

PERSONAL INFORMATION



Engineer Rasheed Ahmed (Ph.D.)

- 📍 **Mailing Address:** Village and P.O Dhodial, Mohallah Ghirwal, Tehsil Bhaffa, District Mansehra Khyber Pakhtunkhwa, Pakistan.
- 📍 **Current Address:** Department of Soil and Climate Sciences, University of Haripur Khyber Pakhtunkhwa Pakistan.
Pakistan (+92) 312-5511171 Phone: 0995-615128

✉ rasheedahmed@uoh.edu.pk : ra181.2000@gmail.com

Sex: Male | Date of Birth: 15/04/198 | Nationality: Pakistani

WORK EXPERIENCE

March 2011 – till to date

Lecturer

Department of Soil and Climate Sciences,
University of Haripur, Khyber Pakhtunkhwa

Main subject teaching:

1. Environmental Hydrology and Watershed Management
2. Water Resources Management,
3. GIS and Remote Sensing
4. Soil Survey and Land Evaluation
5. Municipal Waste Management
6. Soil Fertility and Fertilizers
7. Fundamental of Farm Mechanization

1st Nov 2018. – Till to date

Water Resources Engineer

BK Consultants Office No. 8, 2nd Floor Al-Kousar Plaza, G-10
Markaz, Islamabad.

Main Responsibilities are:

1. Conduct hydrological and hydraulic assessments for the projects
2. Manage the team to design hydraulic structures and layout (Levees, Culverts, Bridges, Irrigation Canals, Small Dams and Reservoirs, etc)
3. Develop interior drainage studies using HEC-HMS and HEC-RAS models for levee certifications and levee analysis for certification
4. Design the Urban Drainage System with or without pumping stations
5. Conduct the Flood Risk Assessments for the proposed building (Residential, Commercial, Industrial or Recreational) structures
6. Managed/Coordinate major natural disaster and infrastructure failure emergency response, repair and restoration.
7. Provide basic design utilizing AutoCAD and HEC RAS.
8. Technical Report Writing for all types of water resources projects

1st August 2009– 28th
February 2011

Assistant Project Engineer

Associate Consultant Engineers (PVT) Limited AJK Pakistan

Main Responsibilities were:

1. Prepared submittal packages, tracked change orders, shop drawings, and issued RFIs.
2. Monitored project plans, reported to Project Manager.
3. Helped Project Management to obtain local projects and contracts.
4. Assisted with project coordination and resolutions of potential field problems.
5. Responsible for transportation of job materials needed.
6. Maintained positive relationships with clients, vendors, and subcontractors.
7. Controlled and handled all aspects of new building construction, corporate renovations, and tenant fit-out projects, while building and maintaining professional relationships with subcontractors, clients, architects, and engineers

10th December 2008 –
11th Jun 2009

Trainee Drainage Engineer

Pakistan Meteorological Department, Climate Research Unit (Research and Development Division), Islamabad Pakistan

Main Responsibilities were:

1. Drainage support for land development, aviation, and roadway civil engineering projects
2. AutoCAD, GIS, hydrologic and hydraulic modelling, and stormwater planning
3. Preparation of technical documents and reports in support of drainage engineering and floodplain management work
4. Repair hydraulic and hydrology models utilizing
5. Exercise sound judgment in the evaluation, selection and modification of standard techniques, procedures, and criteria within the discipline
6. Strong communication skills in dealing with clients, peers, and co-workers
7. Proficient in MicroStation in Roads Storm and Sanitary Permitting experience
8. Team oriented with strong capability to work independently

09th September 2004 –
10th September 2005

Site Engineer

Main Responsibilities were:

1. Plans, designs, and construction of District Irrigation and Drainage facilities
2. Perform project management and contract administration of District Irrigation and Drainage facilities including the canal system, the distribution system, and related facilities. This includes preparation of bidding documents, Board authorizations, contract summaries, negotiations in changes in contract scope, resolution of claims, and other related items.
3. Prepares estimates of quantities of materials. Prepares plans, profiles, maps, and related drawings for construction projects. Prepares contract documents to be used in advertising construction projects.
4. In coordination with the Development Services branch of the Service Department and the Senior Irrigation Engineer, meet with developers and outside engineers to discuss concepts and requirements for new projects and developments and reviews proposed subdivisions to determine compliance with the district's existing irrigation distribution system.
5. Perform inspections of the canal, distribution system, and drainage system in order to determine replacement needs of the facilities.
6. Assists contractors, public and other governmental agencies with questions relating to irrigation water availability.
7. Coordinate and negotiate project work with developers, contractors, public entities, local groups, cities, and individual customers.

