## Bakhshal Khan Lashari, PhD

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### **CAREER PROFILE**

Dr. Lashari has more than 40 years of working experience as an educationist and Principal Scientist. His primary focus is on the research and its implementation in the field of water. He has been involved in various national and international forums, academic institutes, research organizations, policy centers related to the water sector. Recently he has successfully completed a five year (2014-2019) USAID funded project to establish the US-Pakistan Center for Advanced Studies in Water (USPCASW) at Mehran UET, Jamshoro. The main purpose of the center is to resolve the waterrelated challenges through high-quality education and research focusing on SDG-6. Under his leadership, the center has created seven academic programs (4 graduate and 3 Ph.D.) related to the water sector; these programs are Water Sanitation and Health Sciences, Integrated Water Resources Management, Hydraulics Irrigation and Drainage, and Environmental Engineering. As a researcher, his focus was on to promote research on water-related challenges and suggest policies and recommendations to prevent problems especially related to the food security (irrigation water management), environment (water for nature), health (water quality and sanitation) and disaster risk reduction (climate change forecasting related to droughts and floods). During the project period, he created linkages with various national and international organizations such as government departments, (irrigation department, local government, WASAs, WAPDA, PCRWR, SIDA), NGOs (Oxfam, MetaMeta, NRSP, RDF, MDF, UNICEF, UNDP), academic and research organizations (University of Utah, Colorado State University, University of Nevada Las Vegas, Charles Sturt University, University of South Australia, Asian Institute of Technology), Multilateral donor organizations (World Bank, Asian Development Bank, ICARDA, ACIAR), industries (sugar, textile, fisheries).

In his career he has worked with various organizations in different capacities, these organizations include International Water Management Institute (IWMI), NUFFIC-Netherlands, USAID, CIDA, World Bank, ADB, IsDB, FAO, UNICEF, Oxfam, ACIAR Australia, MetaMeta Netherlands, ICARDA, Action Aid Pakistan; WWF Pakistan; Lead Pakistan and many local institutions and provincial and national governments departments. Further, he has been engaged in collaborative academic and research activities with the University of Utah USA, University of Nevada Las Vegas USA, Colorado State University Fort Collins USA; Charles Sturt University Australia; University of South Australia, Adelaide; UNESCO-IHE Delft; SaciWATERs- Cap-Net and AIT Thailand.

Further, during his professional life, he has been awarded the most prestigious educational awards, i.e., Endeavour Award for postdoc by Australian Government in 2008, Fulbright award for postdoc by the USA in 2004-05, best university teacher's award 2002 by the government of Pakistan and the best job performance award 1999 by International Water Management Institute Pakistan. He

has written more than 100 research scientific papers and reports published in refereed journals, international/national conferences. He has also supervised more than 50 master's students and 2 Ph.D. scholars to complete masters and Ph.D. degrees.

Dr. Lashari has strong leadership skills, building networks with organizations and communities in the country and globe. He has ability to work in an environment of multidiscipline, multicultural, and multi-sector societies. Dr. Lashari has provided training to several community people in rural areas, agency staff, farmer communities, rural activists including male and females, faculty members, engineers, workers and policymakers on various aspects of rural livelihoods, disaster management, public health, irrigated agriculture, policy planning, project management, land management, and education.

### **EDUCATION**

- Post Doctorate (Endeavour Award): University of South Australia (Groundwater water policies and governance)

2008.

- Post Doctorate (Fullbright): Colorado State University Fort Collins, USA (Interdisciplinary and Integrated Approach of Agriculture Drainage in Pakistan) 2004-05.
- Ph.D.: Agriculture University, Cracow, Poland (Sediment Transport) 1994.
- M.E.: Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan (Hydraulics and irrigation) 1984.
- B.E: Sindh Agriculture University, Tando Jam, Pakistan (Agricultural Engineering) 1980.

