

ARIF A. ANWAR PhD, PE (Calif.), MASCE

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An Irrigation/Water Resources Engineer licensed in California, with over 25 years of experience encompassing project management, instrumentation, information technology, engineering design, project planning, construction, academia, research, and international development. A creative systems thinker with excellent interpersonal and communication abilities.

WORK EXPERIENCE

Aug.2025- to date, Visiting Professor, University of Southampton.

I contribute to the work of the Energy and Climate Change Research Group in areas of water resources management, co-supervising researchers and research students and dissemination/publication of research results.

Oct 2022 – to date, Consultant

I have rendered services to World Bank, FAO, ADB, Tetra Tech Inc (USA), MinConsult (Malaysia), WaterSprint (Pakistan), and Associates in Development LLC (USA). My assignments encompassed; analytical work for the Pakistan Floods 2022 Post-Disaster Needs Assessment, a water sector diagnostic study for the ADB Country Partnership Strategy, the preparation of a concept note for ADB to present to the Green Climate Fund, participation in various consultation missions with ADB, advisory to ADB re inter-provincial water issues in the context of the Greater Thal Canal, review/analysis for ADB for the Kurram Tangi Integrated Water Resources Development Project and leadership of the TA Consultants team focused on institutional capacity building and policy advisory analysis, irrigation modernization of the Pehur High Level Canal Extension. As Principal Advisor to the Planning Commission of Pakistan (with financial support of ADB) I conducted reviews of water sector investment including financial and economic feasibility. I conducted analytical work for the ADB-World Bank on water pricing, institutional analysis aimed at strengthening Pakistan's federal water institutions and updating Pakistan's National Flood Protection Plan -IV to pivot towards integrated flood risk management. I led a scoping mission and drafted a scoping study for Tetra Tech, developed the Inception Report for MinConsult for the ADB KP Cities Improvement Project. I executed technical work for the migration of a water database for Associates in Development, and conducted analytical work for the World Bank to assist the Government of Somalia in establishing an inter-operable data management system and more recently a detail hydrological, technical, economic review of one of their investments in Pakistan. I have provided technical analysis for drafting of bills for the Pakistan Flood Commission and also for a Dam Safety Act with the ADB.

Nov 2024 – Apr 2025

Chief of Party, USAID Climate Smart Agriculture, Tetra Tech Inc (USA). I led a team of 20 staff including technical experts, finance, admin and HR. I provided leadership and project management for this 5-year USD25M activity to promote innovative climate smart agriculture practices across Pakistan. I interacted with the USAID, other stakeholders including the Government, private sector businesses, proprietors and individual farmers and regular project updates to Tetra Tech Inc. HQ. I delivered the annual plan, monitoring plan, security plan and led the task on innovative surface irrigation. The project was terminated as a result of changes in the US administration.

Oct 2022 – Nov. 2024, Associate Professor – Water Resources Management, University of Birmingham (Dubai Campus)

I led the development a new Water Resources Management Programme at the University Birmingham (Dubai Campus) as Programme Director and built up a water resources research/enterprise group engaging with local and regional partners. I also delivered undergraduate lectures/tutorials on macro and microeconomics.

Aug 2011 – Jul. 2022, Intl. Water Management Institute (IWMI), Principal Researcher – Irrigation/ Head of Office

I had several roles and developed and managed a portfolio of projects.

1. Project: Water Management for Enhanced Productivity (Sep. 2019 - Jun. 2023)
Funding Agency: US Agency for International Development
Lead Implementing Partner: International Water Management Institute

Value: \$7.5M

I led the team as Chief of Party to deliver on this activity and was responsible for all Annual Plans, budgets, quarterly performance reports, overall quality control, financial responsibility etc. The project focused on the Khyber Pakhtunkhwa province of Pakistan to improve water governance and water management practices to bring about socio-economic and development outcomes. I led the development of the concept, proposal budgeting to contracting.

