

*Curriculum Vitae*  
DR. MUHAMMAD ZUBAIR KHAN  
Department of Water Management,  
NWFP Agricultural University,  
Peshawar Pakistan  
Tel: (O) +92 91 9216 544;  
E-mail: [zubair@aup.edu.pk](mailto:zubair@aup.edu.pk)

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- Current Areas of Interest**
- Modelling of irrigation systems through hydrodynamic models
  - Analysis of urban/domestic water supply and sewage systems through Geographic Information Systems (GIS)
  - Renewable Energy (hydropower) from water resources systems
  - Energy efficiency in buildings
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**PERSONAL**

Date of Birth: January 12, 1968  
Place of Birth: NWFP, Pakistan  
Citizenship: Pakistani

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**Education**

Ph.D. – Civil Engineering (Irrigation and Water Resources), University of Engineering and Technology, Taxila (Pakistan), 2006. *Investigation of optimal operation strategies for operation of irrigation systems.*

M.Sc. – Irrigation, Wageningen University (The Netherlands), 1999. *Water management in the civil canals of NWFP – Study of water distribution.*

M.Sc. – Water Management, Agricultural University Peshawar (Pakistan), 1992. *Comparison of supply and demand at tertiary level in the command of Jui Sheikh Canal irrigation system.*

B.Sc. – Water Management, Agricultural University Peshawar (Pakistan), 1990.

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**Awards and Fellowships**

Post Doctoral Fellowship, Higher Education Commission, Government of Pakistan (2008- 2009)

Indigenous PhD Fellowship, Higher Education Commission, Government of Pakistan (2001-2005)

M.Sc. Fellowship,  
Wageningen University, The Netherlands (1997-1999)

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**Employment**

2009 – to date    **Assistant Professor**  
Department of Water Management,  
NWFP Agricultural University, Peshawar, Pakistan.

2008- 2009        **Visiting Post Doctoral Fellow**  
School of Civil Engineering and the Environment,  
University of Southampton, United Kingdom

2005 – 2008	<b>Assistant Professor</b> Department of Water Management, NWFP Agricultural University, Peshawar, Pakistan.
1996 - 2004	<b>Lecturer</b> Department of Water Management, NWFP Agricultural University, Peshawar, Pakistan.
1993 - 1996	<b>Lecturer/research Officer</b> WAMA Project, at AUP Wageningen University, The Netherlands.
<b>Courses Taught</b>	Irrigation System Design, High Efficiency Irrigation Systems, Water Resources Planning and Management, Project Studies Water Management
<b>Students Supervised</b>	Supervised (4) and Co-supervised 10 MSc students. Supervised (2) BSc Internship students
<b>Computer Experience</b>	<i>Numerical canal simulation models</i> : Simulation of Irrigation Canals (SIC), CANALMAN <i>Geographical Information Systems</i> : Arc GIS, Arc INFO, Arc View, <i>Remote Sensing</i> : ILWIS. <i>Programming</i> : Delphi <i>General</i> : MS Office applications, Windows Vista/XP/98.
<b>Journal Publications</b>	<ol style="list-style-type: none"> <li>1. Shah.T., Ul Hassan. <b>M, Z. Khattak</b>, M.Z, Banerjee. P.S, Singh. O.P, and S. Rehman. 2009. Is Irrigation water free? A reality check in the Indo-Gangetic Basin. World Development. Vol. 37 No. 2 422-434</li> <li>2. Ghumman, A.R., <b>Khan, M.Z.</b> and H. Turrall. 2009. Study of feasibility of night-closure of irrigation canals for water saving. Agricultural Water Management. 96 (2009) 457-464.</li> <li>3. <b>Khan, M.Z.</b> and A.R. Ghumman. 2008. Hydrodynamic modelling for water-saving strategies in Irrigation canals. Irrigation and Drainage. Published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/ird.375.</li> <li>4. Ul-Hassan, M., T. Shah, S. Ur. Rehman, M. Z. Khattak, F. Tanwir, M. Z. K. , A. Saboor, and B. K. Lashari. 2008. Diesel price hike and the energy squeeze on Pakistan's smallholder irrigators. Journal of Applied Irrigation Sciences, 43(1): 19-40.</li> <li>5. Ghumman, A.R., <b>Khan, M.Z.</b> Khan, A.H. and S. Munir. 2008. Assessment of operational strategies for logical and optimal use of irrigation water in a downstream control system. Published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/ird.464.</li> <li>6. Khan. G.D., M. Shah, M. Tariq, <b>M. Z. Khan</b> and Naveedullah. 2007. Impact of water table depths on the physical properties of salt affected soil and yield of sugarcane in Mardan SCARP area. Sarhad J. Agric. Vol. 23, No. 2.</li> <li>7. <b>Khan, M.Z.</b>, Ghumman, A.R., Khattak. M.K. and G.D. Khan. 2007. Use of Hydrodynamic Modeling to Assess the Performance of Dagai Distributary of Maira Branch of Upper Swat Canal Irrigation System. Sarhad J. Agric. Vol. 23, No. 4.</li> <li>8. Khan. G.D., M. Shah, M. Tariq, <b>M. Z. Khan</b> and Naveedullah. 2007. Impact of</li> </ol>