### WORK AND EMPLOYMENT HISTORY

Developing strategic planning and fund raising

<b>National Project Coordinator</b> for the project Adopting to Salinity in Southern Indus Basin Funded by Australian Centre for International Agriculture Research, Australia	March 2021 – Continue
Agriculture Research, Australia	
Professor Emeritus	March 2020 - Continue
Summary of activities	<u>'</u>
Research and Networking	
Project Director, US-Pakistan Center for Advanced Studies in	Dec 2014 to March
Water, Mehran UET Jamshoro funded by USAID	2020
Summary of activities	
Managing administrative activities and team, including faculty a	nd administrative staff.
Developing linkages with International and National Institutions	and organizations.

# Director, Institute of Water Resources Engineering & Management, Mehran UET Jamshoro

2006 to Dec 2014

## **Summary of activities**

- Managing administrative activities and team, including faculty and administrative staff.
- Organizing training programs for field engineers and farmer communities,
- Organizing conferences, workshops, and seminars related to water management (surface and groundwater), water policy, and water governance.
- Developing linkages with national and international institutes and organizations.
- Fundraising, conducting research on institutional reforms such as farmers' participation, teaching to postgraduate and graduates.

# Professor Meritorious, Institute of Water Resources Engineering and Management, Mehran UET Jamshoro

May 2011 – Sep 2015

# **Summary of activities**

- Teaching to postgraduates including Ph.D. and Masters fellows
- Conducting research related to groundwater, surface water, water quality, water policy and governance, ecosystem,

# Professor, Institute of Water Resources Engineering and Management, Mehran UET Jamshoro

May 1996- April 2011

## **Summary of activities**

- Teaching to graduates on irrigation water management, drainage engineering, open channel hydraulics, sediment transport.
- Supervising Ph.D. and M.E students for research projects
- Establishing Laboratories
- Conducting outreach research
- Writing research proposals for funding

Carrying over independent research

# Associate Professor, Mehran UET Jamshoro

1990-1996

## **Summary of activities**

- Teaching to the undergraduates on fluid mechanics, Hydraulics and irrigation engineering
- Conducting laboratory demonstration for the students
- Assisting students to arrange and conduct experiments
- Supervising to students for doing research projects
- Providing training to field engineers

Arranging group discussion

## **Assistant Professor, Mehran UET Jamshoro**

-1990

# **Summary of activities**

- Teaching to the undergraduates on fluid mechanics, Hydraulics and irrigation engineering
- Conducting laboratory demonstration for the students
- Assisting students to arrange and conduct experiments
- Supervising to students for doing research projects
- Providing training to field engineers

Arranging group discussion

Lecturer, Mehran UET Jamshoro	1982 – 1985
Summary of activities	
Teaching and research	
Research Assistant, Mehran UET Jamshoro	1980 -1982
Summary of activities	
Teaching and research	
Operation and Maintenance (O&M) Specialist, IWMI, World Bank funded project	Nov 1995- July 1997

# **Summary of activities**

- Provide training to field engineers and farmers and community people,
- Conduct research on the impact of water management and drainage on water productivity and socio-economic condition of the farmers, holding workshops on water policy, water governance, and institutional reforms in the irrigation sector.
- Provide technical support to Area Water Boards (AWBs) and Sindh Irrigation and Drainage Authority (SIDA)
- Provide guidance to the Master's students to complete thesis for Master's Degree, writing reports and present to the clients

# **Summary of activities**

Project planning and management, close coordination with water sector professionals and water community, technical support to Area Water Boards (AWBs) and Sindh Irrigation and Drainage Authority (SIDA) and community, developing policy frameworks for all three tiers organization, developing networking with professionals and community leaders for implementation of water policy.