2. Project: Water Innovation Technology (Apr. 2017 - Dec. 2021)

Funding Agency: US Agency for International Development

Lead Implementing Partner: Mercy Corps

Sub-awardee: International Water Management Institute

Value: \$35M

I led the IWMI team on monitoring of water savings, capacity building and developing and addressing learning agenda (research) questions for the project and water resources development in Jordan. This project aimed to save 18.5 Mm³ of water through water innovation and technology in Azraq and Mafraq governorates of Jordan. IWMI's component for which I was Team Lead was approximately 10% of this total value.

3. Project: Principal Advisor Water Resources (Jun. 2020 - Jun. 2021)

Funding Agency: Asian Development Bank

Lead Implementing Partner: Arif Anwar (Consultant through firm – IWMI)

Value: \$30K

I provided technical socio-economic institutional analysis and advisories to the Planning Commission for water sector projects and recommendations for reform to address systemic issues. This project developed as a result of the Planning Commission of the Ministry Planning Development and Special Initiatives, Government of Pakistan requesting for my services (through IWMI). Project: Pakistan Water Security Diagnostic (May.2017- Jun. 2018)

Funding Agency: World Bank

Lead Implementing Partner: Intl. Water Management Institute

Value: \$200K

I led the development of the proposal and led the IWMI Team working closely with Dr Bill Young at the World Bank and Dr Steve Davies at IFPRI. This project developed the water security diagnostic for Pakistan and the publication "[Pakistan: Getting More from Water](#)" which is a well respected and extensively cited report on Pakistan's water challenges.

4. Project: Fostering Trust Amongst Pakistan's Water Institutions (Jun.2011- May 2016)

Funding Agency: UK Department for International Development

Lead Implementing Partner: Intl. Food Policy Institute

Sub-contractor: Water Management Institute

Value: \$200K

I led the IWMI team to secure this US\$200k sub-project "Fostering Trust amongst Pakistan's Water Institutions". I led the development of the concept note, proposal and through to successful contracting, and contributed to delivery and closure. This project strengthened institutional capacity and policy making by fostering evidence-based decision-making on public policy issues.

5. Project: Pakistan Water Dialog (Sep.2013- Sep. 2015)

Funding Agency: US Department for Agriculture

Lead Implementing Partner: Intl. Water Management Institute

Value: \$330K

I led the team to develop the concept through to contracting, delivery and closure of this project. The project developed a national consensus action plan on improving agriculture productivity and living better with floods through dialogue and interaction with stakeholders across the country to develop a consensus on the key issues. The activity was further extended by three months with an additional US\$75K to support specific actions identified in the consensus action plan.

6. Project: Informing Change in the Indus Basin (Sep.2013- Sep. 2015)

Funding Agency: UK Department for International Development
Lead Implementing Partner: Intl. Water Management Institute
Value: \$2M

I had a key role working in the team to develop the concept proposal, budgeting to contracting. For geo-political reasons (the project was regional in nature and included India) I could not lead the project. I led two of the components, facilitating workshops with national stakeholders across Pakistan at the federal and provincial level. The work on inter-provincial water issues addressed a particularly contentious issue. DfID provided a cost extension to this component and continued interest in this work has also led to the subsequent award of follow-on project.

7. Project: Pakistan Strategy Support Programme (Jun.2011- May 2016)

Funding Agency: US Agency for International Development
Lead Implementing Partner: Intl. Food Policy Institute
Sub-contractor: Intl. Water Management Institute
Value: \$200K

I led the development of the concept note, proposal and through to successful contracting, delivery and closure of this project. The project investigated the impact of timely, credible, accessible information on water governance. I led the IWMI team to secure a US\$200k sub-project “Assessing options for effective water governance in Pakistan’s Indus Basin Irrigation System”.

8. Project: Revitalizing Irrigation in Pakistan (Aug.2011- Nov 2014)

Funding Agency: State of the Netherlands
Lead Implementing Partner: Intl. Water Management Institute
Value: \$4M

I led the project team developing annual plans, budgets, periodic progress reports, leading/contributing to scientific enquiry, publications, capacity building of this project. The primary objective of this project was to develop innovative ways of managing the water resource (surface and ground) to improve ecosystems services and livelihoods sustainably.