water table depths on the physical properties of salt affected soil and yield of sugarcane in Mardan SCARP area. Sarhad J. Agric. Vol. 23, No. 2.

9. N. Ahmad., J.A. Tariq., **M.Z. Khan** and M. A. Shah. 2007. Evaluation of Water Management Practices at Three Outlets of Joe Sheikh Canal Peshawar, Pakistan. Sarhad J. Agric. Vol. 23, No. 4.
10. Ghumman, A.R., **M.Z.Khan**, G. D. Khan and M. K Khattak. 2007. Assessment of supply and irrigation demand for Dagai Distributary of the Maira Branch of Upper Swat Canal Irrigation System. Sarhad J. Agric. Vol. 23, No. 2.
11. M. K. Khattak, Mughal. A.Q., Jamal.L. A., Khan.S. A. and M. Z. Khan. 2007. Economic evaluation of deep and shallow tillage practices under maize fallow rotation. Sarhad J. Agric. Vol. 23, No. 2.
12. Ghumman, A.R., **Khan, M.Z.**, and M.J.Khan. 2006. Use of Numerical Modeling for Management of Canal Irrigation Water. Irrigation and Drainage. 55: 445-458.
13. **M. Z. Khan.**, M. K. Khattak, M.J.Khan. and M. Asrar. 2005. Comparison of Water Supply and Demand for the Rabi Season at Tertiary Level in The Command of the Jui Sheikh Canal Irrigation System. Sarhad J. Agric. Vol.21, No.3, 2005.
14. M. . Khan., **M.Z. Khan.**, S. Ahmad and M. Asrar. 2000. Hydraulic Performance Evaluation of Surezai Minor of the Warsak Gravity Canal Irrigation System. Sarhad J. Agric.Vol. 16 No. 4.
15. N. Ahmad., M.Z. Khan., and A. A. Khan. 2004. Effect of salinity and Sodicity on Crop Production at Kot Kashmir (Lakki Marwat). Sarhad J. Agric. Vol.20, No.4, 2004.

#### **Proceedings Papers**

1. Khan, M. J. Khan, Munawar Khan Khattak and M. Zubair Khan, 2006. "Evaluation of traditional Rod-Kohi irrigation system of D. I. Khan, Proceeding of the International Conference on Water and Environment, held in Agriculture University Faisalabad, October, 2006
2. Ghumman, A.R., Muhammad Zubair Khan and Muhammad Jamal Khan, 2005. Investigation of waterlogging and salinity using geographic information system. International Conference on GIS & RS Riyadh, Saudi Arabia.
3. Ghumman A.R., Muhammad Zubair Khan and Muhammad Jamal Khan, 2004. Use of geographical information system (GIS) to evaluate salinity and changes in water tables in SCARP Mardan. International Seminar on Salinity Mitigation for Efficient Water Resources Management, September, 25, 2004.
4. Khan. M. J., K. S. Babar and M. Z. Khan. 1999. Hydraulic Performance Evaluation of Pabbi Minor of Warsak Gravity Canal Irrigation System. Proceedings of Pakistan Council for Research in Water Resources.

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Date \_\_\_\_\_