### CONSULTANCY SERVICES / PROJECTS

2024	Impact assessment of 54 small dams constructed under the Sindh Resilience Project (SRP) in the Sindh Province funded by the WB (Underway) Working as Water Resources Management Specialist.	
2022-23	Impact assessment of 14 small dams constructed under the Sindh Resilience Project (SRP) in the Sindh Province funded by the WB (completed) Worked as Water Resources Management Specialist	
2020-22	Preparation of Sindh Water Policy (SWP) funded by FAO and WB. Activities: Working as a Consultant, Preparing Technical background paper through extensive literature survey and background studies. Holding consultative meetings with stakeholders and drafting SWP	
2016-17	WASH Baseline Survey, Knowledge, Attitude and Practices, Ward No. 3 of Thatta City funded by NRSP, Pakistan	

2014	"Integrated Water Resources Management" Implement at graduate and undergraduate in universities Train the trainers SIDA funded by World Bank
<b>Activities:</b>	Designed survey tool, analysis, and prepared report.
<b>Activities:</b>	Designed survey tool, collect data and analysis, and prepared report.
2017-18	Water Scarcity in Lower Sindh – Reality vs. Myth: An Exploratory Study of Akram Canal Command Area funded by Oxfam, Pakistan
<b>Activities:</b>	Designed survey tool, analysis, and prepared report.
2019-20	End-line survey funded by Oxfam, Pakistan
Activities: consultation	Developed background paper through a literature survey and stakeholder n.
2019-20	Socio-Economic Situation of Sindh Background paper funded by World Bank
<b>Activities:</b>	Designed survey tool, collect data and analysis, and prepared report.
2019-20	Baseline survey of Spate Irrigation Sindh and Baluchistan, funded by MetaMeta, Netherlands
2020	Preparation of IsDB Water Sector Policy funded by IsDB. Activities: Worked as a Consultant of Asia Region, Prepared Technical background paper through extensive literature survey, prepared joint water policy of three region (Asia, Mena and Africa), presented technical paper in stakeholder workshops organized for experts and member countries of IsDB.
2020-21	Preparing Background paper on Hydro-Agro Informatics program: funded by the WB.  Activities: Working as a Consultant to develop background papers through extensive consultation with stakeholders, literature survey and frequent meetings with relevant departments.
2020-21	Preparing Background paper on conjunctive management of surface and groundwater funded by the WB.  Activities: Working as a Consultant to develop background papers through extensive consultation with stakeholders, literature survey and frequent meetings with relevant departments.
2020-21	Preparing Background paper on groundwater: funded by the WB. Activities: Working as a Consultant to develop background papers through extensive consultation with stakeholders, literature survey and frequent meetings with relevant departments.

**Activities:** Consultative workshop of various water-related stakeholders including industries, private sector, academic institutions, provincial and federal level organization. Preparation of courses based on feedback from the consultative workshop. This degree program course focuses on water policy, governance, sustainable management of resources.

# 2013-14 Training for the Trainers: Conjunctive Management of Surface and Groundwater funded by NUFFIC-Netherlands

**Activities:** Interacting with water professionals, trained the professionals on best practices of conjunctive use of water, bringing professionals and farmer community at one platform to jointly work together. Collecting relevant data on groundwater, water quality, surface water availability and provide training to water-related officials from SIDA, WAPDA, OFWM, and Universities

# Evaluating and developing strategies for Irrigation water management and agricultural productivity in Pakistan, funded by CIDA and WB under project FODP- Water Task Force

**Activities:** Developing water strategies for Pakistan through organizing consultative workshops, collecting data on water resources and agriculture productivity, Diagnosed and analyzed the situation on water resources and agriculture productivity, discussed with stakeholders and evaluated the problems, and developed framework for a future action plan and prepared report and submitted to the clients (Ministry of Water and Power, Government of Pakistan)

# 2010 Sector Review on Irrigation and Power Department, Government of Sindh for Mid Term Budgetary Framework, Government of Sindh

**Activities:** Reviewed various technical issues of irrigated agriculture including irrigation and drainage, waterlogging and salinity, water productivity that supports to develop the water policy framework

# 2009 Energy Efficient Free Housing for Disaster Affected Areas of Thatta and Karachi, Sindh Pakistan funded by Government of Sindh and UNDP

**Activities:** Meeting with the local community, sharing benefits of the energy-efficient approach, providing support to technical people for better understanding, and designing of energy-efficient tools based on local and indigenous approaches.

