

# Curriculum Vitae

## DR. MUHAMMAD DAWOOD

Post-Doc (University of the Punjab, Lahore)

Assistant Professor, Department of Geography, BZU, Multan  
(HEC Approved PhD Supervisor)



### Personal Information

Father's Name	Mr. Khan Bad Shah
Date of Birth	March 15, 1985
CNIC No.	15303-0986755-5
Passport No.	AD7677552
ORCID ID	0009-0007-8078-6507
Nationality	Pakistani
Religion	Islam
Domicile	Khyber Pakhtunkhwa
Place of Birth	Dir Lower-Khyber Pakhtunkhwa
Marital Status	Married
Cell No.	03018345454
E-mail address	dawood.geography@bzu.edu.pk
Postal Address	Department of Geography, BZU, Multan
Permanent Home Address	Village Kambat Tehsil & PO Samarbagh Dir Lower

### Academic Qualification

2001	SSC in Science (First Position), Government High School Kambat, Dir Lower
2003	F.Sc Pre-Medical, Hera School and College, Timergara
2005	B.Sc Biosciences, University of Malakand, Pakistan
2007	M.Sc Geography, University of Peshawar, Pakistan
2011	Post-Graduate Diploma in GIS/RS, University of Peshawar
2015	M.Phil (Applied Geomorphology), University of Peshawar, Pakistan
2018	Ph.D (Climate Change and Disasters), University of Peshawar, Pakistan
2022	Post-Doc (Climate Change), University of the Punjab, Lahore

### Employment Record

Assistant Professor, Department of Geography Bahauddin Zakariya University,  
Multan from 4 April, 2024 till date.

Visiting Faculty in Government College University, Lahore (September 2021 to February 2023).

Assistant Professor (Visiting), Department of Geography, University of Gujrat, Gujrat (February-2020 to March-2021)

Assistant Professor under HEC Interim Placement for Fresh Ph.D Program (IPFP), Department of Geography, University of Gujrat, Gujrat (September-2018-October-2019)

Teaching Assistant, Department of Geography, University of Peshawar (June-2009-July-2010)

Lecturer (Visiting), Department of Geography, University of Peshawar (September-2015-February-2016)

Research Associate, Riphah International University, Islamabad: HEC-NRPU Project (October-2016-November-2017)

Lecturer, Farabi Degree College, Peshawar

Lecturer, ICMS College Hayat Abad, Peshawar (March-2013-March-2015)

#### **Title of Post-Doctorate Research**

Assessing Climate change prediction using Monte Carlo and ARIMA approaches in Khyber Pakhtunkhwa, Pakistan

#### **Title of Ph.D Thesis**

Climate Change and its Impact on River Discharge using Hybrid Modelling in the Hindu Kush region, Pakistan

#### **Title of M.Phil Thesis**

Impact of Climate Change on Runoff in the Drainage Basin of River Swat, Eastern Hindu Kush

#### **Title of M.Sc (Geography) Research Report**

Socio-economic Problems in Village Kambat, Dir Lower

#### **Title of Post-Graduate Diploma in GIS/RS**

Extent of Damages Caused by Flood-2010 in Union Council Balambat, Dir Lower

#### **Specialization**

Climate Change and Disasters, GIS/Remote Sensing, Environmental Hazards, Environmental Geography, Applied Geomorphology.

### **Research Outcomes**

- 14 Research articles published in Impact Factor journals
- 3 Research articles published in HEC recognized X-Category.
- 1 Book Chapter published in Oxford Research Encyclopedia of Natural Hazard Science. Rahman A., Mahmood S., **Dawood M.**, Rahman G., Chen F. (2018). Impact of Climate Change on Flood Factors and Extent of Damages in the Hindu Kush Region.
- Completed research SRGP project titled: Spatial and temporal trend analysis of climate change parameters in Swat basin using Monte Carlo and ARIMA Models under HEC Interim Placement for Fresh Ph.D Program (IPFP)
- Completed research project approved by ORIC titled: Unveiling Climatic Change Risk in the Potwar Region: A Multi-Variable Analysis using Monte Carlo Simulations and Sen's Slope Estimation Approaches for the year 2024-25.
- Reviewed two M.Phil thesis during IPFP tenure as Assistant Professor at University of Gujrat, Gujrat
- Total Research Citations 592
- RG score on Research Gate 15.02
- h-index 10
- i10-index 10
- Total Impact Factor 30.5

### **Assistant Professor in Bahauddin Zakariya University, Multan**

#### **Courses Taught to MSc Geography:**

- i. Population Geography

#### **Courses Taught to BS Geography:**

- i. Introduction to Geography
- ii. Economic Geography

- iii. Introduction to Physical Geography
- iv. Introduction to Human Geography
- v. Conservation of Resources
- vi. Population Geography
- vii. Introduction to Disaster Management
- viii. Introduction to Geology
- ix. Geomorphology
- x. Meteorology
- xi. Hydro-Geography
- xii. Introduction to GIS
- xiii. Geography of Pakistan

**Visiting Faculty in Government College University, Lahore**

**Courses Taught to MS:**

- xiv. Advance Human Geography
- xv. Climate Change Studies

**Courses Taught to BS Geography:**

- i. Disaster Risk Management
- ii. Environmental Geography
- iii. Introduction to Cultural Geography (IDC)
- iv. Urban Geography
- v. Atmosphere and Hydrosphere
- vi. Computer Application
- vii. Introduction to Practical Geography
- viii. Settlement Geography

## **Assistant Professor (IPFP) at University of Gujrat, Gujrat**

### **Courses Taught to M.Phil:**

- i. Climate Change Studies
- ii. Environmental Impact Assessment (EIA)