In my capacity as Head of Office, I had management responsibility for the IWMI Pakistan Office and the surrounding region of Afghanistan, Iraq, and Iran. This role encompassed overseeing the country office at Lahore as well as various project field offices. I was tasked with developing the national strategy and budgets, drafting and executing the Security and Evacuation plan, and managing HR functions such as goal setting and evaluations. Additionally, I ensured that policies were implemented and updated as necessary, engaged with both governmental and non-governmental entities, and collaborated with national and international partners. I represented IWMI on both national and international stages to formulate concept notes, project proposals, and provide professional advice and guidance. I regularly met with and presented to visitors, government officials, and diplomats to disseminate knowledge and research, facilitated partnerships with other CGIAR organisations, and supervised and mentored staff under my reporting line.

Feb 1997– July 2011, University of Southampton, UK (17 years)

Deputy Head of School (Education), School of Civil Engineering and the Environment

Associate Professor, School of Civil Engineering and the Environment

I held responsibility for all the educational programmes within the School of Civil Engineering and the Environment at both undergraduate and graduate levels, which comprised approximately 700 enrolled students. Additionally, I served as Programme Director for the largest of these programmes—the Civil and Environmental Engineering programme, which had over 350 enrolled students. My contributions included the development of a master plan “Curriculum 2010” aimed at reforming the curriculum, of which I implemented the initial three years (after which I took a sabbatical). I led the accreditation process for the engineering programmes for both the UK Engineering Council and ABET. This involved the preparation of all self-evaluation documents, as well as organizing visits, meetings, and post-visit responses. I developed a comprehensive relational database that became the de facto information system for the School. I served as Admissions Tutor for a period of three years, a key public-facing role that entailed reviewing applications,

meeting with prospective parents and students, organising visit days, and presenting information about the University and the curriculum. I was able to increase undergraduate applications from 390 to nearly 800 over three years. I taught a variety of undergraduate and postgraduate courses in hydraulics, hydraulic engineering, irrigation, and water resources planning and management. Additionally, I supervised numerous graduate students and seven research students to the successful completion of their doctorate. I developed a highly specialised research area focusing on the application of operations research tools in the management and operation of water resources.

Oct 1996 – Jan 1997

Engineer with the Anti Narcotics Section of the US Embassy, Islamabad, Pakistan

This relatively short employment was curtailed due to an employment opportunity at the University of Southampton, UK. During this period I worked on various small development projects in rural areas encouraging farmers to switch over from cultivation of poppy to cash crops. My responsibilities involved inspecting sites, designing small projects, tendering, checking bills submitted and reimbursement to the various line departments.

April 1988 – Oct 1996

Assistant Engineer with the Irrigation Department, Government of N-WFP, Pakistan

For the first three years of my tenure I worked on a World Bank funded planning project using the Indus Basin Model and Plan Generator developing a medium (10 year) water resources investment plan. This project involved review of project proposals, and use of modelling tools to evaluate the economic impact. During the latter part of my tenure, I worked on an Asian Development Bank funded project. My responsibilities included surveying, reviewing designs, contract documents, site supervision of construction including quality control and measurement ranging from tunnel repairs, canals and various hydraulic structures. During this period I played a key role working closely with the consultants to piloting pre-cast parabolic channels as a construction technology that is now the standard method for construction of small channels. I led hydraulic testing of full scale pre-cast canal turnout structures.

ACADEMIC QUALIFICATIONS

- MSc Economics and Econometrics University of Southampton, UK. May.2010
- MSc (Software Engineering), The Open University, UK. Dec. 2002
- PhD Civil Engineering University of Southampton, UK. Sep. 2000
- M.Sc. Irrigation Engineering (with distinction), University of Southampton, UK. Jul. 1996
- MSc Civil Engineering (Water Resources Engineering), N-W.F.P. University of Engineering & Technology, Peshawar, Pakistan. May.1996
- BSc Civil Engineering (with Honours), N-W.F.P. University of Engineering & Technology, Peshawar, Pakistan. Apr. 1987

