change for sustainable growth**, was organized by REC during the World Water Week 2016 in Stockholm, Sweden
70. Abdulla F.A. (2008) Climate Change impacts on the West Asia and North Africa (WANA) region, WANA FORUM Preparatory Workshop, 6-7 Nonmember, 2008, Amman Jordan
71. Abdulla F (2007) “Studies and Activities Related to Climate Change in Jordan” Paper presented at the first National Technical Workshop for Enabling Activities for the Preparation of Syria’s Initial National Communication to the UNFCC, 5th of November, 2007, Damascus, Syria.
72. Abdulla F (2008) Regional Circulation Models and Downscaling to the Watershed Scale, Climatic GCM, presented in Training of Trainers Workshop

on Climate Change and its Impacts on Water Resources Management, Organized by ACSAD, RCTWS-Cairo, UNESCO Cairo office and RCUWM-Tehran, 13-16 October, 2008, Damascus- Syria

- 73.** Abdulla F (2008) “Climate Change Scenarios Development and Applications, Case study of Jordan” presented in Training of Trainers Workshop on Climate Change and its Impacts on Water Resources Management, Organized by ACSAD, RCTWS-Cairo, UNESCO Cairo office and RCUWM-Tehran, 13-16 October, 2008, Damascus- Syria
- 74.** Abdulla F (2007) “Overview on the estimation of GHG emissions” Paper presented at the first National Technical Workshop for Enabling Activities for the Preparation of Syria’s Initial National Communication to the UNFCCC, 5th of November, 2007, Damascus, Syria.
- 75.** Abdulla F (2008) “Climate Change and its Impacts on Water Resources in the Mediterranean Region” paper presented in the International Workshop “Water Resources in the Middle East – Reality and Aspiration- Organized by DAAD, Technische Universitat Munchen, and JUST, 19-21, October, Irbid Jordan.
- 76.** Abdulla F (2008) “ Water Resources and Climate Change” paper presented in the Regional Conference “ Climate Change Policies in the Arab Middle East, Challenges for Decision Makers and Activists” organized by the United Nations University (UNN) and Heinrich Boll Stiftung, 21-22 October 2008, Amman Jordan
- 77.** Abdulla F. A., Climate change Models (General Circulation Models): Overview. Eleventh International Course on Wadi Hydrology: Impact of Climate Change on Watershed Management, 13-17 July 2008, Amman Jordan.
- 78.** Abdulla F. A., General Circulation Models vs. Regional Climate Models. Eleventh International Course on Wadi Hydrology: Impact of Climate Change on Watershed Management, 13-17 July 2008, Amman Jordan
- 79.** Abdulla F.A. and Eshtawi T., Climate change effect on sediment yield using Soil and Water Assessment Tool (SWAT): Case study Zarqa basin-Jordan, International Workshop on Flood or Drought? - in the Middle East, Funded by DAAD, Irbid-Jordan, 26-28, pp 1-16, Nov., 2006
- 80.** Facilitator and Organizer for workshop entitled “Medical Waste Management Training Program Level 1” for Decision-makers, Health directors, Hospital Managers and Nurse Managers in hospitals” Monday 14th, June 2004
- 81.** Facilitator and Organizer workshop entitled “Medical Waste Management Training Program Level II” for Supervisors, Managers, Physicians, Senior

- nurses, and Chief pharmacists”, June 21-23, 2004
- 82.** Organize workshop entitled “Medical Waste Management Training Program Level III”, for “Hospital Housekeeping Supervisors, Medical Waste Handling Supervisors” April 12-13, 2005
 - 83.** Organize workshop entitled “Medical Waste Management Training Program Level IV”, for “Incinerator Operators, and Medical Waste Vehicle Drivers, April 19, 2005
 - 84.** Organize the first National Conference “Towards a Healthy Environment for Children”, in Collaboration with CEHA/WHO, 2003
 - 85.** Organize the workshop entitled “The Role of Northern Municipalities in Water Demand Management”, July, 18, 2001
 - 86.** Organize the workshop entitled “Water Audit and Water Saving Economics for Middle Municipalities”, Oct. 30, 2001.
 - 87.** Organize the workshop entitled “Water Audit and Water Saving Economics for Northern Municipalities”, Feb., 13, 2002.
 - 88.** Organize the workshop entitled “Knowledge Attitude Practices towards water uses”, March 2001.
 - 89.** Organize workshop entitled” Domestic and Industrial Wastewater treatment technologies and reuse” June, 2001.
 - 90.** Organize workshop entitled “Water Economics and Water Use Efficiency”, April 2001.
 - 91.** Organize workshop entitled “Biodiversity in Jordan” June 6-7, 2001.
 - 92.** Source Sampling & CEMS Workshop, produced by Walter Smith & Associates, February 14-18, 2005 at the Brownstone Hotel in Raleigh, North Carolina, USA
 - 93.** Education and Evaluation Training Program; General, workshop organized by Jordan University of Science and Technology, two weeks, 1998.
 - 94.** Education and Evaluation Technology; Measurement and Evaluation, workshop organized by Jordan University of Science and Technology, two weeks, 1997.
 - 95.** Participating in the Workshop of “The impacts of Climate change and Grazing Upon Desertification” Held by Unisco Chair for Desert and Desertification Control, 29-30 May, 2000, “Current climate change projections (temperature,

rainfall and seasonality.... Northern Jordan vs. southern Jordan)

96. Participating in the Workshop of “The impacts of Climate change on the water Resources of Jordan” Held by UNDP, GCEP and Al-Shamel Engineerin Office, March 5-9, 2000. Three lectures:
97. Building Capacity for GHGs Inventory and Action Plans in Response to UNFCCC Communications Obligations Project (GHGs Inventory Workshop), GCEP, Amman Jordan, 15-16 March, 1997.
98. Prediction of GHGs Emissions from Solid and Liquid Wastes Treatment Processes up to the year 2040 According to IPCC Approach, Presented in GHGs Inventory Workshop, Climate Change Project, GCEP, Amman, March 1997.
99. 1994, GHGs Emissions/ Liquid and Solid Wastes Treatment Processes, Presented in GHGs Inventory Workshop, Climate Change Project, GCEP, Amman, March 1997.
100. Characterization and Analysis of Physical and Chemical Parameters for Drinking Water. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 3–14 September 2000
101. Characterization and analysis of biological parameters for drinking water. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID ,17-28 September 2000
102. Quality Assurance, Quality Control and Laboratory Certification. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 8-19 October 2000
103. Sources of Water Pollution and their Control. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 7-18 January 2001
104. Drinking Water Supply Systems. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 4-22 February 2001
105. Wastewater Treatment and Reuse. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 11-29 March 2001
106. Media Education on Water and Environmental Issues. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, July29 – August 9, 2001
107. Technology Transfer and Extension Techniques for Efficient Irrigation Management. Through the project “Jordan Water Skills Enhancement and

