Zulfiqar Ali, Ph.D.

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Personal Information



Education

2015 – 2019	Ph.D., Quaid-e-Azam University Islamabad, Pakistan in Statistics. Thesis title: <i>Propagation of Different Stochastic Frameworks for Modeling, Forecasting and Spatial Analysis of Drought Hazard.</i>
2012 – 2014	M.Phil., Quaid-e-Azam University Islamabad, Pakistan in Statistics. Thesis title: <i>Analyzing Spatio-Temporal Variability in Droughts in Northern Area and KPK.</i>
2010 – 2012	M.Sc., University of Sargodha, Punjab, Pakistan in Statistics.

Employment History

2022 - · · · ·	Assistant Professor of Statistics, University of the Punjab, Lahore, Pakistan.

2019 – 2022 **Visiting and Contractual Assistant Professor of Statistics,** Quaid-i-Azam University Islamabad, International Islamic University Islamabad, University of Sargodha, Minhaj University Lahore, University of Sialkot

Research Interests

- Environmental and Ecological Statistics Statistical methods for analyzing environmental and ecological data.
- Climate Modeling and Extreme Event Analysis Predicting climate patterns and extreme weather events using statistical models.
- Machine Learning and Stochastic Process Modeling Data-driven forecasting and uncertainty modeling in dynamic systems.
- **Spatio-Temporal and Biostatistical Analysis** Analyzing spatial and temporal data in environmental and biological sciences.

Research Publications

Journal Articles

15

A. Batool, S. Ahmad, A. Waseem, V. Kartal, Z. Ali, and M. Mohsin, "Evaluating variogram models and kriging approaches for analyzing spatial trends in precipitation simulations from global climate models," *Acta Geophysica*, pp. 1–21, 2025.

A. Batool, V. Kartal, and Z. Ali, "Development of trivariate multiscalar-standardized drought index (tmsdi) for assessing drought characteristics," *Environmental Monitoring and Assessment*, vol. 197, no. 3, p. 268, 2025.

A. Batool, V. Kartal, Z. Ali, M. Scholz, and F. Ali, "A novel regional forecastable multiscalar standardized drought index (rfmsdi) for regional drought monitoring and assessment," *Agricultural Water Management*, vol. 308, p. 109 289, 2025.

M. Mohsin, A. Bilal, and Z. Ali, "Assessment of reliability and availability of a system by using a bivariate stochastic model," *Quality and Reliability Engineering International*, vol. 41, no. 1, pp. 255–273, 2025.

S. Qamar, V. Kartal, M. E. Emiroglu, Z. Ali, S. S. Sammen, and M. Scholz, "A novel early-warning standardized indicator for drought preparedness and management under multiple climate model projections," *Meteorological Applications*, vol. 32, no. 1, e70014, 2025.

M. Shakeel, H. Abbas, Z. Ali, and et al., "Enhancing drought projection reliability: A framework for optimal gcm selection, aggregation, and trend analysis under shared socioeconomic pathways," *Theoretical and Applied Climatology*, vol. 156, p. 216, 2025. *O* DOI: 10.1007/s00704-025-05443-w.

7 M. Shakeel, H. Abbas, A. Waseem, and Z. Ali, "Adaptive ensemble weighting for gcms to enhance future drought characterization under various climate change scenarios," *Theoretical and Applied Climatology*, vol. 156, no. 5, pp. 1–20, 2025.

M. Shakeel and Z. Ali, "A new statistical framework for future drought assessment–mutual information-based regional integrated standardized multicriteria decision for drought assessment," *Theoretical and Applied Climatology*, vol. 156, no. 6, pp. 1–20, 2025.

9 M. Yousaf, A. Iqbal, S. Qamar, *et al.*, "Development of a novel multi-model ensemble weighting scheme for improved drought assessment," *Water Conservation Science and Engineering*, vol. 10, no. 2, p. 45, 2025.

10 H. Abbas and Z. Ali, "A novel statistical framework of drought projection by improving ensemble future climate model simulations under various climate change scenarios," *Environmental Monitoring and Assessment*, vol. 196, no. 10, p. 938, 2024.

S. Ahmad, A. Batool, and Z. Ali, "Spatial predictive analysis of drought duration in relation to climate change using interpolation techniques," *Stochastic Environmental Research and Risk Assessment*, pp. 1–18, 2024.