EDUCATION

2015.03 – 2019.01

PhD in Agricultural Water and Soil Engineering (China)

Institute of Environment and Sustainable Development in Agriculture,
Chinese Academy of Agricultural Science, Beijing China

Principal Subjects: Progress in Agriculture Science and Technology in China, Academic Writing, Classic Agriculture Review, Statistics for Soil Science, Agriculture Waste Pollution, Groundwater Hydrology and Northern China Agriculture Plain Region

Topic of Research

"Nitrate Leaching in the Vegetable Growing Sectors of Northern China Plain, China"

2007.09 – 2008.12

Master in Water Resources Engineering Management (UK)

Department of Civil Engineering,
University of Glasgow Scotland, United Kingdom

Principal subjects: Coastal and Estuary Processes, Computer Modelling of River Flood Flows, Water Quality Modelling in Rivers, Environmental Hydrology and Water Resources, River Engineering, Urban Drainage Design, GIS, Environmental Policy and Wastewater

Topic of Research

"Effective Wetland Conservation and Management Practices worldwide"

2006.09 – 2007.9

Postgraduate Diploma in Information Technology (UK)

Greenford University London Campus, England

Principal Subjects: Introduction to Programming in Java, Network Information Systems, Artificial Intelligence, Software Designing and Development, Data-Modelling & Database Systems, Software Engineering, Internet Application Development

2005.09 – 2006.9

Diploma in Business Administration (UK)

Liverpool College of Management Sciences, Bradford England

Principal Subjects: Business English, Principles of Management, Principles of Marketing, Business Law, Business Communications, and IT

1999.12 – 2004.10

Bachelor of Science in Agricultural Engineering (PAK)

Department of Agricultural Engineering,

NWFP University of Engineering and Technology, Peshawar Khyber Pakhtunkhwa

Principal Subjects: Irrigation Engineering, Farm Power, Environmental Engineering, Groundwater and Wells, Drainage Engineering Business English, Principles of Management, Principles of Marketing, Business Law, Business Communications, and IT

Topic of Research

"Water Conveyance losses in watercourses system of Mardan District"