Information” funded by USAID, 19-30 August 2001

108. Management of Wastewater Treatment plants. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 21 October –1 November 2001

109. Sustainable Management of Crops and Soils Irrigated with Brackish and Treated waters. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 4-15 November 2001

110. Low-scale, Low-Cost Wastewater Treatment for Reuse in Jordan. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 6-10 January 2002 & 27–31 January 2002

111. Water Economics. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 10-21 February 2002

112. Management of Drinking Water Treatment plants. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID, 27–31 January 2002

113. Drought assessment and management . Through the project “Jordan Water Skills Enhancement and Information” funded by USAID 6-12 March 2002

114. Advanced GIS-based Water Resources Management. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID 15-19 December 2002

115. Watershed Management. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID 5-9 January 2003

116. Reservoir Management. Through the project “Jordan Water Skills Enhancement and Information” funded by USAID 12-16 January 200

Awards, honors and professional committees memberships

Department level

1. Coordinator of Water Resource and Environmental Engineering Division
2. Chair and Member of Department Scientific Research Committee
3. Chair and Member of Higher Education Committee

4. Member of Graduation Projects Review Committee
5. Member of Laboratories and Safety Committee
6. Member of Social Committee
7. Member of Curriculum Review and Development Committee

University level

1. Member of the Jordan University of Science & Technology Council 2016/2017
2. Member of the Engineering College Council
3. Member of College of Engineering Scientific Committee
4. Member of the University Environmental Committee
5. Member of the University Medical Waste Committee
6. Member of the University Water Committee
7. Coordinator of JUST Energy Group

National Committee

1. Member of the National Climate Change Committee
2. Member of National Committee for Dams
3. Focal point for Climate change between the University and Climate Change Directorate at Ministry of Environment
4. Member of Board of Trustees at Middle East University Jordan (2013-2017)
5. Member of the National Committee for Nuclear Power Plan (2018)
6. Member of the Advisory Committee for National Jordanian Child Museum
7. Chair of the committee of Jordan Government Prize in the Area of Environmental Studies
8. Member of the Jordanian Engineers Association
9. Member of the Jordan Environment Society

Regional and International levels

1. Member of the regional steering Committee Meeting on Regional Collaboration for Energy Efficiency and Renewable Energy Technology.

2. Chair of the Climate Change Group for West Asia and North Africa
3. Member of the American Society of Civil Engineers (ASCE)
4. Member of the American Geophysical Union (AGU) member
5. Reviewer for a number of Scientific Journals

Prizes

1. Abdul Hammed Shoman Arab Researchers Award for year 2020
2. College of Engineering Honors list, Yarmouk University, 1981-1985.
3. First student recognition in the water resources and environmental engineering master program, Jordan University of Science and Technology, 1987.
4. King Hussein Royal Prize for the academic achievement in M.Sc. Program, 1989.
5. Scholarship for the Ph.D. degree by Jordan University of Science and Technology, 1991.

Publications

Published in refereed, specialized, international, and indexed journals and books:

Paper published on Global Warming & Climate Change

1. **Fayez Abdulla (2021)**, Statistically Downscaling Climate Change Projection of Precipitation and Temperature over the semi-arid Yarmouk Basin- Jordan, International Journal of Global Warming, Vol. 24, Nos. 3/4, pp.261–280
2. Ayat Al Qudah, Munir J. Rusan, Mohammed I. Al-Qinna & **Fayez A. Abdulla**, (2021), Climate change vulnerability assessment for selected agricultural responses at Yarmouk River Basin Area, Jordan, Mitigation and Adaptation Strategies for Global Change, 26:3, <https://doi.org/10.1007/s11027-021-09944-7>
3. **Fayez A. Abdulla** (2020) Stochastic seasonal rainfall simulation model for Irbid region, Northern Jordan, Urban Water Journal, VOL. 17, NO. 5, 431–445, <https://doi.org/10.1080/1573062X.2020.1783325>
4. **Fayez Abdulla**, Dima A. H Malkawi (2020) Potential impact of climate change on the drought conditions in Jordan, Jordan Journal of Civil Engineering, Volume 14, No. 1,,108-116.
5. **Fayez Abdulla** and Alham W. Al-Shurafat, (2020), Assessment of the Impact of Potential Climate Change on the Surface Water of a Trans-boundary Basin: Case Study Yarmouk River, Procedia Manufacturing 44 (2020) 172–179 [https://authors.elsevier.com/sd/article/S2351-9789\(20\)30806-4](https://authors.elsevier.com/sd/article/S2351-9789(20)30806-4)
6. **Fayez Abdulla** and Saif Farhat (2020), Impact of Climate Change on the Performance of Wastewater Treatment Plant: Case study Central Irbid WWTP (Jordan), Procedia Manufacturing 44 (2020) 205–212 [https://authors.elsevier.com/sd/article/S2351-9789\(20\)30810-6](https://authors.elsevier.com/sd/article/S2351-9789(20)30810-6)