S. Akhtar, M. Mohsin, and Z. Ali, "Modeling of ground motion data to assess the seismic features for monitoring the seismic activity," *Natural Hazards*, pp. 1–21, 2024.

13 W. B. Awan, A. Batool, Z. Ali, Z. Xu, R. Niaz, and S. S. Sammen, "A unified procedure for the probabilistic assessment and forecasting temperature characteristics under global climate change," *Environment, Development and Sustainability*, pp. 1–25, 2024.

A. Baseer, Z. Ali, M. Ilyas, and M. Yousaf, "A new monte carlo feature selection (mcfs) algorithm-based weighting scheme for multi-model ensemble of precipitation," *Theoretical and Applied Climatology*, vol. 155, no. 1, pp. 513–524, 2024.

A. Batool, Z. Ali, M. Mohsin, A. Masmoudi, V. Kartal, and S. Satti, "Assessing the generalization of forecasting ability of machine learning and probabilistic models for complex climate characteristics," *Stochastic Environmental Research and Risk Assessment*, vol. 38, no. 8, pp. 2927–2947, 2024.

16 R. Fatima, J. Saleem, M. Ishaq, *et al.*, "Exploring the co-occurrence and latent class analysis of adverse childhood experiences in university students in lahore, pakistan," 2024.

A. Gul, S. Qamar, M. Yousaf, Z. Ali, M. Alshahrani, and S. O. Hilali, "Development of maximum relevant prior feature ensemble (mrpfe) index to characterize future drought using global climate models," Scientific Reports, vol. 14, no. 1, p. 15 836, 2024. A. Mukhtar, Z. Ali, V. Kartal, E. Karakoyun, M. Yousaf, and S. S. Sammen, "Development of divergence and interdependence-based hybrid weighting scheme (dihws) for accurate assessment of regional drought," Theoretical and Applied Climatology, vol. 155, no. 7, pp. 6473-6490, 2024. A. Mukhtar, Z. Ali, A. Nazeer, S. Dhahbi, V. Kartal, and W. Deebani, "A novel semi data dimension reduction type weighting scheme of the multi-model ensemble for accurate assessment of twenty-first century drought," Stochastic Environmental Research and Risk Assessment, vol. 38, no. 8, pp. 2949–2973, 2024. A. Mukhtar, A. Batool, Z. Ali, S. Qamar, S. Riaz, and S. S. Sammen, "A new hybrid weighted regional 20 drought index to improve regional drought assessment," Water Resources Management, vol. 38, no. 14, pp. 5541-5558, 2024. R. Naz and Z. Ali, "A novel self-adjusting weight approximation procedure to minimize non-identical 21 seasonal effects in multimodel ensemble for accurate twenty-first century drought assessment," Stochastic Environmental Research and Risk Assessment, vol. 38, no. 6, pp. 2451–2472, 2024. R. Naz, Z. Ali, V. Kartal, M. A. Alshahrani, S. O. Hilali, and F. M. Al Samman, "Improving drought monitoring using climate models with bias-corrected under gaussian mixture probability models," International Journal of Climatology, vol. 44, no. 14, pp. 4984–5008, 2024. A. Parvez, J. Saleem, M. A. Bhatti, A. Hasan, Z. Ali, and T. Tauqeer, "Boruta-driven analysis of telehealth 23 amalgamation across healthcare stratifications with diffuse-dual-channel and tiered-gatekeeper systems," Scientific Reports, vol. 14, no. 1, p. 24 784, 2024. A. Parvez, J. Saleem, M. A. Bhatti, et al., "Aligning practitioner's perception: Empowering mast framework for evaluating telemedicine services," Digital Health, vol. 10, p. 20 552 076 241 297 317, 2024.

J. Saleem, R. Zakar, M. S. Butt, *et al.*, "Application of the boruta algorithm to assess the multidimensional determinants of malnutrition among children under five years living in southern punjab, pakistan," *BMC Public Health*, vol. 24, no. 1, p. 167, 2024.

26 M. Shakeel and Z. Ali, "Improving future drought predictions–a novel multi-method framework based on mutual information for subset selection and spatial aggregation of global climate models of precipitation," *Stochastic Environmental Research and Risk Assessment*, vol. 38, no. 8, pp. 3291–3312, 2024.