### **Courses Taught to BS Geography and BS Geomatics (GIS/RS):**

- i. Introduction to Remote Sensing and Geographical Information System (RS/GIS)
- ii. Introduction to Statistics
- iii. Regions and Regional Concepts in Geography
- iv. Introduction to Soil Sciences
- v. Agriculture food security
- vi. Introduction to Photogrammetry
- vii. Digital Cartography

## **Visiting Lecturer at University of Peshawar, Pakistan**

### **Courses Taught:**

- i. Human Geography
- ii. Introduction to Computing

## **Teaching Assistant at University of Peshawar, Pakistan**

- i. Official Work in Department Library
- ii. Data entry

## **Research Associate at Riphah International University, Islamabad: (HEC-NRPU Project)**

The main tasks includes writ up for the said Project, reviewing various reports, writing research articles from the particular project and taking classes to M.Phil level including;

- i. Emergency Response and Recovery
- ii. Advanced Research Methods in Disaster Management

## **Lecturer at Farabi Degree College, Peshawar**

### **Courses Taught:**

- i. Human Geography

- ii. Geography of Pakistan
- iii. Physical Geography
- iv. Cartography

## **Lecturer at ICMS College Hayat Abad, Peshawar**

### **Courses Taught**

- i. Pakistan Study
- ii. Social Study
- iii. Conducting Seminars

### **Awards**

- Award of Excellence on account of fastest PhD -2018 by Student Aid Foundation for Excellence (SAFE), University of Peshawar
- Award of Excellence -2017 by Student Aid Foundation for Excellence (SAFE), University of Peshawar
- Award of Excellence -2016 by Student Aid Foundation for Excellence (SAFE), University of Peshawar
- Best Performance Award by Student Talent Expo Peshawar (STEP) -2016
- Award of Excellence -2015 by Student Aid Foundation for Excellence (SAFE), University of Peshawar

### **Certificate of Appreciation**

Received “Certificate of Appreciation” from the Worthy Vice Chancellor, Bahauddin Zakariya University, Multan on account of exceptional contribution in research during the Golden Jubilee Celebrations ceremony 1975-2025 organized by: Youth Development, Center Bahauddin Zakariya University, Multan.

- **Editor of Research Journal**

Asian Journal of Humanities and Social Sciences (ISSN: 2321-2799)

### **Reviewer of Research Journals**

- International Journal of Climatology, Wiley on behalf of the Royal Meteorological Society (**Impact Factor: 4.0**)
- Water Resources Management, Springer (**Impact Factor: 3.5**)
- Environmental Monitoring and Assessment (**Impact Factor: 1.9**)
- Arabian Journal of Geosciences (**Impact Factor: 1.8**)

- Sustainable Water Resources Management, Springer (**Impact Factor: 1.6**)
- Applied & Environmental Soil Science, Hindawi (**Impact Factor: 4.3**)
- Journal of Himalayan Earth Sciences, Pakistan, HEC X-Category
- Universal Journal of Geoscience, Horizon Research Publishing, USA
- Subject Expert with Pakistan Science Foundation (PSF)
- Soft Computing, Springer (**Impact Factor: 3.7**)
- International Journal of Engineering and Geosciences, HEC X-Category
- Ecological Questions, Nicolaus Copernicus University, HEC X-Category
- Natural & Applied Sciences International Journal (NASIJ), HEC Y-Category
- Environmental Earth Sciences, Springer (IF: 2.8-W), Country: **Germany**
- PLOS ONE (IF: 2.9-W), Country: **USA**
- Environmental Systems Research
- International Journal of Engineering and Geosciences (**Impact Factor: 2.5**)
- Climate Change & Disasters
- [Journal of International Relations and Social Dynamics](#)
- [Magna Carta: Contemporary Social Science](#)

## **Research Supervision**

### **i. Ph.D Thesis**

2019 to 2024 Monitoring Hydro Climatic Variability, Its Impact on Intensity, Pattern and Trend Prediction of Discharge on Jhelum River Basin, Western Himalaya.

### **ii. MS/M.Phil Thesis Supervised**

2022-2024 Temperature Variability and Trend Detection in Bahawalpur Division

2022-2024 Rainfall variability and trend prediction: A case study of Bahawalpur

2022-2024 Drought Assessment using SPI in Bahawalpur Division, Pakistan

2020-2024 Rimsha MPhil

### **PhD Thesis: External Examiner**

University of Peshawar, Peshawar, Pakistan

### **PhD Thesis Evaluated**

1. Nasir M. (2024). Mountain Agro-dynamics and Its Impact on Land Use Land Cover and Sustainability of Subsistence Livelihood at Various Altitudinal Zones of Upper Swat Valley, Pakistan.

### **MPhil/MS Thesis: External Examiner**

1. University of Peshawar, Peshawar
2. University of Gujrat, Gujrat
3. The Islamia University of Bahawalpur, Punjab-Pakistan

#### **MS/ MPhil Thesis: Evaluated**

1. Rauf, A. (2025). GIS-based Integrated Approach for Dams Site Selection in Swat Valley, Pakistan.
2. Shandara. (2025). Spatio-temporal Analysis of Groundwater Quality in Hayatabad, District Peshawar between 2005-2025.
3. Tanoli, SK. (2025). Spatio-temporal Analysis of Rainfall and Temperature Variability and its Impacts on Groundwater Resources of District Abbottabad, Pakistan.
4. Majeed, N. (2024). Impact of Climate Change on Agriculture: A Micro-level Study of Cash Crops, Bahawalpur, Pakistan.
5. Sami, R. (2024). Demographic and Socioeconomic Profile of Street Hawkers Case Study of Wallayatabad, Multan.
6. Aamir, A. (2024). Glacial Lake Outburst Flood Risk Assessment in Baltistan Division, Pakistan using Geospatial Techniques.
7. Ali, M. (2024). Precipitation and Drought Projections for 21<sup>st</sup> Century, using cmip5 and RCPS in Balochistan.
8. Afshan. (2024). Hydro-climatic Variability and Trend Predictions: A Comparative Analysis of Swat and Chitral River Basins, Eastern Hindu Kush.