LICENSES & CERTIFICATION

Issued Dec 2004

Pakistan Engineering Council
– Registered Engineer
License No.: 74152

Issued March 2003

Survey Camp Certificate
Department of Civil Engineering
UET Peshawar Khyber

Issued Jun 2014

**Reference Management Through Endnote
ORIC,**
University of Haripur, Pakistan

Issued Sept 2014

**Project Formulation
Workshop Pakistan Science
Foundation**
University of Haripur, Pakistan

Issued Oct 2014

**Technopreneurship
Hattar Industrial Association**
University of Haripur, Pakistan

BOOK AND PUBLICATIONS Book

Peer-Reviewed

1. **Rasheed, A.,** Waseem, A., and Adil, A. 2015. Wetland Conservation and Management Practices in Pakistan: Lap Lambert Academic Publishing GmbH KG.
 1. **Ahmed R,** Mao L, Li Y, Ding J, Lin W, Ahmed S, Abbas A and Ahmed W "Effect of Different Fertilizations on the Plant-Available Nitrogen in Soil Profile (0–100 cm): A Study on Chinese Cabbage". *Front. Plant Sci.* 13:863760 (2022). doi: 10.3389/fpls.2022.863760
 2. Ahmed, Waseem, Rafia Azmat, Ebtihal Khojah, **Rasheed Ahmed,** Abdul Qayyum, Adnan Noor Shah, Asad Abbas, Sumeira Moin, and Bassem N. Samra. "The Development of a Green Innovative Bioactive Film for Industrial Application as a New Emerging Technology to Protect the Quality of Fruits." *Molecules* 27, no. 2 (2022): 486.
 3. **Ahmed, Rasheed,** Yuzhong Li, Lili Mao, Chunying Xu, Wei Lin, Shakeel Ahmed, and Waseem Ahmed. "Biochar effects on mineral nitrogen leaching, moisture content, and evapotranspiration after 15N urea fertilization for vegetable crop." *Agronomy* (2019).
 4. **Rasheed Ahmed,** Shakeel Ahmad, Haifeng Jia, Zhengxia Chen, Qian Li, Dingkun Yin, Muhammad Israr, Waseem Hayat, Hazrat Bilal. "Effects of Climate and Land Use Changes on Stream Flow of Chitral River Basin of Northern Highland Hindu-Kush Region of Pakistan" *Journal of Hydro-environment Research.* (2021).
 5. **Rasheed Ahmed,** Waseem Hayat, Salman Khan, Malik Tahir Hayat, Rashid Pervez, Shakeel Ahmad. Insight into effect of deforestation on selected physical and chemical properties of soil in Lesser-Himalayan community forests of Abbottabad, Pakistan. *Arabian Journal of Geosciences.* (2021).
 6. **Rasheed Ahmad,** Shakeel, Muhammad Israr, Hazrat Bilal, and Waseem Hayat. "Assessment of river Shahpur for flood risk in Northern Pakistan." *Journal of Resources Development and Management.* (2015).
 7. **Rasheed Ahmad,** Shakeel Ahmad, Muhammad Israr, Muhammad Amin, Muhammad Sadiq Hashmi, Nafees Ahmad. Two-decade Spatio-temporal Land use and cover changes in District Shangla of Khyber Pakhtunkhwa-Pakistan *Sarhad Journal of Agriculture.* (2021)
 8. **Rasheed Ahmed,** Shakeel Ahmad, Muhammad Israr, and Nafees Ahmad. Land use and cover changes in the northern mountains of Pakistan; A Spatio-temporal change using MODIS (MCD12Q1) time series. *Sarhad Journal of Agriculture.* (2021).
 9. **Rasheed Ahmed,** Yuzhong Li, Li Li Mao, Wei Lin, Chunying Xu, Ali Raza Gurmani, Mazhar Rafique. Fate of 15N Urea as Plant Available Form with and Without Biochar in the Shunyi Soil, China. *Arabian Journal of Geosciences.* (2020).
 10. Lin, Wei, Junjun Ding, Yuzhong Li, Wei Zhang, **Rasheed Ahmad,** Chunying Xu, Lili Mao, Xiaojing Qiang, Qian Zheng, and Qiaozhen Li. "Partitioning of sources of N₂O from soil treated with different types of fertilizers by the acetylene inhibition method and stable isotope analysis." *European Journal of Soil Science* (2019).
 11. Azmant, Rafia, Abdul Qayyum, Shah Masaud Khan, **Rasheed Ahmed,** and Saima Naz. "Antibacterial potential of new active compounds with biological performances with drugs modeling of pharmacokinetics study as source of bacterial drugs manufacture process and preparations." (2021).
 12. Ahmed, Waseem, Rafia Azmat, Ayaz Mehmood, **Rasheed Ahmed,** M. Liaquat, Sami Ullah Khan, Abdul Qayyum, and Shah Masaud Khan. "Comparison of storability and seasonal changes on new flavonoids, polyphenolic acids and terpenoid compounds of Citrus paradisi (grapefruit) cv. shamber through advance methods." *Journal of Food Measurement and Characterization* (2021).
 13. Azmant, Rafia, Abdul Qayyum, Ayaz Mehmood, and **Rasheed Ahmed.** "Systematic prompting the new physiological and morphological, biological responses of modified metabolic induction process of Calendula officinalis L under heat stress with couple of supplementary nutritional applications as safety of floriculture crops." (2021).
 14. Ahmed, Waseem, Rafia Azmat, Ayaz Mehmood, Abdul Qayyum, **Rasheed Ahmed,** Sami Ullah Khan, M. Liaquat, and Saima Naz. "The analysis of new higher operative bioactive compounds and chemical functional group from herbal plants through UF-HPLC-DAD and Fourier transform infrared spectroscopy methods and their biological activity with antioxidant potential process as future green chemical assay." *Arabian Journal of Chemistry* (2021).