27 M. Shakeel and Z. Ali, "Integration of exponential weighted moving average chart in ensemble of precipitation of multiple global climate models (gcms)," *Water Resources Management*, vol. 38, no. 3, pp. 935–949, 2024.

28 M. Yousaf, A. Baseer, Z. Ali, O. Albalawi, S. Qamar, and E. E. Mahmoud, "Development of ridge ensemble standardized drought index (resdi) for improving drought characterization and future assessment," *Environmental Monitoring and Assessment*, vol. 196, no. 7, p. 614, 2024.

29 M. Ahmad, Z. Ali, M. Ilyas, M. Mohsin, and R. Niaz, "A common factor analysis based data mining procedure for effective assessment of 21st century drought under multiple global climate models," *Water Resources Management*, vol. 37, no. 12, pp. 4787–4806, 2023.

30 Z. Ali, S. Qamar, N. Khan, M. Faisal, and S. S. Sammen, "A new regional drought index under x-bar chart based weighting scheme-the quality boosted regional drought index (qbrdi)," *Water Resources Management*, vol. 37, no. 5, pp. 1895–1911, 2023.

A. Batool, Z. Ali, M. Mohsin, and M. Shakeel, "A generalized procedure for joint monitoring and probabilistic quantification of extreme climate events at regional level," *Environmental Monitoring and Assessment*, vol. 195, no. 10, p. 1223, 2023.

Z. Li, S. Riaz, S. Qamar, Z. Ali, J. N. Abbasi, and R. Fayyaz, "Development of adaptive standardized precipitation index and its application in the tibet plateau region," Stochastic Environmental Research and Risk Assessment, vol. 37, no. 2, pp. 557-575, 2023. R. Niaz, M. M. Almazah, A. Al-Rezami, Z. Ali, I. Hussain, and T. Omer, "Proposing a new framework for analyzing the severity of meteorological drought," Geocarto International, vol. 38, no. 1, p. 2 197 512, 2023. R. Niaz, A. Hussain, M. M. Almazah, I. Hussain, Z. Ali, and A. Al-Rezami, "Identifying inter-seasonal drought characteristics using binary outcome panel data models," Geocarto International, vol. 38, no. 1, p. 2 178 527, 2023. 35 S. Qamar, Z. Ali, and S. S. Sammen, "A new method for modelling precipitation variability in relation to climate change," Journal of Water and Climate Change, vol. 14, no. 1, pp. 289-304, 2023. M. Yousaf, Z. Ali, M. Mohsin, M. Ilyas, and M. Shakeel, "Development of a new hybrid ensemble 36 method for accurate characterization of future drought using multiple global climate models," Stochastic Environmental Research and Risk Assessment, vol. 37, no. 12, pp. 4567-4587, 2023. 37 F. Ali, Z. Ali, B.-Z. Li, et al., "Exploring regional profile of drought history-a new procedure to characterize and evaluate multi-scaler drought indices under spatial poisson log-normal model," Water Resources Management, vol. 36, no. 9, pp. 2989-3005, 2022. F. Ali, B.-Z. Li, and Z. Ali, "A new weighting scheme for diminishing the effect of extreme values in regional drought analysis," Water Resources Management, vol. 36, no. 11, pp. 4099-4114, 2022. F. Ali, S. Riaz, Z. Ali, S. Qamar, B.-Z. Li, and M. A. Khan, "The spatiotemporal weighted efficient drought index—a new generalized procedure of regional drought indicator," *Ecohydrology*, vol. 15, no. 7, e2454, 2022. M. A. Khan, S. Riaz, H. Jiang, et al., "Development of an assessment framework for the proposed 40 multi-scalar seasonally amalgamated regional standardized precipitation evapotranspiration index (msarspei) for regional drought classifications in global warming context," Journal of Environmental Management, vol. 312, p. 114 951, 2022. M. A. Khan, X. Zhang, Z. Ali, H. Jiang, M. Ismail, and S. Qamar, "A new standardized type drought 41 indicators based hybrid procedure for strengthening drought monitoring system," Tellus A: Dynamic Meteorology and Oceanography, vol. 74, no. 1, 2022. Z. Li, Z. Ali, T. Cui, et al., "A comparative analysis of pre-and post-industrial spatiotemporal drought 42 trends and patterns of tibet plateau using sen slope estimator and steady-state probabilities of markov chain," Natural Hazards, vol. 113, no. 1, pp. 547-576, 2022. 43 M. A. Raza, M. M. Almazah, Z. Ali, I. Hussain, and F. S. Al-Duais, "Application of extreme learning machine algorithm for drought forecasting," Complexity, vol. 2022, no. 1, p. 4 998 200, 2022. Z. Tehreem, Z. Ali, N. Al-Ansari, R. Niaz, I. Hussain, and S. S. Sammen, "A novel appraisal protocol for 44 spatiotemporal patterns of rainfall by reconnaissance the precipitation concentration index (pci) with global warming context," Mathematical Problems in Engineering, vol. 2022, no. 1, p. 3 012 100, 2022. 45 S. Yuanbin, S. Qamar, Z. Ali, T. Yang, A. Nazeer, and R. Fayyaz, "A new ensemble index for extracting predictable drought features from multiple historical simulations of climate," Tellus A: Dynamic Meteorology and Oceanography, vol. 74, no. 1, 2022. F. Ali, B.-Z. Li, and Z. Ali, "Strengthening drought monitoring module by ensembling auxiliary information based varying estimators," Water Resources Management, vol. 35, no. 10, pp. 3235-3252, 2021. Z. Ali, A. Ellahi, I. Hussain, et al., "Reduction of errors in hydrological drought monitoring-a novel 47 statistical framework for spatio-temporal assessment of drought," Water Resources Management, vol. 35, no. 13, pp. 4363-4380, 2021.

