

A.Latif Qureshi's Research Map 2018

Sustainable Water Management

Water Governance and Efficient Canal Water Management

Ms. Alina Samon (MS, 2017)

Topic: Comparative evaluation of implementing participatory irrigation management in Sindh
Novelty/Impact: Field dataset; new insight
Support: USPCAS-W/USAID

Ms. Sumeetra (MS, 2017)

Topic: Evaluation of sustainable alternative irrigation practices for water conservation using SIRMOD model
Novelty/Impact: Field Data, SIRMOD model
Support: USPCAS-W/USAID

Collaborators

- Dr. Ali Asghar Mahessar, Irrigation Department/SIDA
- Dr. Aachar Zardai, QUEST, Nawabshah
- Ms. Hadiqa Maqsood, USPCAS-W
- Mr. Shoib Ahmad, CED, NED University, Karachi

Research Infrastructure

- SIRMOD Model
- Field Observation and Discharge measurement
- Meeting with farmers for their participation in water management

Completed Project (January 2017-May 2018)

Diffusion and adoption through partnerships and action of the best watershed rehabilitation and irrigation practices and technologies to help rural farmers- Phase II

Collaborators: 1) RDF 2) Agri. Dept. Sindh

Project Area: Jamshoro District

Source: USAID through USDA & ICARDA (US \$ 34,000)

Current Research Project (June 2018-Nov. 2019)

Close-Loop Secondary Level Canal Monitoring for Equitable and Reliable Distribution of Water

PI: A. Latif Qureshi, **Co-PI:** Dr. Abubakr, LUMS, Lahore

Co-PI: Mr. Jamal, SIDA, **Co-PI:** Mr. Waqas Ahmed

Project Area: Nara Canal Area Water Board

Source: USPCAS-W MUET, UU-USA, LUMS, SIDA

(Total Rs. 6.128 million, from USPCAS-W Rs. 2.9 Million)

MS Students of F18 Batch will be involved

Sustainable Groundwater Management

Ziauddin Abro (PhD, 2018)

Topic: Qualitative improvement in ground water through seepage from River Indus and selected Wetland at d/s Kotri Barrage: A way to reduce sea water intrusion
Novelty/Impact: Use of RS and satellite data, use of Terrameter and IX1D software and groundwater models (PMWIN/SEAWAT)
Support: USPCAS-W

Asadullah Soomro (PhD, 2018)

Topic: Evaluation of Groundwater Potential, its Suitability and Sustainability along Super Highway from Nooriabad to Karachi in Sindh, Pakistan
Novelty/Impact: Use of Terrameter, IX1D software, MODFLOW
Support: USPCAS-W

Zulfiqar (MS, 2018)

Topic: Water Balance Study for Optimum groundwater management strategies in Irrigated agricultural areas of Sakrand Distributary
Novelty/Impact: Groundwater Monitoring and Modeling using Groundwater Vistas
Support: USPCAS-W

Muhammad Azeem (MS-HID, 2018)

Topic: Comparative study of solar, diesel and electric operated tube wells in irrigation system in the command of Gul Minor in district Naushero Feroz
Novelty/Impact: Tube well O&M, Power consumption, Data set of Cropping cultivation
Support: USPCAS-W

Collaborators

- Mr. Waqas Ahmed, USPCAS-W
- Prof. Dr. S. M. Kori, CED, MUET, Jamshoro
- Dr. Arshad Ashraf, PSO, CCEWRI, NARC, Islamabad,
- Dr. Ali Asghar Mahessar, Irrigation Department/SIDA, Govt. of Sindh
- Hafiz A. Salam Memon, PCRWR, DRIP, Tandojam

Current Research Project (July 2016-June 2020)
Improving groundwater management to enhance agriculture and farming livelihoods in Pakistan

Dr. A. Latif Qureshi and Mr. Waqas Ahmed

Collaborators: 1) CSU, Australia 2) ICARDA 3)PCRWR 4) Sindh Irrig. Deptt 5) NED UET and 6) SAU, T. Jam
Project Area: Naushero Feroz and Shaheed Benazirabad Districts of Sindh Province

Source: ACIAR, Australian Government (Aus Dollar 29,999)

Students involved: Ms. Kainat (17-MS-HID)

Mr. Tauqeer (17-MS-IWRM)

Mr. Dileep (S18-MS-HID)

A. Basit (MS, 2017)

Topic: Water Balance Study and Assessment of Groundwater in Matiari Distributary Command Area: A MODFLOW Perspective
Novelty/Impact: Use of MODFLOW
Support: USPCAS-W

Ms. Rabia Dars (MS, 2017)

Topic: Evaluation of Groundwater Potential and its Proper Utilization for the Livelihood of People in Matiari District
Novelty/Impact: use of Terrameter, IX1D software and GIS Mapping
Support: USPCAS-W

Aqeel Ahmed Sahito (MS, 2018)

Topic: Evaluating the Impact of Solar Tubewells on Waterlogging Control and Irrigation: A case study of District Shaheed Benazirabad
Novelty/Impact: Water table data, Soil and Water Quality Analysis
Support: USPCAS-W

Ms. Summaiya (MS, 2018)

Topic: Evaluation of Fresh Groundwater Potential and Suitability in Sub-urban Area of Hyderabad District
Novelty/Impact: Use of Terrameter and IX1D software, GIS mapping
Support: USPCAS-W

Research Infrastructure

- PMWIN (MODFLOW/MT3D), GW Flex, GW Vistas
- PLAXIS 2D Model (Seepage)
- PMWIN/SEAWAT
- Resistivity meter, IX1D software
- GIS and Remote Sensing

Current Project (July 2018-May 2018)

Smart Groundwater Monitoring for Sustainable Groundwater Extraction in Sindh

PI: Waqas Ahmed , **Co-PI:** A. Latif

Project Area: Rohri Canal

Source: Higher Education Commission (Rs.2.988 million)

Students of F18 Batch will be involved

Current Research Project (30 months – Feb. 2018-July 2020)

Sustainable Fresh Groundwater Management for Irrigated Agriculture in Lower Indus Basin (LIB) using PMWIN model

PI: Prof. S. M. Kori, **Co-PI:** A. Latif Qureshi

Project Area: Hyderabad, Tando Allahyar and Tando Muhammad Khan districts of Sindh

Source: Higher Education Commission (Rs. 4.7 million)

Students: Ms. Asma (17-MS-HID)

Mr. Waqas (ME-Hydr. & Irrigation)

Mr. Rana (ME-Hydr. & Irrigation)