7. **Fayez Abdulla** (2020), 21st Century Climate Change Projections of Precipitation and Temperature in Jordan, *Procedia Manufacturing*, 44 (2020) 197–20
[https://authors.elsevier.com/sd/article/S2351-9789\(20\)30809-X](https://authors.elsevier.com/sd/article/S2351-9789(20)30809-X)
8. Hani Abu Qdais, **Fayez Abdulla** and A. Kurbatova, (2019) Wastewater reuse in Jordan and its potential as an adaptation measure to climate change, *Journal of Environmental Engineering and Science*, <https://doi.org/10.1680/jenes.19.00029>
9. **Fayez A. Abdulla** (2016). Water-Related Climate Change Mitigation and Adaptation Measures for Sustainable Growth MENA Water World Café 2016 Background Paper, Working Group 2. Regional Environmental Center, Szentendre, Hungary. ISBN 978-963-9638-71-6
10. R. Laušević, V. Vassilev, A. Kis, **F. Abdulla** and S. Milutinović (2016). Water, Growth and Stability. Background document for the REC's World Café 2016 at WWW2016. Regional Environmental Center, Szentendre, Hungary. ISBN 978-963-9638-71-6
11. **Fayez Abdulla** and Tamer Eshtawi (2015), Climate Change Effect on Sediment Yield at King Talal Dam (Jordan) *Civil and Environmental Research*. Vol.7, No.7
12. Radwan Al-Weshah and **Fayez Abdulla** (2012) "Climate change risk management on hydrology of wadi systems in the Arab Region: Assessment, impact and trends" *J Earth Sci Climate Change* 2012, 3:3
13. Al-Bakri J., Suleiman A., **Abdulla F.**, and Ayad J. (2010) Potential impacts of climate change on the rainfed agriculture of a semi-arid basin in Jordan, *Physics and Chemistry of the Earth*, 35: 125-134
14. **Abdulla, F.A.**, Eshtawi T., and Assaf H. (2009), Assessment of the impact of Potential Climate Change on the Water Balance of Semi-arid Watershed, *Water Resources Management*, 23: 2051-2068
15. **Abdulla F.** and Al-Omari A. (2008). Impact of climate change on the monthly runoff of a semi-arid catchment: Case study Zarqa River Basin (Jordan). *Journal of Applied Biological Sciences* 2 (1): 43-50
16. Abu Qdais H., **Abdulla F.**, and Qrenawi L.(2008), Simulation of Leachate Production from an Arid Solid Waste Landfill Using Hydrologic Evaluation of Landfill Performance (HELP) Model. *The Journal of Solid Waste Technology and Management*, Volume 34, No. 3, 177-186
17. Abu Qdais H., **Abdulla F.**, and Qrenawi L. (2010), Solid Waste Landfills as a Sources of Green Energy: Case Study of Al Akeeder Landfill, *Jordan Journal of Mechanical and Industrial Engineering*, 4 (1): 69-74
18. Al-Ghazzawi Z.D and **Abdulla F.A.** (2008), Mitigation of Methane Emissions from Sanitary Landfills and Sewage Treatment Plants in Jordan, *Clean Technologies and Environmental policy*, Volume 10, No. 4, 341-450.
19. **Abdulla, F.A.**, and D.P. Lettenmaier, Development of Regional Parameter Estimation Equations for Land Surface Hydrologic Model, *Journal of hydrology*, Vol. 197, p. 230-257, 1997.
20. **Abdulla, F. A.**, and D.P. Lettenmaier, Application of Regional Parameter Estimation to Simulate the Water Balance of Large Continental River, *Journal of Hydrology*, Vol. 197, p. 258-285, 1997.
21. **Abdulla, F.A.**, D.P. Lettenmaier, E.F. Wood, and J.A. Smith, Application of a Macroscale Hydrologic Model to Estimate the Water Balance of the Arkansas-Red River Basin, *Journal of Geophysical Research*, Vol. 101, No. D3, pp 7449-7459, 1996.
22. **Abdulla, F.A.**, D.P. Lettenmaier, E.F. Wood, and J.A. Smith, Comparisons of evaporation for the Red-Arkansas Basin, *GEWEX News*, Vol. 5, No. 4, 1995.
23. **Abdulla, F.A.** and Al-Ghazzawi Z.D., Methane Emissions from Domestic Waste Management Facilities in Jordan- Applicability of IPCC Methodology, *Journal of the*

Air and Waste Management Association, 50: 234-239, 2000.

24. **Abdulla F.A.** and Al-Ghazzawi Z.D., Assessment of Methane Emissions from Industrial and Municipal Wastewater Treatment Plants in Jordan, The Institution of Engineers (India), Vol. 79, pp. 1-4, 1998.
25. Al-Ghazzawi Z.D. and **Abdulla F.A.**, Assessment of CH₄ Emissions from Sanitary Landfills and Raw Sewage water Dumping Ponds in Jordan. The Institution of Engineers (India), Vol. 82, pp. 75-79, 1998.

Paper published on Hydrological modeling, Water resources and Environmental Engineering

26. **Fayez Abdulla** and Alham W. Al-Shurafat, (2020), Rainfall-Runoff modeling for Semi-arid and trans-boundary Yarmouk River Basin, Procedia Manufacturing, 44 (2020) 180–188 [https://authors.elsevier.com/sd/article/S2351-9789\(20\)30807-6](https://authors.elsevier.com/sd/article/S2351-9789(20)30807-6)
27. **Fayez Abdulla** (2019): Rainwater harvesting in Jordan: potential water saving, optimal tank sizing and economic analysis, Urban Water Journal, DOI: 10.1080/1573062X.2019.1648530
28. Majed Abu Zreig, Farah Ababneh and **Fayez Abdulla** (2019), Assessment of rooftop rainwater harvesting in northern Jordan, Physics and Chemistry of the Earth, Parts A/B/C, <https://doi.org/10.1016/j.pce.2019.08.002>
29. **Fayez A. Abdulla**, Amani Alfarrar, Hani Abu Qdais and Ben Sonneveld (2016). Evaluation of Wastewater Treatment Plants in Jordan and Suitability for Reuse. Academia Journal of Environmental Science 4(7): 111-117.
30. Amayreh J. A., **Abdulla F. A.**, and Al-Ja'afreh H. (2012) Impact of different water price levels on irrigated agriculture in Northern Jordan Valley, Irrigation Drainage Systems
31. **Abdulla, F.A** and Al-Assad T.A. (2010). Artificial Groundwater Recharge to a Semi-arid Basin: Case study Mujib Aquifer-Jordan, Environmental Earth Sciences, 60(4): 845-859
32. Al-Omari A., Al-Quraan S. Al-Salihi A. and **Abdulla F (2009)**, A Water Management Support System for Amman Zarqa Basin in Jordan, Water Resources Management, 23: 3165–3189
33. Abu Qdais H., Al- Abed N., Al- Ghazawi Z., and **Abdulla F.A.** (2009) Prediction of Trihalomethane Formation in Water Distribution Systems, Desalination and water treatment, 2: 162-169
34. **Abdulla, F.A.** and Al-Shareef, A. W. (2009). Roof Rainwater Harvesting Systems for Household Water Supply in Jordan, Desalination, 243: 195-207.
35. Al-Omari A and **Abdulla F.** (2009). A model for the determination of residential water demand by the use of tracers, Advances in Engineering Software, 40:85-94
36. **Abdulla F.A.** and Eshtawi T. (2007), Application of Automated Geospatial Watershed Assessment (AGWA) Tool to Evaluate the Sediment Yield in a semi-arid Region: Case Study, Kufranja Basin-Jordan, Jordan Journal of Civil Engineering, Volume 1, No. 3, 234-244
37. Al-Abed N., **F.A. Abdulla**, and Zahrawi R. (2007). Evaluation of Irrigation Water Total Suspended Solids (TSS) on a Farm Scale. Archives of Agronomy and Soil Science, 53(3): 345-353
38. Al-Abed N., **F.A. Abdulla**, and Zahrawi R. (2007), Assessment of suspended solids dynamics and their effect in the irrigation networks in the Northern Jordan Valley. Irrigation and Drainage Systems, Vol. 21 (1), pp. 45-59

