

### Dr. Tahir Sarwar

Professor

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# **RESEARCH INTEREST:**

Deficit Irrigation, Agro-climatic Zoning, Water Quality Assessment, Performance Evaluation of Irrigation and Drainage Systems, Crop Water Productivity, Water Harvesting, GIS/RS Applications

#### **EDUCATION:**

- Ph.D. Water Resources Iowa State University, USA 01/1993 – 12/1995
- M.Sc. (Hons) Agriculture (Water Management) NWFP Agricultural University, Peshawar, Pakistan 09/1989 – 08/1991
- B.Sc. (Hons) Agriculture (Water Management) NWFP Agricultural University, Peshawar, Pakistan 09/1985 – 08/1989

## **PROFESSIONAL TRAININGS / CERTIFICATES:**

- Remote Sensing Applications in Water Management The University of Agriculture, Peshawar, Pakistan
- Application of GIS and Remote Sensing to Mountain Agric. and Land Use Management International Centre for Integrated Mountain Development (ICIMOD), Nepal
- Hydrological Modeling
   Pakistan Forest Institute, Peshawar, Pakistan
- GIS and its Application to Irrigation Management International Water Management Institute (IWMI), Lahore, Pakistan
- Soil and Water Conservation
   Wageningen Agricultural University, The Netherlands
- Agro-Meteorology Wageningen Agricultural University, The Netherlands
- Preparation of ADP/Project Formulation & Appraisal & Responsibilities Thereof.
   Staff Training Institute, Peshawar, Pakistan
- W/C, P.L.L. and Irrigation Agronomy
   On-Farm Water Management Training Center, D. I. Khan, Pakistan
- Irrigation Delivery Scheduling
   Wageningen Agricultural University, The Netherlands

## **DISTINCTIONS/AWARDS/FELLOWSHIPS:**

Postdoctoral Fellowship
 Higher Education Commission, Govt. of Pakistan
 01/2008 – 01/2009

- Research Excellence Award lowa State University, USA 12/1995

Merit Scholarship
 Ministry of Education, Govt. of Pakistan
 01/1993 – 12/1995

 First Position in M.Sc. (Hons)
 Dept. of Water Management, NWFP Agricultural University, Peshawar, Pakistan 05/1992

 First Position in B.Sc. (Hons)
 Dept. of Water Management, NWFP Agricultural University, Peshawar, Pakistan 08/1989

 Bronze Medal in B.Sc. (Hons)
 NWFP Agricultural University, Peshawar, Pakistan 08/1989

### **WORK EXPERIENCE:**

Professor

Dept. of Water Management, The University of Agriculture, Peshawar, Pakistan 01/2010 – Present

- Chairman

Dept. of Water Management, The University of Agriculture, Peshawar, Pakistan 01/2016 – 01/2019

 Postdoctoral Research Fellow University of Nebraska – Lincoln, USA 01/2008 – 12/2008

- Associate Professor

Dept. of Water Management, The University of Agriculture, Peshawar, Pakistan 01/2005 – 12/2009

- Assistant Professor

Dept. of Water Management, The University of Agriculture, Peshawar, Pakistan 09/2000 – 12/2004

- Lecturer

Dept. of Water Management, The University of Agriculture, Peshawar, Pakistan 02/1997 – 08/2000

Water Management Officer
 On-Farm Water Management, Govt. of NWFP, Pakistan
 12/1990 – 01/1997

# **TRAININGS / SHORT COURSES CONDUCTED:**

- Crop Water Requirement, Irrigation Scheduling and Surface Irrigation Design
- Irrigation Operation & Management
- Watercourse Design and Improvement for Water Management Officers
- Water Management for Field Assistants
- Watercourse Improvement for Sub-Engineers
- Watercourse Design and Improvement for Social Organizers
- Watercourse and Water Storage Tank Design for Water Management Officers of Balochistan Agric. Dept.
- Crop Substitution
- Sustainable Use of Water Resources
- Irrigation Infrastructure Development and Water Management Practices
- Local Water Harvesting Technologies and Management Systems
- Equity in Water Distribution at Farm Level

### **COURSES TAUGHT:**

### **Undergraduate Courses:**

- Fundamentals of Water Management
- Soil, Plant Water Relations
- Hydrology
- Irrigation Scheduling
- Agricultural Drainage
- Agricultural Meteorology
- Water Quality
- GIS & Remote Sensing

### Postgraduate Courses:

- Optimal Use of Water
- Remote Sensing and its Applications
- Climate Change and Water Resources
- Water Quality Management
- Water Harvesting
- Sprinkle and Trickle Irrigation

### **RESEARCH SUPERVISED:**

- Supervised 03 Ph.D. scholars as Member Supervisory Committee
- Supervised 28 M.Sc. (Hons) students as Major-Supervisor/Chairman Supervisory Committee
- Supervised 19 M.Sc. (Hons) students as Co-Supervisor/Member Supervisory Committee
- Supervised 25 B.Sc. (Hons) students as Internship Supervisor

### RESEARCH AND DEVELOPMENT PROJECTS EARNED:

- Enhancing resilience of communities through exploring the effects of climate change on the rainfall patterns, and existing rainwater management and livelihood practices of communities in Khyber Pakhtunkhwa Province.

Funded By: Norwegian Church Aid, Norway.

Approved Cost: Rs. 2.495 million

 Evaluation of Spatio-temporal changes in water logging and salinity of SCARP Mardan using GIS and GPS.

Funded By: Higher Education Commission, Govt. of Pakistan

Approved Cost: Rs. 0.200 million

Economizing on-farm consumptive water budget of sole and mix forage cultivation.

Funded By: Higher Education Commission), Govt. of Pakistan.

Approved Cost: Rs. 0.200 million

Management of small-scale water logging and salinity in major irrigated areas of NWFP.

Funded By: Pakistan Council of Research in Water Resources, Islamabad.

Approved Cost: Rs. 4.475

- Evaluation and development of appropriate water harvesting technologies.

Funded By: Pakistan Council of Research in Water Resources, Islamabad.

Approved Cost: Rs. 0.255 million

 A case study for alleviation of small-scale water logging and salinity problem in Peshawar valley.

Funded By: Pakistan Council of Research in Water Resources, Islamabad.

Approved Cost: Rs. 0.253 million

Strengthening the Department of Water Resources Management at AUP.

Funded By: Higher Education Commission, Govt. of Pakistan.

Approved Cost: Rs. 3.60 million

 Strengthening & Development of NWFP Agricultural University Peshawar (Water Management Component).

Funded By: Higher Education Commission, Govt. of Pakistan.

Approved Cost: Rs. 36.0 million

#### **PUBLICATIONS:**

<u>Total Publications:</u> 33

In Peer Reviewed Journals: 26

In Workshop/Seminar Proceedings: 07

# MEMBERSHIP OF ACADEMIC BODIES / COMMITTEES:

- Convener, Board of Studies in Water Management 2016 to 2018
- Member, Board of Advanced Studies and Research 2015 to date
- Member, Board of Faculty, Crop Production Sciences 2010 to date
- Member, Board of Faculty, Crop Protection Sciences 2017 to date
- Member, Board of Studies of Environmental Sciences, COMSATS, Abbottabad 2015 to 2018
- Convener, National Curriculum Revision Committee in Water Management 2010, 2014
- Member, Departmental Promotion & Appointment Committee 2015 to date
- Member, Selection Committee, AUPS&C 2015 to 2017
- Member, Academic Council 2017 to date
- Convener/Member, Enquiry Committees 2014 to date