PEER-REVIEWED JOURNAL PUBLICATIONS

1. Amdar, N., Anwar, A., Elmahdi, A., Al-Bakri, J., Jewitt, G., & Mul, M. (2025). Insights into the Potential of Water Conservation in Irrigated Agriculture: A Case Study from the Arid Mediterranean Highlands. *Water Conservation Science and Engineering*, 10(2), 1-16.
2. Bhatti, M. T., Anwar, A. A., & Hussain, K. (2023). Characterization and outlook of climatic hazards in an agricultural area of Pakistan. *Scientific Reports*, 13(1), 9958.
3. Farrar, L. W; Bahaj, A S; James ,P Patrick; Anwar, A; Amdar, N. (2022) “Floating solar PV to reduce water evaporation in water stressed regions and powering water pumping: Case study Jordan”, *Energy Conversion and Management*, Pergamon, 260(115598).
4. Bell, A.R.; Ali Shah M.A. Anwar, A. and, Sam, T (2022) “Crafting spaces for good water governance in Pakistan” *Water Resources Research*. e2021WR031265
5. Bhatti M. T. and Anwar A. A (2022) “Statistical verification of 16-day rainfall forecast for a farmers advisory service in Pakistan”. *Agricultural and Forest Meteorology*, Elsevier 317.
<https://doi.org/10.1016/j.agrformet.2022.108888>
6. Shah M.A, Bell A.R. and Anwar A. A. (2022) “Enabling Volumetric Flow Measurement in the Indus Basin