39. Qdais H. A, Rabi A. and **Abdulla F.** (2007), Characteristics of the Medical Waste Generated at the Jordanian Hospitals, Clean Technologies and Environmental Policy, Vol. 9, Number 2, p 147-152.
40. **Abdulla F.**, Abu Qdais H., Atallah R. (2008). Site Investigation on Medical Waste Management Practices in Northern Jordan, Waste Management, 28: 450-458
41. **Abdulla F.** and Al-Assa'd T. (2006). Modelling groundwater flow for Mujib Aquifer, Jordan, Journal of Earth System Science, Vol. 115, No.3, pp. 289-298.
42. Al-Abed N., **F. Abdulla** and Abu Khyarah A. (2005). "GIS-hydrological models for managing water resources in the Zarqa River basin", Environmental Geology, 47:405-411.
43. **Abdulla, F.A.**, J.A. Amayreh, and A.H. Hossain, (2002). "Single Event Model for Simulating Runoff Hydrograph in Desert Regions", Water Resources Management, 16: 221-238, 2002.
44. Al-khatib M., **Abdulla F.A.** and Rimawi O. (2001). Three dimensional groundwater flow model for the two aquifers (Upper and Middle) of the Azraq basin, Freiburger Forschungshefte, C 494, S137-148
45. **Abdulla, F.A.**, B. Al-Badranih (2000). Application of a rainfall-runoff model to three catchments in Iraq. Hydrological Science Journal, 45(1), pp. 13-25
46. **Abdulla F.A.**, M. Al-Khatib and Al-Ghazzawi Z.D, Groundwater Modeling for Azraq basin -Jordan, Environmental Geology Vol. 40, 1-2, p11-18, 2000.
47. **Abdulla, F. A.**, and D.P. Lettenmaier, Estimation of the ARNO Model Baseflow Parameters Using Daily Streamflow Data, Journal of Hydrology, Vol. 222, pp 37-54, 1999.
48. Malkawi Husein A., Hassan W. F., and **Abdulla F. A.**, " Uncertainty and Reliability analysis Applied to slope stability", Structural Safety, 22, pp. 161-187, pp11-18, 2000.
49. Malkawi Husein A., and **Abdulla F.A.**, Barakat S.A. , and Al-Sheriadeh M. "Application of extreme value statistics to annual maximum magnitudes in Jordan employing a mixture distribution", Earthquake Spectra, The Professional Journal of the Earthquake Engineering Research Institute, Vol. 15, No. 4, 1999.

Conferences (Presentation and Proceedings Publications)

A) Conference papers on Climate Change

1. **Fayez Abdulla** and Alham W. Al-Shurafat, (2020), Assessment of the Impact of Potential Climate Change on the Surface Water of a Trans-boundary Basin: Case Study Yarmouk River, 1st International Conference on Optimization-Driven Architectural Design (OPTARCH 2019), November, 2019, Amman, Jordan.
2. **Abdulla F.A.**, Al-Qadami A. (2019) Structural Characteristics of Precipitation in Jordan. In: Zhang Z., Khélifi N., Mezghani A., Heggy E. (eds) Patterns and Mechanisms of Climate, Paleoclimate and Paleoenvironmental Changes from Low-Latitude Regions. CAJG 2018. Advances in Science, Technology & Innovation (IEREK Interdisciplinary Series for Sustainable Development). Springer, Cham

3. Al-Qadami A., **Abdulla F.A.** (2019) Regionalization of Precipitation in Jordan. In: Zhang Z., Khélifi N., Mezghani A., Heggy E. (eds) Patterns and Mechanisms of Climate, Paleoclimate and Paleoenvironmental Changes from Low-Latitude Regions. CAJG 2018. Advances in Science, Technology & Innovation (IEREK Interdisciplinary Series for Sustainable Development). Springer, Cham
4. Attending the Water Sum Final conference, Sustainable Use of Transboundary Water Resources and Water Security Management. May 18, 2017.
5. Attending the IPCC AR6 scoping, Addis Ababa, Ethiopia, May 1-5, 2017.
6. Andras Kis, **Fayez Abdulla**, Ventsislav Vassilev, Romina, Alvarez Troncoso, BACKGROUND DOCUMENT for the REC's MENA Water World Café 2017, Climate change and water-waste cycle 2017, World Water Week 2017, Sweden.
7. Lausevic Vassilev, Andras Kis, **Fayez Abdulla**, and S. Milutinovic, Water, Growth and Stability, BACKGROUND DOCUMENT for the REC's MENA Water World Café 2016, World Water Week 2016, Sweden.
8. Abdulla F. A (2009) **Climate change evidences and implications in the Middle East, Meeting on Drought:Trends, Humanitarian impact and solutions**, Amman –Jordan, 4-5 May
9. Abdulla F. A (2009) **Adaptation to climate change: some results in Jordan, Meeting on Drought:Trends, Humanitarian impact and solutions**, Amman –Jordan, 4-5 May.
10. Abdulla F. (2008) Assessment the potential impacts of climate change on the water resources of semi-arid basins, paper presented in the Regional Process of the 5th World Water Forum, Regional Meeting on Water in the Mediterranean Basin, 09-11 October, 2008, Near East University, Lefkosa, TRNC
11. Abdulla F. A.,” Impact of climate change on the hydrological Budget of Zarqa River Basin-Jordan”, WSTA Sixth Gulf Water Conference in Concurrence with Second Symposium on Water Use Conservation in the Kingdom of Saudi Arabia, 8-12 March, 2003, Riyad, Saudi Arabia.
12. Abdulla F.A. and Al-Ghazzawi Z.D., Assessment of Methane Emissions from Industrial and Municipal Wastewater Treatment Plants in Jordan, in Proceedings of Water Resources Problems in Middle East, International Conference., Cyprus, Nicosia, pp 477-484, 1997.
13. Al-Ghazzawi Z.D. and Abdulla F.A., Assessment of CH4 Emissions from Sanitary Landfills and Raw Sewage-water Dumping Ponds in Jordan in Proceedings of Water Resources Problems in Middle East, International Conference., Cyprus, Nicosia, pp 485-491, 1997

B) Conference papers related to Hydrological Modelling and Environmental Engineering

1. **Abdulla F.**, Dawleh B.A., Abu-Zreig M., Al-Omari A. (2020) Groundwater Numerical Modelling of Amman-Zarqa Basin-Jordan. In: Shehata H., Das B., Selvadurai A., Fayed A. (eds) Advanced Numerical Methods in Foundation Engineering. GeoMEast 2019. Sustainable Civil Infrastructures. Springer, Cham