# 2008-2009 Promoting Eco-Tourism and Improving Environmental Conditions of Keenjhar Lake, District Thatta, Sindh Pakistan funded by UNDP.

**Activities:** Monitoring and supervising of the project

# 2007-2008 Preparing feasibility report for transitioning SCARP Tube wells to the community, Department of Water and power funded by Government of Sindh

**Activities:** Assessing the benefits of involving farmer community to manage the fresh groundwater, developing strategies for transitioning of public tube wells to the Private sector for optimum and efficient use of the natural resource.

2006	Promotion of High-Efficiency Irrigation Systems in Sindh by the
	Agriculture Department, Government of Sindh

**Activities:** Checked and verified the design of micro irrigation systems and their proper installation, ensured the quality of work, provided training to field engineers and community activists. 2004-05 Third-party Monitoring and Evaluation of reforms in Water Sector in Sindh under National Drainage Programme by Government of Pakistan **Activities:** Meeting with community, professionals and other relevant beneficiaries to determine the advantages and disadvantages of reforms in the irrigation sector of Sindh and prepare a framework for the way forward 2004 Design and Installation of trickle irrigation system and lining of watercourses and construction of water storage reservoirs in Sindh funded by National Drainage Program, Government of Pakistan **Activities:** Checked and verified the design of the micro irrigation system and their installation, ensured the quality of work, including installation and operation and maintenance. Checked design of watercourse lining and its proper implementation and ensuring the quality of lining of watercourse and construction of reservoirs 2001-03 Technical support to Farmer Organization Council (Funded by OXFAM **Activities:** Provided technical services to FOs, provided training to FOs and WUA. 2001-03 Sindh Irrigation and Drainage Authority (IRC-SIDA) Activities: Worked on the policy framework, impact assessment of reforms on the institutional framework, role of various tiers of water management such as WUA, FOs, AWB, and SIDA. 2001-04 Dissemination of developed saline water techniques to farmers in Sindh by WAPDA Activities: Provided technical guidance and suggestions, held farmers days and disseminated

### PRINCIPLE SCIENTIST OF SELECTED RESEARCH PROJECTS

research findings to the farmers and stakeholders

2021-cont.	2021-cont. National coordinator: Adopting to Salinity	
	in Southern Indus Basin funded by Australian Centre for	
	International Agriculture Research (ACIAR)), Australia	
The adapting	to salinity in the Southern Indus Basin (ASSIB) project aims to develop and	
investigate ad	aptation options and strategies with people managing and living in salinity	
affected agric	ultural landscapes in southern Indus Basin. The project's holistic approach	
2016 - 2020	"Improving groundwater management to enhance agriculture and	
	livelihoods in Pakistan' funded by Australian Centre for International	
	Agriculture Research (ACIAR), Australia	
Background research studies, groundwater modeling, community involvement for efficient		
and optimum	use of groundwater, the role of community in managing groundwater,	
developing an	d understanding the policy framework for the management of groundwater	

# 2016 - 2019

# Efficient Participatory Irrigation Institutions to Support Productive and Sustainable Agriculture in South Asia" funded by Australian Centre for International Agriculture Research (ACIAR), Australia

Assessing the role of farmer organization, canal area water, and Sindh Irrigation Drainage Authority, and other relevant stakeholders, integration of joint management approach, policy dialogue with irrigated agriculture community, integrating the institutional role of in better management of water resources.

## 2013 - 2017

Watershed Rehabilitation and Irrigation Improvement in Pakistan: Demonstrating and Disseminating the Best Practices and Technology to help Rural Farmers funded by ICARDA-USDA

Developing networking with professionals and community for understanding the impact of innovative technologies on water conservation, sustainable livelihood of agriculture community, dissemination of various water conservation techniques, provide trainings and farmers workshops.

## 2007 - 2009

Sustainable management of fresh groundwater use for irrigated agriculture and livelihood of rural areas of Sindh funded by Higher Education Commission, Islamabad

Developing different scenarios for sustainable management of groundwater, provide guidance to the community for optimum use of groundwater, prepare documents for the policy guidelines for efficient management of groundwater.