#### **Conference/Workshop/Symposium/Seminar/Webinars/Training Attended**

1. Attended Training Workshop for FOREWARN & Technical Working Groups From Risk to Readiness: Understanding Risk Modeling and Forecasting for Anticipatory Action held in Roomy Signature Hotel, Islamabad dated 10-11 November 2025.
2. Participated in the four days “Level 1 Training Program Cohort II” held on 26<sup>th</sup> May 2025 at Bahauddin Zakariya University, Multan.
3. Attended Online Webinar on “Climate Change Impact on the formation of the Cyclogenesis process over the Arid and semiarid regions” dated 10/09/2025

- organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
4. Attended Online Webinar on “The Role of Geospatial Databases in Enterprise GIS Systems” dated 21/05/2025 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  5. Attended two day workshop on “Climate Action Summit 2025” Pakistan’s NDCs & Green Taxonomy-A Road Map to Sustainability, dated 15/04/2025 organized by the Department of Environmental Sciences, Bahauddin Zakariya University, Multan.
  6. Attended Online Webinar on “Geographical Information Systems (GIS) and Remote Sensing for Renewable Energy Applications” dated 26/03/2025 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  7. Attended Online Webinar on “Drones: Innovating Air Pollution and Climate Research” dated 05/03/2025 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  8. Attended Online Webinar on “Contemporary RS/GIS Skills Needed to Accommodate the Changing Geospatial Technologies” dated 12/02/2025 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  9. Attended Online Webinar on “Advances in Remote Sensing and Artificial Intelligence in Marine and Coastal Studies” dated 29/01/2025 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  10. Attended Online Webinar on “Turning Earth Observations to Natural Language Dialogues” dated 26/01/2025 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  11. Attended Online Webinar on “The Role of GNSS Satellites in Natural Hazards Monitoring” dated 21/01/2025 organized by The Emirati Society of

- GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
12. Attended Online Webinar on “Coral Reef Early Warning System for Small Island Developing States (SIDS)” dated 12/06/2024 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  13. Attended Online Webinar on “Remote Sensing to Understand Crop Health for Precision Agriculture” dated 22/05/2024 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  14. Attended Online Webinar on “Leveraging Earth Observation Technology for Sustainable Development: A Case Study in Bahrain” dated 21/02/2024 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  15. Attended Online Webinar on “The Significance of Programming for Geospatial Professionals with Real Life Example” dated 07/02/2024 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  16. Attended Online International Webinar on “Exploring the Transition from Traditional Cartography to Digital Mapping” dated 17/10/2023 organized by the Department of Geography, Government College University, Lahore.
  17. Attended Online Webinar on “Deep Learning Techniques for Large-Scale Date Palm Tree Mapping from Multi-scale Remotely Sensed Data” dated 13/09/2023 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
  18. Attended Online Webinar on “Mastering Academic Writing” dated 16/09/2023 organized by the Student Aid Committee, Al-Islah Foundation, Malaysia.
  19. Attended Online Webinar on “CNN-based Boundary Detector for Remote-sensing Images-Dubai Police” dated 26/07/2023 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.

20. Attended Online Webinar on “Sharjah Electricity, Water, and Gas Authority-GIS Intelligence System” dated 10/05/2023 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
21. Attended the 4th ISDE International Lectures titled "Local Earth Observation Data Cubes for the Digital Earth Vision" dated 23/05/2023 organized by the International Society for Digital Earth (ISDE).
22. Attended Online Webinar on “Top tips on teaching Cambridge IGCSE Combined and Co-Ordinated Sciences from David Martindill London” dated 17/04/2023, organized by Cambridge University Press, United Kingdom.
23. Attended Online Webinar on “Climate Change: Floods and Mitigation in Pakistan” dated 31/03/2023 organized by Pakistan Council of Research and Water Resources (PCRWR), Ministry of Water resources Islamabad, Pakistan.
24. Attended Seminar on “Challenges, Opportunities and Trend in Biotechnology in Pakistan” dated 23/03/2023 organized by Pakistan Environmental Protection Agency (PEPA), Ministry of Climate Change, Government of Pakistan held at Serena Hotel, Islamabad.
25. Attended Online Webinar on “Geospatial Analytics Platforms Space Data Center” dated 21/03/2023 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
26. Attended SDGs Symposium-2023 on “Cities and Nature: Exploring linkages and designing solutions for sustainability” dated 28/02/2023 organized by Springer Nature.
27. Attended Online Webinar on “Earth Observation Data to Serve Humanity” dated 08/02/2023 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.
28. Attended Online Webinar on “Navigating the pathways of research publishing in high-quality journals with Scopus at Higher Education Commission (HEC), Pakistan” dated 15/11/2022 organized by the Science direct (Elsevier).
29. Attended Online Webinar on “Mobile and Indoor Mapping” dated 09/11/2022 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre (MBRSC), Dubai.