2. **Fayez Abdulla** and Alham W. Al-Shurafat, (2020), Rainfall-Runoff modeling for Semi-arid and trans-boundary Yarmouk River Basin, 1st International Conference on Optimization-Driven Architectural Design (OPTARCH 2019), November, 2019, Amman, Jordan.
3. Attending the 3rd Regional Conference on “Water Governance in MENA and wider Mediterranean region - Strengthening integrity and financing for water security and sustainable development” 12-14 December, 2017, Barcelona, Spain.
4. Abdulla F. A (2009) Climate Change impacts on the surface water resources in Jordan, paper presented at 14th Jordan Science Week, Higher Council of Science and Technology, Amman-Jordan
5. Abdulla F. and Al-Assa'd T. (2006). Groundwater Model Development for a Jordanian Watershed, Arab Water World (AWW), 30 (4), pp. 52-54.
6. Al-Abed N., Abdulla F.A., and M. Hadadin, **Estimation of meteorological and hydrological drought characteristics of Kufrinja basin**, Jordan International Workshop on Flood or Drought? - in the Middle East, Funded by DAAD, Irbid-Jordan, 26-28, Nov., pp 55-66, 2006
7. Al-Abed N., Abdulla F.A., and M. Hadadin, **Drought Assessment and Management for Zarqa River Basin Using Geographic Information System (GIS)**, paper presented and published in the First National GIS Symposium in Saudi Arabia, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. 21-23 Nov., 2005
8. Abdulla F. A. and Tamer Al-Assad, The Use of Modflow to Study the Possibilities of Artificial Groundwater Recharge to Mujib Watershed, The Third International Conference on Wadi Hydrology, Sana'a, Yemen, 12-14 December, 2005
9. Abdulla F. A. and Amani Al-Shareef, Assessment of Rainwater Roof Harvesting for Household Water Supply in Jordan, paper presented in the Integrated Urban Water Resources Management, NATO Advanced Research Workshop, Senec, Slovakia, October 19-23, 2005, pp 391-400.
10. Abdulla F. A. and Tamer Al-Assad, “Development of Groundwater Model for Mujib Watershed-Jordan”, paper presented in the 4th International Water Conference in the Arab Countries (ARWATEX 2005), Beirut Lebanon, pp. 154-169, 27-30 June, 2005
11. Abdulla F.A., “Evaluation of the impact of climate change on the monthly runoff of a semi-arid catchment-Jordan”, paper presented on the “Joint UNESCO-WRCP Invited Workshop on Applicability of Climate Research and

- Information for Water Resources Management in Semi-arid and Arid region”, Cairo, Egypt, 18-21 April 2005.
12. Abdulla F. A. and Malkawi Husein, Sedimentation problem in Jordanian Dams: Case study King Talal and Kafrein Dams, paper presented in the 3rd International Water Conference in the Arab Countries (ARWATEX 2004), Beirut Lebanon, pp. 114-124, 27-30 September, 2004
 13. Abdulla F., Al-Ghazzawi Z. and M. Al-Khatib, Development of groundwater Modelling for the Azraq Basin-Jordan, paper presented in the International Conference on Calibration and Reliability in Groundwater Modelling: coping with uncertainty, Zurich, Switzerland, 20-23 Sept., 1999.
 14. Abdulla F.A., Impacts of climate change on the water resources of Jordan, paper presented for GCEP/UNDP, Climate change Project, Amman 1998.
 15. Abdulla, F. A., Analysis and Modeling of Rainfall Pattern in Northern Part of Jordan, paper presented in the Second International Conference on Wadi Hydrology, 1-4 July, 2003, Amman, Jordan, October 1997.
 16. Abdulla F.A., B. Nijssen, D.P. Lettenmaier, E.F. Wood, and J.A. Smith, Modeling Large Scale Surface Energy Fluxes Using VIC-2L Model, Paper presented at the European Geophysical Society, General Assembly, Hamburg, Germany, April, 1995.
 17. Abdulla, F.A. and D.P. Lettenmaier, Development of Regional Equations for Parameterization of land Surface Schemes, paper presented at the American Geophysical Union Fall Meeting, San Francisco, USA, December 1994.
 18. Al-Ghazzawi Z.D. and Abdulla F. A., Appropriateness of Waste Stabilization Ponds to Arid and Semi –arid Regions of Middle East. in Proceedings of the second International conference on Sustainability in Desert Region, 20-22 November, 1999. United Arab Emirates University, UAE.
 19. Abdulla F.A. and S. Tekeli, Modeling of Rainfall Pattern in Northern Part of Jordan, First Week Engineering Conference by Jordanian Engineers Association, pp.563- 578, Amman, Jordan, October 1997.
 20. Abdulla F.A. and Al-Ghazzawi Z.D., Assessment of Methane Emissions from Industrial and Municipal Wastewater Treatment Plants in Jordan, paper presented for GCEP/UNDP, Climate change Project, Amman 1997.
 21. Al-Ghazzawi Z.D. and Abdulla F.A., Assessment of CH₄ Emissions from Sanitary Landfills and Raw Sewage-water Dumping Ponds in Jordan. paper presented for GCEP/UNDP, Climate change Project, Amman 1997.
 22. Abdulla F.A., “Sustainable Energy at JUST-Jordan”, paper presented in the

- second Steering Committee Meeting on Regional Collaboration for Energy Efficiency and Renewable Energy Technology, Sponsored by the US Department of State, Office of Citizen Exchange, American University of Beirut, Beirut, Lebanon, 24 January, 2005.
23. Abdulla F.A, “Jordanian paper on National Energy Policies”, paper presented in the Stakeholders Workshop on Regional Energy Policy Outline on Energy Access and Renewable Energy, Sponsored by the Global Network on Energy for Sustainable Development- GNESD, American University of Beirut, Beirut, Lebanon, 5 January, 2005.
 24. Chedid R., Abdulla F, El-Fadel M., Ghaddar N., Mezher T., Khoury H., Harb A., Hamzeh Ali “Initial Assessment of the contribution of renewable energy technologies in Jordan, Syria and Lebanon, paper presented. in the Stakeholders Workshop on Regional Energy Policy Outline on Energy Access and Renewable Energy, Sponsored by the Global Network on Energy for Sustainable Development- GNESD, American University of Beirut, Beirut, Lebanon, 5 January, 2005.
 25. Abdulla F.A., Widyan M., Al-Ghazawi Z., Kiwan S., Abu Qdais H., Hayajneh M., Harb A., Al-Nimr M., “Status of Jordan Renewable Energy Sector: Problems, Needs and Challenges, paper presented in the regional workshop on Energy Efficiency and Renewable Energy Technology, Sponsored by the US Department of State, Office of Citizen Exchange, American University of Beirut, Beirut, Lebanon, 26-30 April, 2004.
 26. Karaki S., Chaaban F., Chedid R., and Mezher T., Hamzeh A., Harb A., and Abdulla F. Electric Energy Access in Jordan, Lebanon and Syria. Paper Prepared for “Energy Access II” Working Group Global Network on Energy for Sustainable Development
 27. Nesreen Ghaddar, Fadl Moukalled , Riad Chedid , Mutasem El-Fadel , and Toufic Mezher , Ali Hamzeh, Ahmad Harb, and Fayez Abdulla "Renewable Energies Technologies Contribution and Barriers to Poverty Alleviation in Jordan, Syria, and Lebanon", 2002
 28. Abdulla F. A., “Preliminary Study on Household Water Security in Irbid City”, First National Conference “Towards a Healthy Environment for Children”, 8-9 July, 2003, Irbid-Jordan.
 29. Al-Omari B. and Abdulla F. A., Pedestrian Accidents among Children in Jordan, First National Conference “Towards a Healthy Environment for Children”, 8-9 July, 2003, Irbid-Jordan.