# 2007-2009

# Sustainable reuse of drainage effluent in irrigated agriculture for increasing crop productivity funded by WWF-Pakistan

Enhance the perception of farmer community to reuse of the drainage effluent as water conservation strategy and increase water productivity, motivate and inspire the local community to focus on various approaches of water management and efficient and productive environment.

## 2004-2005

# Drainage and Stormwater Improvement, Bristol Town, Arkansas River catchment, Colorado, Colorado State University, Fort

Discussed with communities on drainage issues and workout options to resolve the issues with potential participation of the community, discussing with various departments and report to the community for clear understanding of the problem and the solution, create ownership among the various actors and prepare the feasibility report

## 2003-2004

# Impact assessment of LBOD project funded by National Drainage Programme, Government of Pakistan

Assessing the impact of drainage interventions on the socio-economic condition of the local community, food security, environment, and water productivity.

### 2002

# Inter-disciplinary and integrated approach-Case study of Pakistan by World

Reviewed previous documents/reports on drainage development, operation, and maintenance, conducted interviews with various departments and stakeholders and prepared report.

### FUNDING SECURED DURING LAST SEVEN YEARS

- US\$ 18.76 M for establishing US-Pakistan Center for Advanced Studies in Water at Mehran UET Jamshoro and lead the center to the successful establishment of the center.
- Rs. 141 M from GoS for construction of Girls hostel for the center at MUET.
- AUSD 900,000 (Approx.) from ACIAR for a research project
- Rs 41 M for capacity building of Irrigation Officials of GoS
- Rs. 13 M from World Bank funded project-WSIP
- Rs. 25 M against different projects by different organizations such as UNICEF, OXFAM, NRSP, MetaMeta, etc.

### AWARDS/HONORS

- Australian Alumni Excellence Award 2014
- Endeavor Awards for Post-Doctoral Research Fellowship by the Australian Government (2008): Groundwater Governance and Policies.
- Fulbright Post Doctoral Research Fellowship award by USA (2004-2005): Interdisciplinary and Integrated Approach of Agriculture Drainage in Pakistan.
- Best University Teachers Award 2002, by Higher Education Commission, Government of Pakistan.
- Job Performance Award, by International Water Management Institute (IWMI), Pakistan (1999).
- Ph.D. scholarship under cultural program (1991).
- Lecture delivered to the faculty and graduate students of Harvard and MIT Universities, the USA on 28 Oct 2013.
- Lecture delivered to the faculty and graduate students of Nanjing University China in November 2010.
- Lecture delivered to the faculty, research fellows and community of Charles Sturt University Wagga Wagga Australia in May 2010
- Lecture delivered to the faculty and graduate students and research fellows of Utah State

### MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS

- Pakistan Engineering Council.
- Board of Governance, USPCAS-W, MUET Jamshoro
- Board of Governance, Center of Excellence in Water Resources Engineering, UET Lahore.
- Board of Governance, Sindh Irrigation and Drainage Authority Board.
- Technical advisor, Pakistan Council for Research in Water Resources, Ministry of Science and Technology, Government of Pakistan.
- Member Global Water Partnership.
- Syndicate, Mehran University of Eng. and Technology Jamshoro, 2009-2012.
- Senate, Mehran University of Eng. and Technology Jamshoro.
- Academic Council, Mehran University of Eng. and Technology Jamshoro.
- Steering committee-IRC-SIDA (2002-04).
- Committee on the assessment of water shortage- National Drainage Programme, 2003-2005.
- Project Implementation Unit" revamping irrigation system" Government of Sindh, 2006-07.
- Project steering committee "water escapage downstream Kotri," GoS, 2005-07.
- Chairman Board of Governors, Sindh Agricultural Forestry Workers Coordinating Organization (SAFWCO-NGO), 2005-2010.
- WWF Steering committee for the project 'Indus Delta for All,' 2008-to date.
- Technical Research Advisory Committee, WSIP-SIDA, funded by the World Bank.
- Chairperson Board of Directors, Research and Development Foundation 2009-2018).