30. Three days training on University Ranking; 29<sup>th</sup> June to 1<sup>st</sup> July, 2022 organized by Academic Planning and External Links (APEL), Government College University, Lahore.
31. Attended Online Webinar on "Nature Water-An introduction for Water researchers, Librarians and Information Managers" organized by Springer Nature
32. Attended Webinar on "LATEX for Academic Writing" dated 16/09/2022 organized by the Department of Economics, Government College University, Lahore.
33. Attended Online Webinar on "Multisource Remote Sensing-based Precipitation Estimation over the UAE" dated 07/09/2022 organized by The Emirati Society of GIS and Remote Sensing (ESGRS), Mohammad Bin Rashid Space Centre, Dubai.
34. Attended 4<sup>th</sup> Webinar of NDRMF webinar series on Rationalizing the Economic Case for DRR/DRM in Pakistan dated 07/09/2022 organized by National Disaster & Risk Management Fund (NDRMF), Islamabad.
35. Attended a virtual training session on LMS dated September 03, 2022 organized by the IT Department, Government College University, Lahore.
36. Attended webinar on career counseling and opportunities in the field of Geography dated 04 September, 2022.
37. Attended one-day Department of Geography's Virtual Open Session Government College University, Lahore dated 17 August 2022.
38. Attended NASA Earth Science Applications Week 2022, a three-day virtual celebration of the many ways NASA Earth Science is being utilized to make our world a better place Organized by the NASA Earth Applied Sciences Program 09 & 11 August, 2022.
39. Attended virtual webinar on "SAR Interferometry for Monitoring of Land Surface Deformations" Dated Aug 10, 2022 Organized by "The Emirati Society of GIS and Remote Sensing (ESGRS)", Mohammad Bin Rashid Space Centre, Dubai".
40. 1<sup>st</sup> International Virtual Conference on "Environmental Protection & Social Responsibility" organized by the Faculty of Social Sciences, The Islamia

University of Bahawalpur in Collaboration with Green Campus Project, IUB dated 10<sup>th</sup> August, 2022.

41. International Hybrid Symposium on “Minerals and Rocks” 2<sup>nd</sup> April, 2022 organized by the Department of Geography, Government College University, Lahore.
42. Pakistan Climate Conference 2022 with the theme “One Planet One Pakistan”, March 16, 2022 Organized by Unilever Pakistan, Avari Towers, Karachi 10am to 4:30pm.
43. Seminar on “International volunteer day” with titled: “Exploring the Power of Volunteer”, December 14<sup>th</sup>, 2021 organized by Disaster Risk Management Society, Government College University, Lahore.
44. Live Webinar on “Disaster Risk Reduction” organized by Disaster Risk Management Society, GC University, Lahore in collaboration with Jacksonville State University, USA & University of Peshawar on Wednesday 28<sup>th</sup> April, 2021.
45. Online Lecture “Citation Management through a Software” organized by China Study Center, University of Peshawar on 6<sup>th</sup> May, 2021.
46. International Webinar “Microbial Diversity in Changing Climate” organized by the Department of Environmental Sciences, COMSATS university Islamabad on Tuesday 30<sup>th</sup> March, 2021.
47. Webinar on “World Meteorological Day” organized by the Lahore College for Women University (LCWU) on Wednesday 31<sup>th</sup> March 2021.
48. National Symposium on “Geography Curriculum and career opportunities” organized by the Department of Geography, University of Peshawar, Peshawar on Thursday 4<sup>th</sup> March, 2021.
49. Frontiers Forum speaker series, organized by Frontier Forum Lausanne Switzerland on Tuesday 2<sup>nd</sup> March, 2021.
50. Training workshop on “Trends and Prospects of Geography in Higher Education” at Baragali summer campus from June 22-25, 2018.
51. National Conference-2018 on “Climate Change and its impact on agriculture and livelihood of Khyber Pakhtunkhwa and FATA” was jointly organized by the Key Laboratory of Climate Change, Department of Geography, University of Peshawar and Department of Food Sciences and Technology, The

- Agriculture University Peshawar in collaboration with Holistic Understanding for Justified Research and Action (HUIRA) under the Project “WFP/SDC Livelihood & DRR Initiatives in Bajaur and Mohmand Agencies FATA” at Pakistan Forest Institute (PFI) Peshawar on June 20, 2018.
52. 1<sup>st</sup> Workshop on Computer based Software Application in Research, organized by the Department of Computer Science, University of Swabi on 22<sup>nd</sup> May, 2017.
  53. Specialized 5-Day Training workshop on “Application of GIS in Disaster Risk Management” for researcher, schoolteachers, college teachers, university teachers, DRR manager and community representative held during July 3-7, 2017 at the Institute of Education and Research, University of Peshawar, jointly organized by Disaster Resilience and Climate Change, Department of Geography, University of Peshawar, Pakistan and HUIRA Organization.
  54. Workshop on Focused Group Discussions on “Multi Hazards, Vulnerabilities & Risk Assessment (MHVRA) of District Peshawar, 22<sup>nd</sup> February, 2017 at Pearl Continental Hotel Peshawar.
  55. “Broad based workshop on Focus Group Discussion with key stakeholders in MHVRA Peshawar”, jointly organized by Riphah International University and Al-Khidmat Foundation at Green Olive’s, Peshawar on 8<sup>th</sup> September, 2016.
  56. 5<sup>th</sup> CDPM-Disaster Management Exhibition-2012, from November 20-21, 2013, at the Center for Disaster Preparedness & Management, University of Peshawar-Pakistan.
  57. 6<sup>th</sup> CDPM-Disaster Management Exhibition-2012, from December 3-4, 2014, at the Center for Disaster Preparedness & Management, University of Peshawar-Pakistan.
  58. 3<sup>rd</sup> CDPM-Disaster Management Exhibition-2011, from April 20-21, 2011, at the Center for Disaster Preparedness & Management, University of Peshawar-Pakistan.
  59. International Disaster Management Conference (IDMC–2010), on “Good Governance in Disaster Risk Reduction and Climate Change Adaptation” from October-19-21, 2010, at Baragali–Summer Campus, University of Peshawar-Pakistan.