BOOKS & CHAPTER in Books

1. **Fayez Abdulla**, Wim van Veen, Hani Abu Qdais, Lia van Wesenbeeck , Ben Sonneveld (2018). The impact of climate change on the water availability and recharge of aquifers in the Jordan River Basin. Chapter in Book.
2. Kis, Andras, **Dr. Fayez Abdulla**, Dr. Hani Abu Qdais, Gabor Ungvari. Water Demand Management in the Context of Water Services. Jordan. REKK. July 2016.
3. Kis, Andras, **Dr. Fayez Abdulla**, Dr. Hani Abu Qdais, Gábor Ungvári. Jordan Demonstration Case on the Wadi Shallalah WWTP. Action 1.1 – Capacity Building on Water Demand Management in Jordan and Tunisia within the Water Resources Management Good Practices and Knowledge Transfer project. REC. November 2016.
4. **Fayez Abdulla**, Concept and Technology of Water Harvesting, Chapter in Book "Water Harvesting Handbook" 2019
5. **Fayez Abdulla**, Raoudha Gafrej, Zsuzsanna Nagy, Gergely Palfi, and Evelin Szabo, Water Scarcity and Drought A Good Practice Handbook, This handbook was prepared for the project “Sustainable Use of Transboundary Water Resources and Water Security Management” (WATER SUM), implemented by the Regional Environmental Center (REC) with funding from the Government of Sweden, May 2017.
6. Kis, András, Fayez Abdulla, Moez Allaoui, Hella Ben Brahim Neji, Hani Abu Qdais, Gábor Ungvári. Handbook of Good Practices of Water Demand Management. REC. May 2017. [under publishing]
7. Eshtawi T. And Abdulla F. (2011) Book entitled “Using Hydological Models in the Management of a Semi Arid Watershed: Under the Umbrella of GIS. 124 pages. **Publisher:** LAP LAMBERT Academic Publishing **ISBN-10:** 3844329943 & **ISBN-13:** 978-3844329940
8. Qrenawi L., Qdais H., Abdulla F. (2011) Book entitled “Environmental and Health Risk Assessment of Al-Akaider Landfill”. 160 pages. VDM Verlag Dr. Mueller e.K., 2011, ISBN 3639216350, 9783639216356

MANUALS AND REPORTS RELATED To CLIMAT CHANGE

1. Ehab Eid and **Fayez Abdulla**, "Climate Finance in Jordan", submitted to UN Environment, January, 2020.
2. Hani Abu Qdais and **Fayez Abdulla** report "Survey on Water use, solar energy production and utilization by the farmers in Jordan", submitted to "" Word

Food Center-VU University Amsterdam, November – 2019

3. **Fayez Abdulla**, report on "National Designated Authority for Jordan" submitted to UNEP, Nov. 2019.
4. **Fayez Abdulla**, report on "Green Climate Fund No-Objection Procedure for Jordan", submitted to UN-Environment, December, 2019.
5. **Fayez Abdulla** report on "Water, desertification, and climate change and impact on agriculture" submitted to World Food Program (WFP). December 2018.
6. **Fayez Abdulla**, report on "Hydrological Studies for Estimating PMP and PMF Jordan Research and Training Reactor (JRTR)", JUST, August, 2018
7. **Fayez Abdulla**, report on 'MENA World Café 2017 Issue Papers', WaterSum project, Regional Environmental Center, Hungary, August, 2017.
8. **Fayez Abdulla**, Jawad Al-Bakri, Emad Karablie, Hussien Al-Kisswani, Julie Fabre, Guillaume Thirel (IRSTEA), Lucie Royer; Lisa Russo, Céline Déandreis, report on "Vulnerability Assessment of human water consumption to climate change", December, 2017, ACTERA, France, UNDP.
9. **Fayez Abdulla**, Water, Growth and Stability, 'MENA World Café 2016 Issue Papers' Water related mitigation and adaptation measures to climate change for sustainable growth, Regional Environmental Center, August, 2016
10. András Kis, **Fayez Abdulla**, Hani Abu Qdais, Gábor Ungvári, report on "Jordan Demo case" within the project WATER SUM Sustainable Use of Transboundary Water Resources and Water Security Management, Regional Environmental Center, Hungary, November, 2016.
11. **Fayez Abdulla**, report on "Water and Climate Change Practice Framework Assessment Report, Jordan" submitted to Regional Environmental Center, Hungary, October, 2016.
12. András Kis, **Fayez Abdulla**, Hani Abu Qdais, report on "National workshop on IWRM and adaptation to climate change, held in Jordan on May 26-27, 2016, Regional Environmental Center, Hungary.
13. András Kis, **Fayez Abdulla**, Hani Abu Qdais, Gábor Ungvári "Needs Assessment Report for Jordan" submitted to Regional Environmental Center, Hungary. 2016.
14. András Kis, **Fayez Abdulla**, Hani Abu Qdais, Gábor Ungvári, report on "Water demand management in the context of water services in Jordan",

submitted to Regional Environmental Center, Hungary, July, 2016.

15. **Fayez Abdulla**, report on "21st century projections for precipitation and temperature change in Jordan May, 2015, submitted to Ministry of Water and Irrigation, Amman, Jordan
16. **Fayez Abdulla**, report on "Climate Change Downscaling for Jordan" May, 2015, submitted to Ministry of Water and Irrigation, Amman, Jordan.
17. **Fayez Abdulla**, developing Training Manual on Data Evaluation and Statistical Climate Change Scenarios Downscaling" submitted to Ministry of Water and Irrigation, May 2015, Amman, Jordan.
18. Hani Abu Qdais and **Fayez Abdulla** "Jordan's Assessment of Water Integrity Risks, Target Groups and Capacity Needs" submitted to SIWI-SIDA, Sweden, Nov. 2014.
19. **Fayez Abdulla**, report on "Hydrological studies for Zarqa-Ma'in, Zara, Eshqaiq Wadis" submitted to ORIENT Company, Amman, Jordan, September, 2013
20. **Fayez Abdulla**, report on "Rainwater Harvesting in the Water and Sanitation Plumbing Code" submitted to IDARA Project-USAID, April, 2011.
21. **INDC analysis report Team leader** for the Green Climate Fund project for readiness and Preparatory Support for Jordan, Funded by United Nations Environment Program (UN-Environment), Oct-2018-July 2020.
22. **Participate in** preparing the full funding proposal to Green Climate Fund project "*Building resilience to cope with climate change in Jordan through improving water use efficiency in the agriculture sectors*" Feb. 2020
23. "*Developing a framework for climate vulnerability assessment and adaptive capacity at the local level in Jordan*", GIZ, December 2018.
24. Climate Vulnerability Assessment for Zarqa River Basin Final report, December, 2017 for **ACTERRA** France March, December 2017.
25. "Strategic review on the achievement of sustainable development Goal 2 (Food Security, Nutrition and Sustainable Agriculture) in Jordan, for World Food Programme (WFP) December 2018.
26. "**Let the sun shine; exploitation of the Water-Energy-Food nexus in the Middle East**" for Amsterdam Centre for World Food Studies of the VU University, Amsterdam(ACWFS), **December 2019.**
27. "hydrological study for raising Wala Dam. For ENJICON company, Amman Jordan 2015

