



## **KHALIFA QASIM LAGHARI (PhD.)**

Professor (HEC –Pak approved PhD. Supervisor)

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### **PERSONAL BACKGROUND**

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Born: September 15, 1964, Citizenship: Pakistan, Married, 2 Children

### **OBJECTIVE**

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An enthusiastic, adaptive and fast-learning with a broad and acute interest in the discovery of new innovative irrigation water management systems, I particularly enjoy collaborating with scientists from different disciplines to develop new skills and solve new problems/challenges in Irrigation-water delivery systems.

### **ABILITIES**

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- Management
- Create a Positive Learning Environment
- Group Counselling
- Delivery of Lectures
- Organizing seminars/workshops/Networking
- Evaluate Performance
- Listening ability
- Real Research & Results Oriented

### **RESEARCH INTEREST**

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Irrigation water management; irrigation scheduling; crop consumptive water use (evapotranspiration); precision irrigation; water resources; surface irrigation scheduling systems computer-modeling, water table management, efficient use of water, water harvesting, crop water requirements study

### **EDUCATION**

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**2009**

**PhD. (Irrigation Engineering)**

Mehran University of Engrg. and Tech., Jamshoro, Pakistan

Dissertation Title: "Perceptive Research on Irrigation Scheduling and Water Management"

**1993**

**M.E (Hydraulics & Irrigation Engineering)**

Mehran University of Engrg and Tech., Jamshoro, Pakistan

Thesis Title: "Scouring Downstream of Hydraulic Structure"

**1990**

**B.E (Agriculture Engineering)**

Sindh Agriculture University, Tandojam, Pakistan

Final year Project Title: "Design and Fabrication of Soil Profile Meter"

## ACADEMIC AWARDS AND HONORS

- **Merit Scholarship (2004)** – Fellowship for Ph.D., Mehran UET. Jamshoro, Pakistan
- **Author's Shield (2008)** - Mehran UET. Jamshoro, Pakistan
- **Gold Medal in M.E. (1993)** – Scholarship from PCRWR . First Position in the Class, Mehran UET. Jamshoro, Pakistan
- **Silver Medal in B.E. (1990)** - First Position in the Class, Sindh Agriculture University, Tandojam

## PROFESSIONAL EXPERIENCE

- 2012 – Up to date**      **Professor**  
Dept. of Civil Engineering, Mehran UET Jamshoro, Sindh, Pakistan.  
Teaching and Research on subjects Applied Hydraulics, Irrigation Engineering and Fluid Mechanics.
- 2009 – 2012**            **Associate Professor**  
Dept. of Civil Engineering, Mehran UET Jamshoro, Sindh, Pakistan.  
Teaching and Research on subjects Applied Hydraulics, Irrigation Engineering and Fluid Mechanics.
- 1998 – 2009**            **Associate Professor**  
Dept. of Civil Engineering, Mehran UET Jamshoro, Sindh, Pakistan.  
Teaching and Research on subjects Applied Hydraulics, Irrigation Engineering and Fluid Mechanics.
- 1993 – 1998**            **Lecturer**  
Dept. of Civil Engineering, Mehran UET Jamshoro, Sindh, Pakistan.  
Teaching and Research on subjects Applied Hydraulics and Surveying.

## FIELD EXPERIENCE

- 2004 – 2009              Ph.D. Research  
Irrigation scheduling, Irrigation water management of Wheat and Cotton Crops

## SUBJECTS EXPERTISE

- Irrigation Engineering
- Applied Hydraulics
- Irrigation Water Management
- Water Resources Management
- Soil Water Plant Relationship
- Hydrology
- Fluid Mechanics
- Drainage Engineering

## SUBJECTS EXPERTISE MAJOR FIELDS OF UNDERGRADE PROJECTS

- Irrigation Scheduling Systems
- Applied Hydraulics
- Fluid Mechanics
- Irrigation Engineering

## PROFESSIONAL AFFILIATIONS

- **Member** of Hydrologic Engineering Center-River Analysis System (HEC-RAS) Eric Tate Center for Research in Water Resources, USA.
- **Member** of Project Evaluation at Higher Education Commission, Pakistan.
- **Member** of Editorial Board, Journal of agriculture engineering, veterinary sciences of SAU Tandojam, Pakistan.
- **Member** of Departmental of Review Committee (DRC), Mehran UET, Jamshoro, Pakistan.
- **Member** of senate Committee of Mehran UET, Jamshoro, Pakistan
- **Member** of Selection Board SAU Tandojam (Irrigation Engineering Expert)
- **Member** of Pakistan Engineering Council (PEC)

## TECHNICAL TRAININGS

- Training on “English Language Improvements & Class Room Methods” (28<sup>th</sup> Sep – 3<sup>rd</sup> Oct, 1993) sponsored by British Council, UK at ELC, MUET, Jamshoro, Sindh, Pakistan.
- Technical training on “Barrage Hydraulics” (Jun–Aug, 1998) in Technological University of Tajikistan, Dushanbe, Islamic Republic of Tajikistan.
- Training workshop on “Efficient Irrigation Management Practices” (July 10–12, 2007) under the linkage program between Mehran University and Colorado State University, Fort Collins, USA, sponsored by HEC Pakistan.