### LIST OF SELECTED PUBLICATIONS AND REPORTS

2024

Adapting to Salinity in Southern Indus Basin publishing by Australian Centre for International Agriculture Research (ACIAR), GPO Box 1571, Canberra ACT 2601, Australia (Under Publication)

2023

Zaidi, Arjumand Z., Khan, N., Panhwar, V., Lashari B., Leghari, F. "A way forward towards the demand-based agriculture water supply using satellite data: a case study of the data-scarce region of Sindh, Pakistan." *Arabian Journal of Geosciences*. (2023) (available online)

2020

Efficient participatory irrigation institutions to support productive and sustainable agriculture in south Asia published by Australian Centre for International Agriculture Research (ACIAR), GPO Box 1571, Canberra ACT 2601, Australia.

2020

Development of Business Plan for USPCAS-W, MUET Jamshoro

2019-20

Baseline survey of Spate Irrigation Sindh and Baluchistan funded by MetaMeta, Netherlands.

2019-20

Background paper on Socio-Economic condition of Sindh, Pakistan, funded by WSIP, GoS

2019-20

End-line survey of Oxfam funded project in districts of Badin, TMK and Hyderabad funded by Oxfam, Pakistan

2017-18

Water Scarcity in Lower Sindh – Reality vs Myth: An Exploratory Study of Akram Canal Command Area, funded by Oxfam, Pakistan

2016-17

WASH Baseline Survey, Knowledge, Attitude and Practices, Ward No. 3 of Thatta City funded by NRSP, Pakistan

2013

B.K Lashari (2013) "Flood 2010 and its Disastrous Effects in Sindh, Pakistan" presented and published in International Conference on Irrigation and Drainage organized by USCID from 22-25 October 2013 in Denver, Colorado, USA

B.K Lashari (2013) "Evaluation of Canal Stability and Sediment Transport Behavior: A case study of new Phuleli Irrigation Canals in Sindh, Pakistan" presented and published in International Symposium on River Sedimentation (ISRS 2013) held in Kyoto, Japan from 2-5 September 2013.

2012

B.K Lashari and Masood Mahesar (2012) "FACTORS HAMPERING POTENTIAL YIELDS OF MAJOR CROPS: A Case Study from Sindh Pakistan" presented and published in International Conference on Managing Irrigation Systems in Today's Environment organized by USCID from 13-16 November 2012 in Reno-Nevada, USA

B.K Lashari and Masood Mahesar (2012) "POTENTIALS FOR IMPROVING WATER AND AGRICULTURE PRODUCTIVITY IN SINDH, PAKISTAN" presented in 16th International Water Technology Conference held in Istanbul, Turkey from 7-10 May 2012.

2011

B. K Lashari and S.M.Kori (2011) Book Chapter on "Drainage Scavenger tube wells can sustain rural livelihoods: evidence from Sindh, Pakistan" published in the book "Hydrological cycle and water resources sustainability in changing environment" by

International Association of Hydrological Science Bookshop, publ. No.350, ISBN: 978-1-907161-25-4.

- B. K. Lashari (2011) "Tile Drainage The sources of additional irrigation water and sustainable crop production: A case study of farmer and agency managed system in Sindh, Pakistan" presented in 6<sup>th</sup> International Conference on "Irrigation & Drainage" on 15-18 November 2011, at USA
- B.K. Lashari and Masood Mahesar (2011) "REFORMS IN THE IRRIGATION SECTOR OF SINDH, PAKISTAN: A WAY FORWARD TO WATER AND FOOD SECURITY" presented in 15<sup>th</sup> International Water Technology Conference held in Alexandria, Egypt from 28 April-1 May 2011.
- B.K. Lashari, Manohar Lal and K.Q. Leghari (2011) "Flood frequency analysis of main Nara valley." Published in Mehran University Research Journal of Engineering and Technology, Vol.30, No.1, January 2011.