28. “Promoting Inclusive Groundwater Governance in the Near East and North Africa the Food and Agriculture Organization of the United Nations (“FAO”). **July 2016.**
29. Assessing climate-change impacts on drought conditions in Jordan, Jordan University of Science and Technology, 2018.
30. “Developing a Gap Analysis and Strategic recommendations for the institutional set up of a sustainable mechanism for GHG inventory leading to an MRV system in Jordan” for Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. **October 2015**
31. **Fayez Abdulla** and Dr.Zsuzsanna Nagy, Practical Guidelines on Adaptation Measures for Water Practitioners under Action 3 – Capacity building on water resources management in a changing climate in Jordan and Tunisia, WATER SUM Sustainable Use of Transboundary Water Resources and Water Security Management, Regional Project funded by Sida, Sweden, July 2017.
32. Report on “**Climate change** downscaling for Jordan” within a project entitled “Regional coordination on improved water Resources Management and capacity building” Funded by GEF, World Bank and NASA, Ministry of Water Irrigation, 2015.
33. Developing a training manual on “DATA EVALUATION AND STATISTICAL **CLIMATE CHANGE** SCENARIOS DOWNSACLING” TRAINNING MANUAL” within a project entitled “Regional coordination on improved water Resources Management and capacity building” Funded by GEF, World Bank and NASA, Ministry of Water Irrigation, 2015
34. Report on “**21st century projections for precipitation and temperature change in Jordan**” within a project entitled “Regional coordination on improved water Resources Management and capacity building” Funded by GEF, World Bank and NASA, Ministry of Water Irrigation, 2015.
35. Report on “**Quantifying the Uncertainty in the National GHG Inventory for the year 2006**” within **Third National Communications (TNC) (2015)**, funded by UNDP, Ministry of Environment , Amman, Jordan
36. James Leten, Pilar Avello, Anthi Brouma, Hani Abu Qdais, Fayez Abdulla, Silva Kerkezian; Nadim Farajalla, Zeinab Farhat, Ahmed Legrouri, Jack Kalpakian, Amer Marei, Yagob Eyad, Latifa Bousslemi, Sihem Benabdallah and Ahmed Ghrabi. **Water Integrity in the Middle East and North Africa region** Synthesis report of Water Integrity Risk Assessments in Jordan,

Lebanon, Morocco, Palestine and Tunisia. Editors: Mufleh Al-Alaween, Maria Jacobson, Alice Jaraiseh, and Josh Weinberg. ISBN: 978-91-88495-05-1.

37. Abdulla F. A. and others (2009) "**Vulnerability Assessment and Adaptation Measures of Climate Change**", Chapter 4, in Jordan's Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC), Ministry of Environment, pp 71-112.
38. Abdulla F.A, "**Climate change** risk management in Wadi Systems in Arab Region" a study submitted to the UNESCO office Cairo, International Hydrological Program. Egypt Cairo.
39. Abdulla F. A (1995) Regionalization of a Macro-scale Hydrological Model. Publisher: University of Washington, Page 388.

OTHER REPORTS RELATED TO HYDROLOGICAL MODELLING & ENVIRONMENT

1. Abdulla F., Al-Abed N., Malkawee A. and Eshitawe T. Report on the "Development of GIS-Hydrological model for Managing water Resources in the Zarqa River Basin", Higher Council of Science and Technology (HCST), Amman, Jordan, 2009
2. Abdulla, F.A., Regionalization of a Macroscale Hydrological Model, Water Resources Series, Technical Report No., 144, University of Washington, Seattle, Washington, U.S.A, 1995.
3. Abdulla, F.A., Abu Qdais H., Rabi A., Medical waste management in northern Jordan. Final Report, submitted to United States Agency for International Development (USAID), Jordan, 2005.
4. Abdulla, F. A., Hydrological investigation of the Kufranja Dam site, Jordan Valley Authority, Ministry of Water and Irrigation, Amman, Jordan, 2006.

Supervised Master Thesis's

1. Comparison of Different Drought Indices In Jordan: Case Study of Mujib Basin, Rushdi Mohammad Ali, 2020 (Note: drought under climate change

- scenarios is investigated)
2. Flash Flood Modelling in Jordan Using Geographic Information System (GIS) and HEC-HMS Software, Yazen Ababneh, 2020. (Note, climate change impacts on Flash flood is studied)
 3. Impact of Climate Change on Water Resources of Mujib Basin, Jordan, Mohammad Bassam Talafah, December, 2019
 4. The Use of Modeling and Simulation for Evaluating Performance and Reliability of Wastewater Treatment Plant Systems Under Different Scenarios, Saif Allah Farhat, October, 2019. (Note: Performance of WWTP under climate change was investigated)
 5. climate change vulnerability assessment for the agricultural sector in the Yarmouk river basin area, Ayat Said Al-Qudah, November, 2019
 6. The Spatial and Temporal Simulation of the Hydrological Water Budget for Yarmouk River Basin under Current and Projected Future Climate, Elham Al-Shrafat, December, 2016
 7. Water Governance and Integrity risk Assessment for Water sector in Jordan, Manal Sami Al-Shraideh, November, 2016
 8. Regionalization of Precipitation for Jordan Using Hierarchical Clustering Analysis Method, Abdellah Al-Godmi, 2018
 9. Impact of Climate Change on Water Resources in Mujib Basin Using Statistical Downscaling Techniques by Various General Circulation Models (GCMs) Experiments, August, 2015
 10. The Impact of Climate Change on Human Health in Water - Stressed Regions: Case Study - Northern Jordan, Rana Beshtawi, June, 2010
 11. Evaluation of ash solidification process from medical waste incineration, Ahmad Dardoor, Sept, 2009
 12. Contribution from solid waste disposal sites to greenhouse gases emissions in Jordan, Lubna Nwaysieh, December, 2007
 13. Forecasting of irrigation water demand in Jordan valley under different water pricing policies, Haitham Ja'afreh, January, 2008
 14. Spatial and temporal analysis of monthly and annual rainfall in Jordan, Maha Abu- Mwais, Thesis under preparation, 2007
 15. Water Demand Management as a tool for Bridging the Gap between supply and