R. Habeeb, X. Zhang, I. Hussain, et al., "Statistical analysis of modified hargreaves equation for precise estimation of reference evapotranspiration," Tellus A: Dynamic Meteorology and Oceanography, vol. 73, no. 1, pp. 1–12, 2021. M. A. Khan, M. Faisal, M. Z. Hashmi, A. Nazeer, Z. Ali, and I. Hussain, "Modeling drought duration and severity using two-dimensional copula," Journal of Atmospheric and Solar-Terrestrial Physics, vol. 214, p. 105 530, 2021. R. Niaz, I. Hussain, Z. Ali, and M. Faisal, "A novel framework for regional pattern recognition of 50 drought intensities," Arabian Journal of Geosciences, vol. 14, pp. 1-16, 2021. 51 R. Niaz, I. Hussain, X. Zhang, et al., "Prediction of drought severity using model-based clustering," Mathematical Problems in Engineering, vol. 2021, no. 1, p. 9 954 293, 2021. 52 R. Niaz, X. Zhang, Z. Ali, et al., "A new propagation-based framework to enhance competency in regional drought monitoring," Tellus A: Dynamic Meteorology and Oceanography, vol. 73, no. 1, pp. 1–12, 2021. A. Raza, I. Hussain, Z. Ali, et al., "A seasonally blended and regionally integrated drought index using bayesian network theory," Meteorological Applications, vol. 28, no. 3, e1992, 2021. Z. Ali, I. M. Almanjahie, I. Hussain, M. Ismail, and M. Faisal, "A novel generalized combinative 54 procedure for multi-scalar standardized drought indices-the long average weighted joint aggregative criterion," Tellus A: Dynamic Meteorology and Oceanography, vol. 72, no. 1, pp. 1–23, 2020. 55 Z. Ali, I. Hussain, M. Faisal, M. Y. Shad, E. E. Elashkar, and S. Gani, "An ensemble procedure for pattern recognition of regional drought," International Journal of Climatology, vol. 40, no. 1, pp. 94–114, 2020. Z. Ali, I. Hussain, M. Faisal, et al., "Characterization of regional hydrological drought using improved 56 precipitation records under multi-auxiliary information," Theoretical and Applied Climatology, vol. 140, pp. 25-36, 2020. 57 Z. Ali, I. Hussain, M. Faisal, et al., "On the more generalized non-parametric framework for the propagation of uncertainty in drought monitoring," Meteorological Applications, vol. 27, no. 3, e1914, 2020. Z. Ali, I. Hussain, M. Faisal, et al., "Propagation of the multi-scalar aggregative standardized precipitation temperature index and its application," Water Resources Management, vol. 34, pp. 699-714, 2020. Z. Ali, I. Hussain, M. A. Grzegorczyk, et al., "Bayesian network based procedure for regional drought monitoring: The seasonally combinative regional drought indicator," Journal of Environmental Management, vol. 276, p. 111 296, 2020. Z. Ali, I. Hussain, A. Nazeer, et al., "Measuring and restructuring the risk in forecasting drought classes: 60 An application of weighted markov chain based model for standardised precipitation evapotranspiration index (spei) at one-month time scale," Tellus A: Dynamic Meteorology and *Oceanography*, vol. 72, no. 1, pp. 1–10, 2020. H. Jiang, M. A. Khan, Z. Li, Z. Ali, F. Ali, and S. Gul, "Regional drought assessment using improved 61 precipitation records under auxiliary information," Tellus A: Dynamic Meteorology and Oceanography, vol. 72, no. 1, pp. 1–26, 2020. R. Niaz, I. Hussain, Z. Ali, et al., "A novel spatially weighted accumulative procedure for regional drought monitoring," Tellus A: Dynamic Meteorology and Oceanography, vol. 72, no. 1, pp. 1–13, 2020. I. Ullah, A. Zuberi, H. Rehman, Z. Ali, P.-O. Thörnqvist, and S. Winberg, "Effects of early rearing 63 enrichments on modulation of brain monoamines and hypothalamic-pituitary-interrenal axis (hpi axis) of fish mahseer (tor putitora)," Fish Physiology and Biochemistry, vol. 46, pp. 75–88, 2020.