## RESEARCH SUPERVISED

- **Supervised 18 B.E students** as their Major-Advisor on their research projects.
- **Supervised 2 M.E students** as their Major-Advisor on their research projects.

## TECHNICAL SKILLS

- Irrigation Water Management by Computer Model
- Meteorological Data Observation through Equipment

## OTHER COMPUTER SKILLS

- Microsoft Office (Word, Excel, Power Point, Visio) – Expert Level
- Assured in effective working with Internet, as well as web development tools
- Computer Modelling by Visual Basic-6

## CONFERENCES / SEMINARS / SYMPOSIA / WORKSHOPS ATTENDED

- June 4-6, 2014**      **Conference - (attended)** - Water: 21st Century Challenges & Way Forward, Saving Water for Humanity Foundation International (SWHFINT) and IFPRI-USAID, Department of Civil Engineering, UET, Lahore, Pakistan.
- March 16-19, 2013**      **Conference – (attended)** - International Conference on Intelligent Water Distribution Systems (IWDS), IRSA Islamabad.
- March 7-8, 2011**      **Conference - (attended)** - International Conference on Water Resources Engineering & Management. UET. Agricultural University Faisalabad, Pakistan
- Dec 2009**      **Seminar** – Research paper presentation Irrigation Water Management by Simulation Model  
IIDE, MUET, Jamshoro M.D Hall MUET, Jamshoro.
- March 4-5, 2008**      **Conference - Paper presented** - International Conference on Engineering Management [ICEM], Benchmarking Management Practices in Developing Countries. Dept. of Civil Engineering, Mehran UET, Jamshoro.
- July 10-12, 2007**      **Workshop** - Efficient Irrigation Management Practices  
Under the linkage program between Mehran University and Colorado State University, Sponsored by HEC, Islamabad. IIDE, MUET Jamshoro
- Dec 6, 2006**      **Conference - Paper presented** - International Water Day, M.D Hall MUET Jamshoro

## PEERED REVIEWED RESEARCH JOURNAL PUBLICATIONS

1. A Nindwani, B.K Lashari, A.H Memon, K.Q Laghari, H.M Hammad, W Farhad, [2014] "Impact of Drainage Water Use for Crop Irrigation". Journal of Science International, ISI Indexed, Publications International, Lahore, Pakistan