2010

- B.K. Lashari, K.Q. Leghari, HM Memon (2010) "Water user efficiency of cotton and wheat crops at various management allowed depletion in lower Indus basin Published in Mehran University Research Journal of Engineering and Technology, , Vol.29, No.4, October 2010.
- B.K. Lashari, K.Q. Leghari, A.M Phul (2010) "Remodeling of Kalri baghar Feeder Published in Mehran University Research Journal of Engineering and Technology, , Vol.29, No.4, October 2010.
- B.K. Lashari and S.M Kori (2010) Drainage Scavenger Tube wells can Sustain Rural Livelihoods: Evidence from Sindh Pakistan, published in Proceedings of IWRM2010, Nanjing, China, November 2010).
- B.K Lashari (2010) Book Chapter on "Participatory Irrigation Management (PIM) in the Context of Privatization in Sindh, Pakistan" submitted for publication in IC Water, Charles Sturt University, Australia (Under publication process)
- B.K Lashari (2010) "Socio-Ecology Impact of Shallow Ground water Use on Livelihood of Rural Populace of Sindh, Pakistan," submitted for publication in IC Water, Charles Sturt University, Australia (Under publication process)

2009

- B.K. Lashari, K.Q. Leghari, M.Ujjan (2009) "Participatory management reform in irrigation sector of Sindh" Published in Mehran University Research Journal of Engineering and Technology, Vol.28, No.4, October 2009.
- K.Q. Leghari B.K. Lashari and N.Z. Leghari (2009) "Sensitivity analysis of weather

based irrigation scheduling model" published in Mehran University Research Journal of Engineering and Technology, Vol.28, No.4, October 2009.

- R. Siddiqui B.K. Lashari, K.Q. Leghari, (2009) "Calibration and validation of newly fabricated Cutthroat Flume published in Mehran University Research Journal of Engineering and Technology, Vol.28, No.3, July 2009.
- B. Lashari and A.A Memon (2009) "Sustainable irrigation water management: A case study on secondary canal of sindh province of Pakistan accepted in 5<sup>th</sup> International conference on irrigation and drainage to be held on 3-6 Nov 2009 at salt lake City USA

2008

- K.Q. Leghari, Dr. B.K. Lashari, Dr. H.M. Memon (2008) "Perceptive research on wheat evapotranspiration in Pakistan" published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/ird.393.
- K.Q. Leghari, B.K. Lashari, H.M. Memon (2008) Perceptive research on wheat evapotranspiration in Pakistan published in international journal of irrigation and drainage 57:571-584 (2008) John Wiley and Sons, ltd. 2008
- K.Q. Leghari, B.K. Lashari, H.M. Memon (2008) "Computer-Based Irrigation Scheduling for Cotton Crop" published in Mehran University Research Journal of Engineering and Technology, Vol.27, No.3, July 2008.
- S.M. Kori, B.K. Lashari and N.A. Memon (2008) "Impact evaluation of drainage effluent from sub main drains to agricultural land" published Mehran University Research Journal of Engg. & Tech. volume 28, No. 1, January 2008 [ISSN 0254-7821]
- S.M. Kori, B.K. Lashari and N.A. Memon (2008) "Calibration and Validation of Groundwater Flow Model Under Scavenger Wells Operations", published in Mehran University Research Journal of Engineering and Technology, Jamshoro Vol.27, No.2, April 2008.
- B. K. Lashari and Iftkhar Arain (2008) "A Farmer Managed Tile Drainage System: Impacts on salinity management and lessons learnt from Sindh, Pakistan" paper presented and published in 2<sup>nd</sup> International Salinity Forum at Adelaide Australia from 31 March to 03 April 2008.

2007

Bakhshal Lashari, Jennifer Mckay, Karen Villholth (2007) Institutional and Legal Groundwater Management Framework: Lessons Learnt from South Australia for Pakistan published in International Journal of Environment and Development, Vol. 4,

No.1, Serials Publications, and New Delhi, India.