Z. Ali, I. Hussain, M. Faisal, E. E. Elashkar, S. Gani, and M. A. Shehzad, "Selection of appropriate time scale with boruta algorithm for regional drought monitoring using multi-scaler drought index," *Tellus A: Dynamic Meteorology and Oceanography*, vol. 71, no. 1, p. 1604 057, 2019.

Z. Ali, I. Hussain, M. Faisal, A. M. Shoukry, S. Gani, and I. Ahmad, "A framework to identify homogeneous drought characterization regions," *Theoretical and Applied Climatology*, vol. 137, pp. 3161–3172, 2019.

⁶⁶ Z. Ali, I. Hussain, M. Faisal, *et al.*, "A probabilistic weighted joint aggregative drought index (pwjadi) criterion for drought monitoring systems," *Tellus A: Dynamic Meteorology and Oceanography*, vol. 71, no. 1, p. 1 588 584, 2019.

⁶⁷ Z. Ali, I. Hussain, M. Faisal, *et al.*, "A new weighting scheme in weighted markov model for predicting the probability of drought episodes," *Advances in Meteorology*, vol. 2018, no. 1, p. 8 954 656, 2018.

⁶⁸ Z. Ali, I. Hussain, M. Faisal, *et al.*, "Forecasting drought using multilayer perceptron artificial neural network model," *Advances in meteorology*, vol. 2017, no. 1, p. 5 681 308, 2017.

Z. Ali, I. Hussain, M. Faisal, *et al.*, "A novel multi-scalar drought index for monitoring drought: The standardized precipitation temperature index," *Water resources management*, vol. 31, pp. 4957–4969, 2017.

70 H. M. Nazir, I. Hussain, M. I. Zafar, Z. Ali, and N. M. AbdEl-Salam, "Classification of drinking water quality index and identification of significant factors," *Water resources management*, vol. 30, pp. 4233–4246, 2016.

Miscellaneous Experience

Committee Memberships

Present Member, Departmental Doctoral Programme Committee (DDPC), College of Statistical Sciences, University of the Punjab, Lahore. Member, Exams Inspection Committee (Internal), College of Statistical Sciences, University of the Punjab, Lahore. 2023 Member, Decoration Committee, Sport Fest 2023,24, College of Statistical Sciences, University of the Punjab, Lahore. Member, Decoration Committee, Sport Fest 24, College of Statistical Sciences, University 2024 of the Punjab, Lahore. In-charge, Decoration Committee, Sport Fest 2025, College of Statistical Sciences, Uni-2025 versity of the Punjab, Lahore. Member, HEC Revision Committee (Departmental Level). Present **Focal Person Roles**

Focal Person, ORIC (Departmental Level).