2. Ashfaque A. Memon, Khalifa Q. Leghari, Agha F. H. Pathan, Kanya L. Khatri, Sadiq A. Shah, Kanwal K. Pinjani, Rabia Soomro, Kameran Ansari, [2013]., "Design and Evaluation of Dadu Canal Lining for Sustainable Water Saving" *Journal of Water Resource and Protection*, 5, pp. 689-698 doi:10.4236/jwarp.2013.57069 Published Online July 2013 (<http://www.scirp.org/journal/jwarp>). U.S.A. based Journal.
3. Hafiz Mohkum Hammad, Ashfaq Ahmad, Wajid Farhad, Farhat Abbas, Khalifa Qasim and Shafqat Saeed, [2013] "Nitrogen Stimulates Phenological Traits, Growth and Growing Degree Days of Maize" *Pakistan Journal of Agri. Sci.*, Vol. 50 No:3, pp.337-344; 2013.
4. Hammad, H.M., A. Ahmad, Laghari, K.Q., Farhat A., Wajid N., Wajid F., and Ali H.M. [2011]. "Organic Farming in Wheat Crop Under Arid Condition of Pakistan", *Pakistan Journal of Agric. Sci*, ISSN (Print) 0552-9034, ISSN (Online) 2076-0906, V.48, No.2, pp.97-102, Pakistan.
5. Manohar, L., Lashari, B.K., Laghari, K.Q., [2011]. "Flood Frequency Analysis of Main Nara Valley", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V.30, No.1, pp. 125-134. Sindh, Pakistan.
6. Hammad, H.M., A. Khaliq, A. Ahmad, M. Aslam, A.H. Malik, W. Farhad, and Laghari, K.Q [2011]. "Influence of Different organic Manures on Wheat Productivity". *International Journal of Agric. Biol.*, 13: 137-140 ISSN Print: 1560-8530; ISSN Online: 1814-9596, 10-395/HUT/2011/13-1-137-140, Pakistan.
7. Lashari, B.K., Laghari, K.Q., Phul, A.M., [2010]. "Development of Irrigation Scheduling Model", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V.29, No.4, pp. 681-688. Sindh, Pakistan.
8. Laghari, K.Q., Lashari, B.K., Memon, H.M., [2010]. "Water Use Efficiency of Cotton and Wheat Crops at Various Management Allowed Depletion in Lower Indus Basin", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V.29, No.4, pp. 661-672. Sindh, Pakistan.
9. Phul, A.M., Lashari, B.K., Laghari, K.Q., [2010]. "Remodeling of Kalri Baghar (K.B) Feeder", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V.29, No.4, pp. 689-696. Sindh, Pakistan.
10. Siddqui, R., Lashari, B.K., Laghari, K.Q., [2009]. "Calibration and Simulation of Cutthroat Flumes for Measuring Discharge", *Mehran University Research journal of Engineering & Technology*, ISSN 0254-7821, V. 28 No.3, pp. 385-392, Sindh Pakistan.
11. Lashari, B.K., Laghari, K.Q., Ujjan, G.M., [2009]. "Participatory Management of Reforms in Irrigation Sector of Sindh", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V. 28, No. 4, pp. 573-580, Sindh, Pakistan.
12. Laghari, K.Q., Lashari, B.K., Laghari, N.Z., [2009]. "Sensitivity Analysis of Weather Based Irrigation Scheduling Model", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V. 28, No. 4, pp. 565-572, Sindh, Pakistan.
13. Laghari, K.Q., Lashari, B.K., Memon, H.M., [2008]. "Perceptive Research on Wheat Evapotranspiration in Pakistan", *Journal of Irrigation and Drainage*. V. 57, pp. 571-584. John Wiley & Sons, Ltd. UK. ([www.interscience.wiley.com](http://www.interscience.wiley.com)).
14. Laghari, K.Q., Lashari, B.K., Memon, H.M., [2008]. "Computer-Based Irrigation Scheduling of Cotton Crop", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V. 27, No. 3, pp. 293-306. Sindh, Pakistan.
15. Laghari, K.Q., Sarki, A., Phul, A.M., [1999] "Conveyance Losses in Lined and Unlined Watercourses of Latif Minor", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V. 18, No. 4, pp. 251-254. Sindh, Pakistan.
16. Laghari, K.Q., Sarki, A., Phul, A.M., [1998]. "Effect of Potential Head on the Efficiency of Pelton Wheel", *Mehran University Research Journal of Engineering & Technology*, ISSN: 0254-7821 (print). V. 18, No. 1, pp. 19-26. Sindh, Pakistan

17. Laghari, K.Q., Qureshi, A.L., Phul, A.M., [1996]. "A Model Study of Scour Downstream of Sluice Gates", Mehran University Research Journal of Engineering & Technology, ISSN: 0254-7821 (print). V. 15, No. 3, pp. 6-10. Sindh, Pakistan.
  18. Hammad, H. M., F. Abbas, A Ahmad, K. Q. Laghari and W. Farhad,. [2015]. Water and nitrogen application stimulate maize resource capture and use efficiency under semi-arid environment. *Turkish Journal of Field Crop Research* (Submitted).
  19. Hammad, H. M., F. Abbas, K. Q. Laghari, W. Farhad, G. M. Shah, M. A. Khan, W. Nasim and M. Mubeen. [2015]. Integrated use of organic manure to enhance soil organic carbon and wheat yield. *Journal of Plant Nutrition* (Submitted).
  20. Mahessar, A.A., Qureshi, A.L., Kori, S.M., Faowui, G.S., Memon, N.A, Memon, A.A., Laghari, K.Q. [2020]. Sediment Transport Dynamics in the Upper Nara Canal Off-taking from Sukkur Barrage of Indus River. *Engineering, Technology & Applied Science Research* Vol. 10, No. 6, pp. 6563-6569
  21. Mahessar, A.A., Qureshi, A.L., Siddiqui, B., Kori, S.M., Mukwana, K.C., Qureshi, A.S., Leghari, K.Q., [2020]. Rainfall Analysis for Hyderabad and Nawabshah, Sindh, Pakistan. *Engineering, Technology & Applied Science Research* Vol. 10, No. 6, pp. 6597-6602
  22. Hammad, H.M., Abbas F., Ahmad A., Fahad S., Laghari K.Q., Alharby H., Farhad W., [2016]. "The effect of nutrients shortage on plant's efficiency to capture solar radiations under semi-arid environments", *Environmental Science and Pollution Research* Vol. 23, pp 20497-20505
  23. Leghari N., Mughal A.Q, Leghari K.Q, Farhad W., Mirjat M.S., Hammad H.M., [2016]. "Effect of various tillage practices on soil properties and maize growth", *Pakistan Journal of Botany* Vol. 48, No. 3, pp 1173-1182
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