- Irrigation Scheme: Perceptions and Conflict Reduction”. Water Resources Research, AGU <https://doi.org/10.1029/2020WR029464>
7. Anwar A.A. and Bhatti M.T. (2021) “Routing field channels through a tertiary unit with heterogeneous fields” J. Irrig. Drain. Eng. ASCE. 147(9) [doi.org/10.1061/\(ASCE\)IR.1943-4774.0001592](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001592)
 8. Bhatti M.T. Ashraf M., Anwar A.A. (2021) “Erosion and Sediment in a Transboundary River Catchment: Appraisal and Management”, Sustainability, Multidisciplinary Digital Publishing Institute 13, 3547. <https://doi.org/10.3390/su13063547>
 9. Anwar A.A. and Ahmad W. (2020) “Precision Surface Irrigation with Conjunctive Water Use” Sustain. Water Resour. Manag. Springer. 6, 75. <https://doi.org/10.1007/s40899-020-00434-3>
 10. Bhatti M.T., Anwar A.A., and Shah A.A.(2019). “Revisiting Telemetry in Pakistan's Indus Basin Irrigation System”, Water, Multidisciplinary Digital Publishing Institute 11(11)2315 doi.org/10.3390/w11112315
 11. Young W.J., Anwar A., Bhatti T., Borgomeo E., Davies S., Garthwaite III, W.R., Gilmont E.M., Leb Christina, Lytton L., Makin I., Saeed B. (2019) “Pakistan: Getting More from Water”, World Bank.
 12. Anwar A.A., and Richards D.J. (2018) “A Comparison of EC and ABET Accreditation Criteria” J. Prof. Issues in Engrg. Educ. ASCE 144(3). [doi.org/10.1061/\(ASCE\)EI.1943-5541.0000364](https://doi.org/10.1061/(ASCE)EI.1943-5541.0000364)
 13. Anwar A. A. and, Bhatti T.M. (2017) “Pakistan’s Water Apportionment Accord 1991 – 25 Years On” J. Water Resources Planning and Mgmt. 144(1) ASCE. [doi:10.1061/\(ASCE\)WR.1943-5452.0000831](https://doi.org/10.1061/(ASCE)WR.1943-5452.0000831)
 14. de Vries T.T., Anwar A.A., and Bhatti T.M. (2017) “Canal Operations Planner. III: Minimizing Inequity with Delivery Performance Ratio Relaxation” J. Irrig. Drain Eng., ASCE 143(9). doi: [10.1061/\(ASCE\)IR.1943-4774.0001218](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001218)
 15. Anwar A.A. and, de Vries T.T. (2017) “Sequential Irrigation Scheduling Avoiding Night Irrigation” J. Irrig. Drain. Eng., ASCE. doi: [10.1061/\(ASCE\)IR.1943-4774.0001178](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001178)
 16. Bhatti, MT; Anwar. AA and Aslam, M (2017) "Groundwater Monitoring and Management: Status and Options in Pakistan", Computers and Electronics in Agriculture, Elsevier. 135:143-153 doi:[10.1016/j.compag.2016.12.016](https://doi.org/10.1016/j.compag.2016.12.016)
 17. Haq Z.U. and Anwar A.A. (2017) “Simultaneous irrigation scheduling GA model with identical discharges and travel time” J. Irrig. Drain. Eng., ASCE, 143(2) doi: [10.1061/\(ASCE\)IR.1943-4774.0001125](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001125) ,
 18. Shah A., Anwar A., Bell A.R., and Haq Z.U. (2016) “Equity in a Tertiary Canal of the Indus Basin Irrigation System” Agriculture Water Management, Elsevier 178:201–14 doi: [10.1016/j.agwat.2016.09.018](https://doi.org/10.1016/j.agwat.2016.09.018)
 19. Anwar A. A., Bhatti T.M., and de Vries T.T. (2016) “Canal Operations Planner I: Maximizing DPR” J. Irrig. And Drainage Engrg., ASCE 142(12) doi: [10.1061/\(ASCE\)IR.1943-4774.0001091](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001091)
 20. Anwar A. A., de Vries T.T., and, Bhatti T.M. (2016) “Canal Operations Planner II: Minimizing Inequity” J. Irrig. And Drainage Engrg., ASCE 142(12) doi: [10.1061/\(ASCE\)IR.1943-4774.0001092](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001092)
 21. Awan K.U., Anwar A.A., Ahmad W., and Hafeez M (2016) “A methodology to estimate equity of canal water and groundwater use at different spatial and temporal scales - A Geo-informatics approach” Journal of Environmental Earth Sciences, 75: 409. doi: [doi: 10.1007/s12665-015-4976-4](https://doi.org/10.1007/s12665-015-4976-4)
 22. Anwar, A. and Haq, Z.U. (2016). "Arranged-Demand Irrigation Scheduling with Nonidentical Discharges." J. Irrig. Drain Eng, ASCE. 142(9) doi: [10.1061/\(ASCE\)IR.1943-4774.0001029](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001029)
 23. Anwar A.A., Ahmad W., Bhatti T.M., and Haq Z.U. (2016) “The Potential of Precision Surface Irrigation in the Indus Basin Irrigation System” Irrigation Science, Elsevier. 34(5): 379-396.[doi:10.1007/s00271-016-0509-5](https://doi.org/10.1007/s00271-016-0509-5)
 24. Bell, A. Shah, A. Anwar, A. and Ringler, C. (2015). “What role can information play in improved equity in Pakistan’s irrigation system? Evidence from an experimental game in Punjab”. Ecology and Society 20(1):51.
 25. Anwar A.A. and Richards D.J. (2015) “The Washington Accord and US Licensing Boards”, J. of Prof. Issues in Engrg. Educ., ASCE. 141(4) doi: [10.1061/\(ASCE\)EI.1943-5541](https://doi.org/10.1061/(ASCE)EI.1943-5541)
 26. de Vries, T. and Anwar, A. (2015). "Irrigation Scheduling Using Complex Machine Scheduling." J. Irrig. Drain Eng. ASCE. 141(5). doi: [10.1061/\(ASCE\)IR.1943-4774.0000824](https://doi.org/10.1061/(ASCE)IR.1943-4774.0000824)
 27. Claudia R. and Anwar A.(2013) Water for food security: challenges for Pakistan, Water International, Routledge, 38(5):505-514.
 28. Anwar A.A. and Haq Z.U. (2013) “An Old-New Measure of Canal Water Equity” Water International, Routledge, 38(5):536-551
 29. Anwar A.A., and Richards D.J. (2013) “USA set to dominate accreditation of engineering education and professional qualifications”, Proceedings of the ICE – Civil Engineering, doi: [10.1680/cien.12.00012](https://doi.org/10.1680/cien.12.00012)