60. 2<sup>nd</sup> CDPM-Disaster Management Exhibition-2010, on June 08-09, 2010, at the Center for Disaster Preparedness & Management, University of Peshawar-Pakistan.
61. Attended one-day online workshop on “Mix Method Strategies” February 04, 2016 at video conference hall, University of Peshawar conducted by Intramural Research Program (IRP).

### **National and International Conferences/Workshops attended as a Resource Person**

1. Attended International conference as invited speaker on “Nexus of Climate Change, and DRR: Anticipatory Actions” dated August 01-03, 2025 organized by University of Peshawar, Pakistan at Baragali Summer Campus.
2. Attended 1<sup>st</sup> International Conference on “Sustainability, Innovation and Climate Change: Transforming the Business Landscape” dated February 22-23, 2025, organized by Quaid-i-Azam Finance Society, Department of Management Sciences Quaid-i-Azam University, Islamabad.
3. Attended 18<sup>th</sup> International Geography Conference on “Impact of Climate Change, Sustainability and resilience” held at Baragali Summer Campus, University of Peshawar June 7-9, 2024 organized by the Department of Geography, University of Peshawar, under the Auspices of Pakistan Geographical Association (PGA).
4. Attended Two Days National Conference on “Climate Change and Water Resources (CCWR): Bridging the Gap for SDG6” organized under HEC LCF funded project. “Achieving SDG6: Inclusive Governance of Urban Water & Sanitation”. Dated Feb 28-29, 2024 at Agriculture Engineering Department, Bahauddin Zakariya University, Multan.
5. Attended National Symposium on “Curriculum Review and Standardization” Geography and Geomatics dated 16/02/2024 organized by the Department of Geography and Geomatics, University of Peshawar.
6. Attended One day national seminar as invited speaker on “*Smog Awareness*” Haze to hope: Smog solutions in Pakistan organized by the Department of

Environmental Sciences, Bahauddin Zakariya University, Multan, dated November 28, 2023.

7. Attended 2<sup>nd</sup> International Geographical Conference (Virtual) on “Climate Change and Disasters” dated 05-06, 2023 organized by the Department of Geography, Government College University, Lahore.
8. International Conference on Waste Business and Management dated September 12-13, 2023 organized by Pakistan Academy of Environmental Sciences in collaboration with the Department of Geography, Quai-i-Azam University, Islamabad and Pakistan Environmental Protection Agency (PAK-EPA).
9. International Conference on “Implications of Climate Change on Water and Agriculture” held at BaraGali Summer Campus, University of Peshawar June 17-19, 2023 organized by the Department of Geography, University of Peshawar.
10. 1<sup>st</sup> International (Virtual) on Application of Hybrid Modelling in Geographical Research dated 03/02/2023 organized by the Department of Geography, Government College University, Lahore.
11. International Conference on “Climate Change and Environment” organized by the Department of Environmental Sciences, Quaid-i-Azam University, Islamabad dated January 11-13, 2023.
12. International Conference on “Impact of Climate Change on Water and Agricultural Sustainability” held at Baragali Summer Campus, University of Peshawar May 24-26, 2022 jointly organized by the Department of Geography, University of Peshawar in Collaboration with Directorate General of Soil and Water Conservation, Government of Khyber Pakhtunkhwa under the Auspices of Pakistan Geographical Association (PGA).
13. Professional Training Workshop for Soil and Water Conservation Officers on “Climate Change and Its Impact on Soil and Water Resources” held at BaraGali Summer Campus, University of Peshawar August 22-24, 2022 organized by the Directorate of Soil and Water Conservation Khyber Pakhtunkhwa.

14. International conference on “Climate Change and Traditional Agricultural Pattern in Pakistan: Implications and Solutions” from 26-28 Oct, 2022 organized by the Department of Geography, Shah Abdul Latif University, Khairpur Sindh.
15. International conference on “Nexus of climate change, Hydro-Geography and agriculture” from June 21-24, 2021 at BaraGali Summer Campus, University of Peshawar Pakistan.
16. As a Session Chair attended the 16<sup>th</sup> All Pakistan Geographical Conference on “Globalization, Environmental Challenges and changing paradigm of Geography in Pakistan” organized by the Department of Geography, University of Punjab, Lahore in collaboration with Lahore College for Women University, Lahore March 11<sup>th</sup> to 13<sup>th</sup>, 2021 at Lahore, Pakistan.
17. 4<sup>th</sup> International Water Conference (IWC-4) on “Climate Change & Disaster Risk Management for Sustainable Development & Businesses” December 19-21, 2017. Jointly organized by SHFINT, Riphah International University, University of Haripur, University of Peshawar, Abasyn University & Pakistan Council of Research and Water Resources (PCRWR), Islamabad, Pakistan.
18. International Conference on “Global Environmental Change and the Role of Geographers” held at Baragali Summer Campus, University of Peshawar July 25-27, 2017 and organized by Disaster Resilience and Climate Change, Department of Geography, University of Peshawar, Pakistan.
19. International Conference on Asia Pacific Policy Dialogue on Water, Energy, Food Security for Poverty Alleviation in Dry land Regions of Pakistan, November 23-25, 2016 At PMAS-Arid Agriculture University Rawalpindi, Pakistan and delivered oral presentation on “Spatio-Statistical analysis of rainfall fluctuation, anomaly and trend in the Hindu Kush region using ARIMA approach.
20. International workshop on sustainable development and solution in post 2015 scenario, presentation title “Climate change and sustainable development in Pakistan” held at University of Gujrat, Gujrat from 1<sup>st</sup> to 3 November, 2016.
21. Specialized 5-Day Training workshop on “*Application of GIS in Disaster Risk Management*” for researcher, school teachers, college teachers, university teachers, DRR manager and community representative held during July 3-7,