15. Ahmed, Waseem, Rafia Azmat, Jawaid Akram, Ayaz Mehmood, **Rasheed Ahmed**, Abdul Qayyum, Sami Ullah Khan, Shah Masaud, Ijaz Husain, and M. Liaquat. "Effects of various harvesting times on bioactive compound in citrus paradisi (shamber)." Pakistan Journal of Botany (2007).
16. Masood Ur-Rahman, Shazia Sakhi, Muhammad Abid, Mohammad Adnan, Tanveer Ahmad, Aftab Ahmad Khan, Shah Masaud Khan and Irshad Ahmad Khan, **Rasheed Ahmed**. Role of Pp.MYB39 during anthocyanin biosynthesis in peach fruit by interacting with Pp. DFR. South African Journal of Plant and Soil. (2021).

Research Articles

1. Minor fruit production needs boost. in Volume 06 Issue 22 by Technology Times <https://www.technologytimes.pk/2015/05/31/minor-fruit-production-needs-boost/>
2. Water Resources Management- a must to deal with water scarcity issues in Pakistan. in Volume 06 Issue 21 by Technology Times <https://www.technologytimes.pk/2015/05/24/water-resources-management-a-must-to-deal-with-water-scarcity-issues-in-pakistan/>
3. Rising water stress in Pakistan Published in Volume 06 Issue 05 by Technology Times <https://www.technologytimes.pk/2015/02/17/rising-water-stress-in-pakistan/>
4. Post-harvest management to control aflatoxin contamination of chilli published in Volume 05 Issue 43 by Technology Times <https://www.technologytimes.pk/2014/11/07/post-harvest-management-to-control-aflatoxin-contamination-of-chilli/>
5. Problems of Litchi crop in Pakistan Published in Volume 05 Issue 40 by Technology Times <https://www.technologytimes.pk/2014/10/15/problems-of-litchi-crop-in-pakistan/>
6. Walnut is gold of Pakistan Published in Volume 05 Issue 34 by Technology Times <https://www.technologytimes.pk/2014/09/03/walnuts-is-gold-of-pakistan/>
7. Saving Citrus orchard from fruit fly Published in Volume 05 Issue 33 by Technology Times <https://www.technologytimes.pk/2014/08/27/saving-citrus-orchard-from-fruit-fly/>
8. Apricot as cash crop Published in Published in Volume 05 Issue 28 by Technology Times <https://www.technologytimes.pk/2014/07/06/apricot-as-cash-crop/>

Conference Papers

1. Shakeel Ahmad, **Rasheed Ahmed**, and Jia Heifeng, (2019). Effects of Climate and Land Use Changes on Stream Flow of Chitral River Basin of Northern Highland Hindu-Kush Region of Pakistan. *International Symposium on Sustainable Urban Drainage (SUD 2019)* held on October 17-20, 2019 in Ningbo, Zhejiang, China. (Page no 122-126 of SUD 2019 Proceeding)
2. **Ahmed, Rasheed**, Yuzhong Li, Lili Mao, Chunying Xu, Wei Lin, Shakeel Ahmed, and Waseem Ahmed. "Biochar effects on mineral nitrogen leaching, moisture content, and evapotranspiration after 15N urea fertilization for vegetable crop: International Conference on the Agriculture and Biological Sciences at the University of Haripur held on 27-30 March 2019

Trainings, Workshops and Conferences Organized

1. 1st International Conference on "Prospect and Opportunities for Agriculture Development in Pakistan", 25th to 27th June 2013, District Murree Punjab Pakistan
2. International Conference on "the Agriculture and Biological Science" at the University of Haripur held on 27-30 March 2019
3. International Conference on the "Climate Resilient Smart Soil Management (ICCRSSM-2020)" held on 05-07 March 2020 at the University of Haripur
4. International Workshop on "Use of GIS Techniques and Stable Isotopes for Sustainable Development in Agriculture and Environment" held on 15-16 October, 2020