30. Anwar A.A., and Haq Z.U. (2012) "Genetic Algorithms For The Sequential Irrigation Scheduling Problem", Irrigation Science, Springer Berlin/Heidelberg. 31: 815.
31. Sissons M.F., James P.A.D., Bradford J., Myers L.E., Bahaj A.S., Anwar A., Green S. (2011) " Pole-mounted horizontal axis micro-wind turbines: UK field trial findings and market size assessment" Energy Policy, Elsevier 39(6):3822-3831
32. James P. A. B., Sissons M.F., Bradford J., Myers L. E., Bahaj A. S., Anwar A. A., and Green S, (2010). "Implications of the UK Field Trial assessment of Building Mounted Horizontal Axis Micro-Wind Turbines" Energy Policy 38(10):6130-6144.
33. Haq Z.U. and, Anwar A.A (2010) "Irrigation Scheduling with Genetic Algorithms" J. Irrig. and Drain. Engrg., ASCE 136(10):704-714.
34. Haq Z.U., Anwar A.A., and Clarke D. (2008) "Evaluation of a Genetic Algorithm for the Irrigation Scheduling Problem". J. Irrig. and Drain. Engrg., ASCE. 134(6):737-744.
35. de Vries T.T., Anwar A.A. (2006) "Irrigation Scheduling with Travel Times". J. Irrig. and Drain. Engrg., ASCE 132(3):220-227.
36. Anwar A.A., Clarke D., and de Vries T.T., (2006) "Channel Capacity Under Arranged Demand Irrigation". Agricultural Water Management, Elsevier 82:148-160.
37. Anwar A.A., and Clarke D. (2005) "Design of Hydraulically Efficient Power-Law Channels with Freeboard". J. Irrig. and Drain. Engrg., ASCE 131(6):560-563.
38. Anwar A.A. and de Vries T.T. (2004) "Irrigation Scheduling II: A Heuristics Approach". J. Irrig. and Drain. Engrg., ASCE 130(1):17-25.
39. de Vries T.T. and Anwar A.A. (2004) "Irrigation Scheduling I: An Integer Programming Approach". J. Irrig. and Drain. Engrg., ASCE 130(1):9-16.
40. Anwar A.A. and de Vries T.T. (2003) "Hydraulically Efficient Power Law Channels" J. Irrig. and Drain. Engrg. ASCE 129(1):18-26
41. Anwar A.A. and Bahaj A.S. (2003) "Student Project Allocation using Integer Programming". IEEE Transactions on Engineering Education, IEEE, 46 (3):359-67.
42. Anwar A.A. and Clarke D. (2001) "Irrigation Scheduling using Mixed Integer Linear Programming". J. Irrig. and Drain. Engrg. ASCE 127(2):63-69.
43. Anwar A.A. (2000) "Adjusted Average Correction Factors for Sprinkler Laterals." J. Irrig. and Drain. Engrg. ASCE 126(5):296-303.
44. Anwar A.A.(2000) "Correction Factors for Center-Pivots with End-Guns" J. Irrig. and Drain. Engrg. ASCE 126(2):113-118.
45. Anwar A.A.(2000) "Inlet Pressure for Tapered Horizontal Laterals" J. Irrig. and Drain. Engrg. ASCE 126(1):57-63.
46. Anwar A.A. (1999) "Adjusted Factor G_a for Pipelines with Multiple Outlets and Outflow" J. Irrig. and Drain Engrg. ASCE, 125(6):355-360.
47. Anwar, A.A. (1999) "Factor G for pipelines with equally spaced multiple outlets and outflow." J. Irrig. & Drain. Engrg., ASCE 125(1):34-38.
48. Anwar, A.A. (1999). "Baffle Sluice Modules with Improved Performance." J. Irrig. & Drain. Engrg., ASCE, 125(2):91-95

PEER-REVIEWED CONFERENCE PROCEEDINGS

1. Hamid Y, Anwar A, and Aslam M (2015) "Capture of Flood Water" 73rd Annual Session of Pakistan Engineering Congress, Pakistan Engineering Congress, Lahore Pakistan
2. Lashari B.K., Anwar A., Aslam M (2015) "Efficient Application of Water On Farm", 73rd Annual Session of Pakistan Engineering Congress, Pakistan Engineering Congress, Lahore Pakistan
3. Bhatti A.K., Anwar A., Aslam M (2015) "Groundwater Issues" 73rd Annual Session of Pakistan Engineering Congress, Pakistan Engineering Congress, Lahore Pakistan
4. Ashraf M., Anwar A., and Aslam M. (2015) "Irrigation Scheduling", 73rd Annual Session of Pakistan Engineering Congress, Pakistan Engineering Congress, Lahore Pakistan
5. Memon N.A., Anwar A., and Aslam M. (2015) "Minimizing Flood Damages TO Agriculture", 73rd Annual