- 2017 at the Institute of Education and Research, University of Peshawar jointly organized by Disaster Resilience and Climate Change, Department of Geography, University of Peshawar, Pakistan and HUIRA Organization.
22. 14<sup>th</sup> All Pakistan Geographical Conference on “Geography: Hazards and Disaster Risk Management” organized by the Department of Geography, University of Punjab, Lahore from March 5<sup>th</sup> to 7<sup>th</sup>, 2013 at Lahore.
  23. International Disaster Management Conference-2010 on “Good Governance in Disaster Risk Reduction and Climate Change Adaptation”. October 19 – 21, 2010 Bara Gali Summer Campus University of Peshawar-Pakistan.
  24. 2<sup>nd</sup> International Conference on environmental and sustainable development March 13-14, 2018 organized by Sustainable Development Study Centre (SDSC), Government College University, Lahore.
  25. 1<sup>st</sup> National Graduate Conference March 15-16, 2017 at Allama Iqbal Open University, Islamabad Office of Research, Innovation & Commercialization (ORIC).
  26. As a Session Chair attended the 1<sup>st</sup> International Conference on Software Engineering and Computing Discipline, 2019 organized by the Department of Computer Science and Directorate of Office of Research, Innovation & Commercialization (ORIC), University of Swabi, Pakistan.
  27. Science-Policy Conference on Climate Change December 18-20, 2017, Organized by Global Change Impact Studies Centre (GCISC) and the University of Utah at Marriot Hotel Islamabad, Pakistan.

### **Membership of Professional Organizations**

1. Member, Pakistan Geographical Association (PGA)
2. Member, Hiking and Mountaineering Club (HMC), GC University, Lahore to Date
3. Member, Disaster Risk Management Society (DRMS), GC University, Lahore to Date

4. Member, Garret Geographical Society (GGS), Department of Geography GC University, Lahore
5. Member, Dir Officer Welfare Association (DOWA), 2012 to Date

### **M.Phil/MS Thesis Evaluated:**

1. Sana Bibi. (2019). Evaluation report on M.Phil Thesis entitled “Appraisal of Landslide Susceptibility using Frequency Ratio: A Study of Tehsil Balakot, Khyber Pakhtunkhwa”.
2. Abrarullah. (2019). Evaluation report on MS Thesis entitled “Impact of land use on spatial and seasonal variation of crimes in 2016, using GIS hotspot technique in Peshawar City District”.
3. Impact of Climate Change on Agriculture: A Micro level Study of Cash Crops, Bahawalpur, Pakistan by Nouman Majeed.
4. Demographic and Socioeconomic Profile of Street Hawkers Case Study of Wallayatabad, Multan Rabbia Sami.
5. Glacial Lake Outburst Flood Risk Assessment in Baltistan Division, Pakistan using Geospatial Techniques by Aamna Aamir.
6. Precipitation and Drought Projections for 21<sup>st</sup> Century, using cmip5 and RCPS in Balochistan by Muhammad Ali.
7. Hydro-climatic Variability and Trend Predictions: A Comparative Analysis of Swat and Chitral River Basins, Eastern Hindu Kush by Afshan.

### **Research Project Supervision**

During Interim Place of Fresh Ph.D (IPFP), one group of BS Geography consisting of seven students was supervised titled: Spatial analysis of water contaminations and water borne diseases in Gujrat using Plain approaches.

### **Academic Distinction**

- Talent Certificate in Bazm-E-Shaheen N.W.F.P (Now Khyber Pakhtunkhwa) exam in the year-2000-2001
- First Position in SSC Exam-2001
- First Position in Post-Graduate Diploma in GIS/RS-2011-12

- First Position in GRE-type test conducted by the Department of Geography, University of Peshawar for PhD admissions

### Research Supervised

S.No	Title	Year	Research Experience
1			BS (Hons)
2	Drought Assessment in Bahawalpur Division Punjab, Pakistan	2022	BS (Hons)
3	Assessing Rainfall Prediction in Rawalpindi Division, Punjab, Pakistan using Mann-Kendall Trend Model	2022	BS (Hons)
4	Analyzing Temperature in Rawalpindi Division using Mann-Kendall Trend Model	2022	BS (Hons)
5	Spatial Analysis of Ground Water Depletion in District Quetta, Balochistan	2022	BS (Hons)
6	Spatial and temporal analysis of agricultural land and its conversion into urban area: A study of Lahore city	2022	BS (Hons)
7	Effects of GLOF on native population in Hunza Valley, Gilgit-Baltistan	2022	BS (Hons)

### List of Publications

1. Rahman, A., & Dawood, M. (2017). Spatio-Statistical analysis of temperature fluctuation using Mann-Kendall and Sen's Slope Approach. *Climate dynamics*, 48(3-4), 783-797 (**Impact Factor = 5.04**).
2. Dawood, M., Rahman, A. U., Rahman, G., Nadeem, B., & Miandad, M. (2024). Geo-statistical analysis of climatic variability and trend detection in the Hindu Kush region, North Pakistan. *Environmental Monitoring and Assessment*, 196(1), 4. <https://doi.org/10.1007/s10661-023-12175-9> (**Impact Factor = 3.3**).
3. Nadeem, B., Rahman, A., Dawood, M. (2025). Modelling Rainfall Variability, Trend and Anomaly in Jhelum River Basin, Western Himalaya. *Carpathian Journal of Earth and Environmental Sciences*, 20(2), 295-306. DOI:10.26471/cjees/2025/020/334.