ACADEMIC ACTIVITIES

Journal Reviewer

1. Science of the Total Environment, ISSN (0048-9697)
2. Renewable & Sustainable Energy Reviews (ISSN: 1364-0321)

International Membership

1. Member of "Surveying and Spatial Sciences Institute" (SSSI) www.sssi.org.au/ (Australia). Since 2015 till to date.
2. Member of "The International Society for Photogrammetry and Remote Sensing" (ISPRS) <http://www.isprs.org/>. Since 2015 till to date.
3. Member of "International Society for Development and Sustainability" (ISDS) Japan. Membership ID: M007727. Since January 2018 till to date

National
Memberships
**HONOURS &
AWARDS**

1. Seventh Environment Club
2. WWF Pakistan
3. World Youth Parliament for Water

1. Awarded the CAAS Scholarship for PhD (March 2016 to February 2019).
2. Awarded First Position in 3rd year of bachelor's degree
3. Awarded Third position in 2nd year of bachelor's degree
4. Awarded Third position in 3rd year of bachelor's degree
5. Player of Year Cricket and Football Team 2003

PERSONAL SKILLS

Mother tongue(s)
English
Urdu/Punjabi
Chinese
Communication skills

Organizational /
managerial skills
Job-related skills

Computer and
programming skills

Hindko and Pushto

Excellent in Reading, Listening, Speaking and Writing

Excellent in Reading, Listening, Speaking and Writing

Basic

Good communication skills gained through my 18 years of education as English was and is a medium of teaching, listening, writing and reading.

Good Management Skills as being the Coordinator Academics of a Secondary Level School as well as through involvement in Co-curricular and Extra-curricular Activities during educational career.

1- Time Management 2- Leaderships Qualities 3- Working under Harsh Conditions without assistance of anybody 4- Efficient Administrative skills

Snow Runoff Modelling, ArcGIS, AutoCAD, SWMM, Ubuntu (Linux), ENVI, Hec-RAS, GraphPad Prism, TR-55, Surfer, GrADS, Satellite Remote Sensing and MODIS data Analysis, Mapping and Modelling, Hydrus, SigmaPlot, Endnote, Statistic 8.1, Xlstate, Microsoft Office 2010, Windows 2007 and 2010, Report Writing, Mendeley Desktop, Printing, and Scanning

**ADDITIONAL
INFORMATION**

Presentations

- 1- Disaster Risk Management. 2- Landslides and their control. 3- Climate Change and Environment
- 4- Land Use and Land cover change 5- Snow cover change and Cryosphere

Seminars

- 1- Community Based Disaster Risk Management, 2- District Volunteerism Workshop, 3- Sustainable development through Ethical Fitness.

Successfully Completed
Projects

- 1- Hydro-meteorological and land use changes impact on the water resources management: A case study of the Chitral River Basin
- 2- Aerial Survey through different technologies and Raster Data Interpretation for different projects including Naya Pakistan Sang Jani Housing Scheme, Motorway City, and other sites
- 3- Hydrological Studies and Hydraulic Modelling for the Urban Drainage Network and Pumping System Design in the Ghazi Kot Township Mansehra
- 4- Flood risk assessments for the different return periods of small waterways (streams, nallas or riverine) nearby the proposed sites of different projects such as Govt Girl College Mansehra, Air University Islamabad and Govt Girl College Oghi
- 5- Hydrological and hydraulic technical report written for the culvert, small bridges, and flood protection walls such as GT Road Islamabad to Peshawar Culvert Sang Jani Toll Plaza, N-75 (IMDC) culverts at KM 29, 32, 35.
- 6- Urban Drainage Network System Design for the sewerage and stormwater with pumping station at Motorway City Lahore

References

Dr. Mao Lili

Email: maolili@caas.cn
Phone: (Office): + 86 (010) 82106032
Mobile: + 86 (131) 61254651
Associate Professor IEDA,
CAAS Beijing China

Dr. Ali Raza Gurmani

Email: ali.gurmani@uoh.edu.pk Phone
(Office): + 92 (0) 995 616 240
Mobile: + 92 (0) 331-5251544
Associate Professor Department of Soil and
Climate Sciences University of Haripur

Dr. Babar Khan

Email: info@bkconsultants.com.pk /
engr.babar@gmail.com Phone (Office): +92 51
2740011
Mobile: +92 345 9623303
Managing Director
BK Consultants Islamabad, Pakistan