- Session of Pakistan Engineering Congress, Pakistan Engineering Congress, Lahore Pakistan
6. Gill M.A., Anwar A., and Aslam M. (2015) "On Farm Water Storage", 73rd Annual Session of Pakistan Engineering Congress, Pakistan Engineering Congress, Lahore Pakistan
 7. Kakar A.W., Anwar A., and Aslam M. (2015) " Rainwater Harvesting", 73rd Annual Session of Pakistan Engineering Congress, Pakistan Engineering Congress, Lahore Pakistan
 8. Asghar M.W., Anwar A., and Aslam M. (2015) "Surface Water Issues", 73rd Annual Session of Pakistan Engineering Congress, Pakistan Engineering Congress, Lahore Pakistan
 9. de Vries T.T., and Anwar A.A. "Equitable Canal Water Allocation" World Environmental and Water Resources Congress 2015: 736-744.
 10. Anwar. A, Shah. A, Aslam, M (2014) Modernizing a public irrigation scheme. A case study of Pakistan's Hakra canal scheme. Reforms in management of public irrigation system. Bengaluru, India 30 – 31 Oct. 2014
 11. Bell, A. Shah, A. Anwar, A. and Ringler, C. 2013. Is information the key to improved equity in Pakistan's irrigation system? Evidence from an experimental game in Punjab, IASC 2013, Japan
 12. Haq Z.U., and Anwar A.A., (2012) "Application Of Genetic Algorithm To Sequential Irrigation/Single Machine Scheduling Problem", GEM'12 - The 2012 International Conference on Genetic and Evolutionary Methods, Las Vegas July 16-19, 2012.
 13. Sissons, M.F, James, P.A.B., Myers, L.E., Bahaj, A.S., Anwar, A.A., Double, K. and Russil, J. (2007) UK field trial assessment of the potential of microwind in the built environment. In, Proceedings International Networking of Young Scientists (INYS) on Renewable Energy, Kuala-Lumpur, Malaysia, 12 - 16 Nov 2007.
 14. Clarke, D. and Anwar, A.A. (2006) Flexibility vs Inertia in irrigation water management. In, The International Commission on Irrigation and Drainage (ICID.UK)
 15. Wiseman, A.J. and Anwar, A.A. (1999) Baffle sluice constant discharge modules. In, 17th International Congress on Irrigation and Drainage, Granada, Spain 1999 on the Theme "Water for Agriculture in the Next Millennium". , International Commission on Irrigation and Drainage, 48-56.

PROFESSIONAL QUALIFICATIONS AND MEMBERSHIPS

1. Professional Engineer (California) [License no. 82732](#)
2. Member ASCE
3. Member Pakistan Engineering Council

VOLUNTARY/PRO BONO WORK

1. Associate Editor, ASCE Journal of Irrigation and Drainage Engineering.
2. ABET Program Evaluator
3. Systems Analyst/Developer [KP-Water](#), GoKP Irrigation Department.

SKILLS AND LANGUAGES

English	(Read/Write/Spoken)
French	(Read/Write/Spoken) Average
Pashto	Spoken only
Urdu	Spoken only
Computer	MS Office, Java, VBA, MS SQL, STATA, LINGO, Python, PostgreSQL, PostGIS
Date of Birth	June, 12, 1964.
Nationality	UK, Pakistan
Driving license	UK, US (California)
Prof. Licenses	Professional Engineer – California , Professional Engineer – Pakistan.

AWARDS

Chevening Scholar	1994-95
Ghali Award for Best Design Exercise	1995
Binnie Black and Veatch Award for Best Examination Results	1995
Halcrow Award for Best Dissertation	1995