4. Miandad, M., Ansar, A., Rahman, G., Munawar, S., **Dawood, M.** (2025). Spatio-temporal impact of climate variability on crop production of Potohar Region, Pakistan (1990-2017) *Ecological Questions*, 36(2025)1, HEC recognized **X-Category**.
5. Hashim, M., Rahman, A., Nadeem, B., Aziz, F., **Dawood, M.**, Qasim, M., Farooq, MU., Muneer, S. (2023). Spatio-Temporal Analysis of Land Use Land Cover Changes and Spectral Normalized Difference Indices in Multan City, Pakistan, 685-698, *Al-Qantara*, 9(4) (**Impact Factor = 0.21, W-Category**).
6. Rahman, G., Rahman, A. U., Munawar, S., Moazzam, M. F. U., **Dawood, M.**, Miandad, M., & Panezai, S. (2022). Trend analysis of historical and future precipitation projections over a diverse topographic region of Khyber Pakhtunkhwa using SDSM. *Journal of Water and Climate Change* (**Impact Factor = 2.8**).
7. **Dawood, M.**, Rahman, A., Mahmood, S., Rahman, G., & Nazir, S. (2021). Assessing the impact of climatic change on discharge in Swat river basin using fuzzy logic. *Arabian Journal of Geosciences*, 14(18), 1-16. <https://doi.org/10.1007/s12517-021-08219-4> (**Impact Factor: 1.8**).
8. **Dawood, M.**, Rahman, A., Ullah, S., Rahman, G., & Azam, K. (2018b). Spatio-temporal analysis of temperature variability, trend, and magnitude in the Hindu Kush region using Monte Carlo and Sen's slope approaches. *Arabian Journal Geosciences* 11:1–15. <https://doi.org/10.1007/s12517-018-3823-9> (**Impact Factor 1.8**).
9. **Dawood, M.**, Rahman, A. U., Ullah, S., Mahmood, S., Rahman, G., & Azam, K. (2020). Spatio-statistical analysis of rainfall fluctuation, anomaly and trend in the Hindu Kush region using ARIMA approach. *Natural Hazards*, 101, 459-564 (**Impact Factor = 3.1**).
10. **Dawood, M.**, Mahmood, S., Rahman, G., & Rahman, A. (2018a). Impact of rainfall fluctuation on river discharge in Hindu Kush Region, Pakistan. *Abasyn Journal of Social Science* 10:246–259 (Special Issue, November-2017: Disaster Risk Management and Climate Change for Business Continuity and Sustainable Development), HEC recognized **X-Category**.
11. Nadeem, B., Rahman, A., **Dawood, M.**, Kashif, M., & Hashim, M. (2024). Spatio-Temporal Evaluation of Temperature Variability, Trend and Pattern in

- Jhelum River Basin, Western Himalaya. *OEconomia*, 7(2), 1-15, <https://oeconomiajournal.com/index.php/Journal/article/view/128/117>. HEC recognized **X-Category**.
12. Rahman, G., Rahman, A., Ullah, U., & **Dawood, M.** (2018). Spatial and temporal variation of rainfall and drought in Khyber Pakhtunkhwa Province of Pakistan during 1971–2015. *Arabian Journal of Geosciences*, 11, pp1-13, <https://doi.org/10.1007/s12517-08-3396-7> (**Impact Factor 1.8**).
  13. Rahman, G., Rahman, A., Ullah, U., **Dawood, M.**, Farhan, M., Lee, B. (2018). Spatio-temporal characteristics of meteorological drought in Khyber Pakhtunkhwa, Pakistan. *PLOS ONE*, 1-16. <https://doi.org/10.1371/journal.pone.0249718> (**Impact Factor = 3.75**).
  14. Rahman, G., Rahman, A., Anwar, M. M., **Dawood, M.**, & Miandad, M. (2021). Spatio-temporal analysis variation of variability, trend detection and drought assessment in Khyber Pakhtunkhwa, Pakistan. *Arabian Journal of Geosciences*, pp 1-15, <https://doi.org/10.1007/s12517-021-09382-4> (**Impact Factor 1.8**).
  15. Aziz, A., Anwar, M. M., & **Dawood, M.** (2020). The impact of neighborhood services on land values: an estimation through the hedonic pricing model. *GeoJournal*, 1-11, (**Impact Factor = 2.5**).
  16. Khan, H., Shah Nazir, S. S., Iqbal, M., **Dawood, M.**, Ali, F., Zaman, Q., & Ilyas, M. (2014). A comparative and spatial study of various areas of Khyber Pakhtunkhwa-an education perspective. *Life Science Journal*, 11(10s), (**Impact Factor = 0.16**).
  17. Mohsin, M., Anwar, M, M., **Dawood, M.**, Ali Shah, M, A., Jamal, F., & Basit, M. (2019). Impact of land use change on land values: A case of Jhangiwalla, Bahawalpur City, Pakistan. *Journal of Biodiversity and Environmental Sciences (JBES)*. ISSN: 2220-6663 (Print) 2222-3045 (Online) Vol. 14, No. 6, p. 152-160, 2019 <http://www.innspub.net>. HEC recognized **X-Category**.
  18. Gul, S., Ullah, S., & **Dawood, M.** (2018a). Media Portrayal of Women during Kashmir Earthquake: A Comparison of Pakistani and Canadian Newspapers *Abasyn Journal of Social Science* 10:92–101 (Special Issue, November-2017: Disaster Risk Management and Climate Change for Business Continuity and Sustainable Development), HEC recognized **X-Category**.