2006

Lashari. B, and Mehaser A (2006) "Improving canal water management through participatory approach: A case study of secondary canal (Potho Minor) Sindh Pakistan Presented and published in fourth international conference on irrigation and drainage-Groundwater and surface water under stress: competition, interaction, solution held in Boise, Idaho USA from October 25-28 Oct 2006.

2004

Lashari. B, and Murry-Rust H (2004) "Improving Equity of Water Distribution: the Challenge for Farmer Organizations in Sindh under the National Drainage Program Presented and published in the third international conference on irrigation and drainagewater for a sustainable world –limited supplies and expanding demand held in Salt lake City, Utah USA from October 13-16,2004.

Chandio S.N and Lashari. B, (2004) "Institutional reforms in irrigation sector in Pakistan: An approach towards integrated water resources management." Presented and published in the third international conference on irrigation and drainage- water for a sustainable world –limited supplies and expanding demand held in Salt lake City, Utah USA from October 13-16.2004.

2003

Lashari. B, and Murry-Rust H (2003) "Farmers response to water availability and environment conditions in three secondary canals in Sindh Province of Pakistan." Presented and published in the second international conference on irrigation and drainage-water for a sustainable world –limited supplies and expanding demand held in Phoenix AZ USA from May 12-15,2003.

2002

Lashari B (2002) "Evaluation of shallow ground water use in command area of Dhoro Naro Minor, Nawabshah," published in the Mehran University Research Journal of Engineering and Technology, Volume 21, No. 4 October 2002.

Lashari. B, and Murry-Rust H (2002) "Impact of Farmer-Managed Maintenance of Secondary Canals on Water Distribution Equity: A Case Study from Sindh, Pakistan" Presented and published in the 1<sup>st</sup> international conference on Energy, Climate, Environment and Water- Issues and Opportunities for Irrigation and Drainage held in San Luis Obispo, California USA from July 9-13,2002.

Lashari B and Mangrio M (2002) "Sustainability of shallow groundwater Tubewells in Sindh Pakistan. Presented and published in the South-Asia Water Conference organized by Global Water Partnership and Pakistan Water Partnership at Islamabad from 14-16 December 2002.

Lashari, B and Chandio S.N (2002) "Assessment of unretrivable surface irrigation water losses" Presented and Published in the proceeding of seminar on Strategies to address the present and future water quality issues held on March 6-7, 2002, Islamabad.

2001

Yameen. M and Lashari B (2001)" Impact of Socio-Technical Knowledge on Water Users capacity for Managing Distributary (Secondary) Channel of Irrigation System Through Participatory Approach" Published in ASAE 94<sup>th</sup> Annual International Meeting from July 29 – August 1, 2001 at Sacramento, California, USA.

Memon Y, etal (2001) "Are farmers willing to participate in operation and maintenance of drainage system" presented and published in proceedings of National Seminal on Drainage in Pakistan to be held in Faisalabad on 16-17 April 2001.

Lashari B, etal (2001) "Effective operation of drainage system" presented and published in the proceedings of National seminar on Drainage in Pakistan to be held in Faisalabad on 16-17 April 2001.

2000

Mangrio M, Lashari B and Siddiqui R (2000) "Recharge behavior to groundwater in the command area of Heran Distributary, Sanghar, Sindh "presented and published in proceedings of the Regional groundwater management seminar in Islamabad, October 9-11, 2000.

Ujjan G.M, Talpur M.A and Lashari B (2000) "Operation and Maintenance cost of drainage system: The case study of Bareji Distributary, Mirpurkhas, Sindh, Pakistan presented and published in proceedings of the National Seminar on Drainage in Pakistan in Mehran University of Engineering and Technology Jamshoro, August.

Lashari B and Memon Y (2000) "Use of shallow groundwater in water-short period: The case study of Dhoro Naro Minor, Nawabshah, Sindh, Pakistan presented and published in proceedings of the Regional groundwater management seminar in Islababad, October 9-11,2000.

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1999

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