- demand in Jordan, Eynas Al-Qdauh, August, 2006.
16. Using the hydrological models (HSPF & SWAT) in the management of a semi arid watershed, Tamer Eshtawi, July, 2006
 17. Health and Environmental Risk Assessment of Al-Akaider Landfill, Luay Qrenawi, June 2006
 18. Modeling Biogas Production from Russaifah Closed Landfill, Rasha Qedaisat, 2005.
 19. Development of a Mathematical Groundwater Model for the Amman-Zarqa Basin, Bashar Abu Douleh, November, 2005.
 20. The use of MODFLOW to study the possibility of artificial groundwater recharge for Mujeb Basin (Jordan), Tamer Antton, May 2004
 21. Development of three dimensional groundwater model for Dhuleil Area/ Amman-Zarqa basin, Enas Shawaqfah, June 2005.
 22. Evaluation and Analysis of suspended sediments on irrigation network in northern Jordan Valley, Raed Zahrawee, May, 2005
 23. Modeling the Performance of Reverse Osmosis Desalination for Jordanian Brackish Water, Osama Al-Agbar, May 2003.
 24. Drought Assessment and Management in Jordan using Geographic Information Systems (GIS), Muttasum Hadadeen. June 2002.
 25. Application of Geographic Information System as a Management Tool for the Zarqa River basin System, Aymen Abu-Kyarah, July 2002.
 26. Development of a groundwater model for the two upper aquifers (Shallow and Middle) of the Azraq basin, Mohammed Al-Khatib, January, 1999.
 27. Application of hydrological rainfall-runoff models for Greater Zab river basin in the North of Iraq, by Laith Al-Badranih, August. 1998
 28. Development of hydrological models for arid and semiarid regions of the Iraqi Western Desert, Adel Hossain, June 1998
 29. Feasibility of Solid Waste Recycling for Irbid City, Lubna Al-Kaledy, June, 2002.
 30. Economics of wastewater treatment in Jordan/ Developing an Expert System, Suzan Bataineh, June 2000.
 31. Retrofit of RBC System for Nitrogen Removal Experimental Investigation and

computer Simulation, Hoissam Al-kelani, June 1999

32. Application of Global optimization techniques to design optimum RCC water tanks. Mohammed Al-Hassanat, June 1998

FUNDED RESEARCH PROJECTS

1. Simulation of Trihalomethane Formation in Water Distribution Systems, Funded by the Higher Council of Science and Technology (HCST), Amman, Jordan, 2000 (US\$10,000)
2. Preparing a Joint Program Document for Jordan: Adaptation to Climate Change to sustain Jordan's MDG Achievements", funded by UNDP, 2 September – 2 October, 2007. (US\$ 25,000)
3. Piloting climate change adaptation to protect human health" (2006). The project is supervised by World Health Organization/CEHA and funded by GEF/UNDP (US\$20,000)
4. Management of saline soil using Remote Sensing and Geographic information Systems (GIS), Funded by the Higher Council of Science and Technology (HCST), Amman, Jordan, 2000 (US\$19,000)
5. Hydrological study of Wadi Kufranja Dam, funded by Jordan Valley Authority, Ministry of Water and Irrigation, Amman Jordan. (US\$15,000)
6. Household Water Security for Irbid City, Funded by CEHA/WHO, Amman Jordan, 2003.
7. Medical Waste Management Project for Northern Jordan", 2003-2005. Funded by USAID (US\$450,000).
8. Reservoir Management for the Southern Systems of Jordan", 2002-2004. Funded by the USAID.
9. Development of GIS-Hydrological model for Managing water Resources in the Zarqa River Basin, Funded by the Higher Council of Science and Technology (HCST), Amman, Jordan, 2000 (US\$ 9,000)
10. Development of GIS based model for solid waste landfills siting, Funded by the Higher Council of Science and Technology (HCST), Amman, Jordan, 2000 (US\$15,000)
11. Development of a groundwater model for the two upper aquifers (Shallow and Middle) of the Azraq basin, research proposal funded by the Dean-ship of Scientific Research at JUST, March 1999
12. Hydrological and meteorological data investigation and analysis for the Jordan Badia, Funded by Jordan Badia Research and Development Program and the Higher Council of Science and Technology (HCST), Amman, Jordan, Jan. 1997-1999.
13. Impact of climate change on the water resources budget of the Zarqa River basin, research proposal funded by the Dean-ship of Scientific Research at JUST, March 1999.
14. Drought Assessment and Management in Jordan using Geographic Information Systems (GIS), research proposal funded by the King Hussein Environmental Management Training Program and the Canadian International Development Agency, 1998-2000.
15. Waste water treatment Economics, Funded by the Higher Council of Science and Technology (HCST), Amman, Jordan, 2001 (US\$10,000)

16. Ecosystem Approaches to Human Health in North Jordan Valley” Funded by International Development Research Center (IDRC), Canada , 2001. (20,000 Canadian Dollars)

Community service

1. Consultant for phase 1 of the climate change project (the waste sector)
2. Consultant for phase 2 of the climate change project (the waste sector)
3. Participating in all the Climate Change Workshops in Jordan
4. Building Capacity for GHGs Inventory and Action Plans in Response to UNFCCC Communications Obligations Project (GHGs Inventory Workshop), GCEP, Amman Jordan, 15-16 March, 1997. The following papers were presented:
5. Prediction of GHGs Emissions from Solid and Liquid Wastes Treatment Processes up to the year 2040 According to IPCC Approach, Presented in GHGs Inventory Workshop, Climate Change Project, GCEP, Amman, March 1997.
6. 1994, GHGs Emissions/ Liquid and Solid Wastes Treatment Processes, Presented in GHGs Inventory Workshop, Climate Change Project, GCEP, Amman, March 1997.
7. Consultant and member of the National Committee for Dam: Duties preparing reports related to hydrology, hydraulics and environment related to dams.

Language

Arabic : Mother Language

English : Excellent, read, write and speak.

Contact Information

Civil Engineering Department
College of Engineering
Jordan University of Science & Technology
P.O Box 3030
Irbid, 221-10 Jordan

Phone: (H) 962-2-7102351
(O) 962-2-7201000 ext. 22103
Fax: 962-2-7095018
Mobile: 962-795880016
Email: fabdulla@just.edu.jo

Certification:

Dr. Fayez A. Abdulla

Hydrology, Dam Engineering, Climate Change & Water Resources Engineering expert

I, the undersigned, certify that to the best of my knowledge, these data correctly describe me, my qualifications and my experience. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal and/or sanctions by the Client.

Fayez Abdulla, PhD



03.08.2020

Name of expert

Signature

Date

Burak TURAN, PhD

03.08.2020

Name of authorized representative
of the JVA

Signature

Date