19. **Dawood, M.**, & Shirazi, S. A. (2023). Geo-spatial analysis of rainfall variability in Khyber Pakhtunkhwa Province, Pakistan. *Ecological Questions*, 34(1), HEC recognized **X-Category**.
20. Rahman, A. U., Mahmood, S., **Dawood, M.**, Rahman, G., & Chen, F. (2019). Impact of climate change on flood factors and extent of damages in the Hindu Kush Region. In Oxford research encyclopedia of natural hazard science.
21. Hashim, M., Rahman, A., Qasim, M., Farooq, M U., **Dawood, M.**, Nadeem, B., Muneer, S. (2025) "Application of Geospatial Approaches for Evaluation of Urban Growth Pattern and Trend Prediction of Multan City, Pakistan", IJIST, Vol. 07 Special Issue. pp 108-120.
22. Jamil, A., Dawood, M., & Ubaidullah. (2025). Assessing Drought Conditions using SPEI in Bahawalpur Division, Punjab, Pakistan. *International Journal of Innovations in Science & Technology*, 7(9), 266–278. Retrieved from <https://journal.50sea.com/index.php/IJIST/article/view/1469>.

### **Submitted Papers**

1. Recently a research article titled "Assessing snow cover variability in Swat river Basin, eastern Hindu Kush, Pakistan" has been submitted to the journal *Modelling Earth Systems and Environment*, Springer (**Impact Factor = 3.9**).
2. Recently a research article titled "Spatio-Statistical Analysis of Rainfall Fluctuation in Khyber Pakhtunkhwa, Pakistan" is submitted to the *Journal Ecological Questions* (**HEC X Category**).

### **Professional Experience in Administration**

Dec-2024 to Date	Departmental Student Affairs (DSA), Department of Geography Bahauddin Zakariya University, Multan
Oct-2024 to Date	Building Incharge, Department of Geography Bahauddin Zakariya University, Multan
Sept-2021 to Feb 2023	QEC Coordinator, Department of Geography GC University, Lahore

Sep-2021 to Aug 2022 MS Coordinator (Geography), Department of Geography, GC University, Lahore

Sep-2021 to Feb 2023 Incharge Library, Department of Geography GC University, Lahore

Sep-2021 to Feb 2023 Co-Incharge Sports Department of Geography GC University, Lahore

Jan-2022 to Feb 2023 Ranking Focal Person, Department of Geography GC University, Lahore

Sep-2021 to Sep-22 Co-Advisor Garret Geographical Society (GGS), Department of Geography GC University, Lahore

Feb-2022 to Feb 2023 Assistant Superintendent, Ashfaq Ahmad Hostel (Boys) in New Campus, GC University, Lahore

Feb-2021 to Feb 2023 Secretary Departmental Board of Faculty (DBoF), Department of Geography GC University, Lahore

Mar-2022 to Feb 2023 Secretary Departmental Research Advisory Committee (MS/MPhil), Department of Geography GC University, Lahore

Jan-2022 to Feb 2023 Advisor BS Year III, Department of Geography GC University, Lahore

Apr-2022 to Feb 2023 Departmental Assistant Controller of Examinations, Department of Geography GC University, Lahore

Feb-2022 to Feb 2023 Incharge Library, Ashfaq Ahmad Hostel (New Campus) GC University, Lahore

### **Computer and English Skills**

- 6 Months Diploma in basic Computer in distinction: Jandool College of Technology, Dir Lower

- MATLAB, Fuzzy Logic Model, Addinsoft Excel state, SPSS and Origin Pro-8.
- Statistical Models such as Mann-Kendall Trend Model, Mann-Kendall modified test, ARIMA Model, Monte Carlo Simulation Model, Sen's Slope Estimator, Regression Model and Correlation etc.
- MS Word 2007, 2010 and 2013, MS Excel, MS Power Point, Windows XP, Windows 7. Windows 8.
- ArcGIS, MapInfo, ERDAS Imagine, ArcView.
- Two Months English Conversation in distinction from Kabul English Language Center (KELC), Peshawar.
- English Proficiency Certificate from University of Peshawar, Pakistan
  
- Completed online short course on Global Warming: The Science and Modeling of Climate Change from University of Chicago

### **Skills in Geo-Informatics**

<b>Skill Name</b>	<b>Level</b>	<b>Last Used</b>
GIS software ArcGIS (for Teaching and Research)	Excellent	Currently Working
Addinsoft Excel State-2014	Excellent	Currently Working
SPSS (For Research)	Excellent	Currently Working
Minitab software	Excellent	Currently Working
Mat Lab	Excellent	Currently Working

### **Languages: Reading, Writing and Speaking Skills**

<i>Language</i>	<i>Speaking</i>	<i>Reading</i>	<i>Writing</i>
English	Excellent	Excellent	Excellent
Urdu	Excellent	Excellent	Excellent
Pashto	Excellent	Excellent	Excellent
Persian	Good	Good	Good
Punjabi	Good	Good	Good

### **Countries Visited**

- Kingdom of Saudi Arabia (KSA)

## **References**

- i) Prof. Dr. Atta-ur-Rahman, Chairman, Department of Geography and Geomatics, University of Peshawar, Pakistan. E-mail; [atta\\_urp@yahoo.com](mailto:atta_urp@yahoo.com) Mobile No. +923459429184
- ii) Dr. Samiullah, Assistant Professor, Department of Geography and Geomatics, University of Peshawar, Pakistan. Email; [samigeo78@uop.edu.pk](mailto:samigeo78@uop.edu.pk) Mobile No. +923459429484