Focal Person, Career Counselling Center (Departmental Level).

Courses Taught

Undergraduate Level

- **Population Study**
- Demography
- **Probability and Statistics**
- **Epidemiology**

Courses Taught (continued)

- **Probability and Probability Distribution**
- Categorical Data Analysis
- R Software
- SPSS Software
- Official Statistics
- Introduction to Biomedical Research
- Design and Analysis for Medical Studies
- Research Methods

Post-Graduate and Ph.D. Level

- Spatial Statistics
- Time Series Analysis
- Multivariate Analysis
- Advanced Topics in GIS

Thesis Supervision

Ph.D. Level

In-progress

- **Rubina Naz**. Thesis Topic: New Statistical Approaches for the Assessment of Drought and Extreme Events in Relation to Climate Change, **Status:** Submitted for Review.
- Muhammad Shakeel. Thesis Topic: Development of Hybrid Paradigms for Simultaneous Handling Bias and Multiplicity in Global Climate Models for Future Drought Characterization, Status: Submitted for Review.
- Rabiya Fatima. Development of statistical approaches to access spatio temporal characteristics of droughts and heat wave, Status: In Progress
- Rashida Khalil. Thesis Topic: Novel Calibration Frameworks for Improving Multi-Model Ensembles of Simulated Climate Data: Applications in Drought and Heatwave Assessment: Status: In Progress
- Hussnain Abbas. Thesis Topic: Advanced Statistical Frameworks for Analyzing Drought Dynamics under Socioeconomic Emission Scenarios, Thesis Topic: Status: In Progress
- Wajiha Batool Awan. Thesis Topic: Novel Statistical Procedures and Standardized Indices for Assessing Probabilistic Characterization of Air Pollution with Spatial and Spatio-Temporal Covariates: Status: In Progress

M.Phil. Level

2023

- Alina Mukhtar. Development of Multimodal Ensemble of Precipitation for Handling Multiplicity of Global Climate Models (GCMs).
- Amina Batool. Improved Standardized Indices for Joint Monitoring of Dry and Hot Conditions of Climate.
- Muhammad Ahmad. Novel Data Mining Procedures for Accurate Assessment and Characterization of Drought under Global Climate Models.
- Abdul Baseer. Implications of Monte Carlo Feature Selection (MCFS) for Accurate Assessment of Drought.
- **Mahrukh Yousaf**. Development of Multimodel Weighted Projected Standardized Precipitation Index With Application.

Thesis Supervision (continued)

- **Sumaya Saif**. Analyzing Trend and Probabilistic Characterizations of Cold and Hot Events under Global Climate Models.
- 2024 Sufian Ahmad. Exploring the Complex Spatial Characteristics of Climate Variables Using Kriging Interpolation Methods.
 - **Zunaira Batool**. Integration of Bayesian Adaptive Sampling in Multi-Model-Ensemble of Global Circulation Models.
 - Sarah Khan. Improving Multi-Models Ensembles by Grouping Global Climate Models Under Advanced Clustering Method.
 - **Saira Akram**. Development of New Standardized Indices for Improving Drought Monitoring System.
 - Ayesha Waseem. Improved Indices for Assessment and Forecasting of Drought and Flood Using Integrated Steady State Probability of Markov Chain.

Undergraduate Level



- Ahmad Awan Mukhtar, Drought Dynamics in Gilgit Baltistan: Utilizing NDVI and Statistical Modeling for Effective Management.
- Ali Hassan Sherazi, A Comprehensive Analysis of Deep Learning Techniques for Downscaling Global Climate Model Outputs.
- **Robina Fazal Karim**, Determinations of Life Expectance: A Global Study From 2000-2015.

Symposia

2024 Symposium on Frontiers of Engineering Materials and Metallographic Competition
 Fundamentals and Modern Trends in Supply Chain

Software Skills

Statistical and Computational Programming

R
C
C++
SPSS
NCSS
Arc-GIS
Python
UNIX
Matlab

Projects

- Estimating the Economics of Climate Change in Pakistan, **Funding Organization:** RASTA, PIDE, Pakistan. **Role:** Co-Principal Investigator, **Funds:** 4996530 PKR, **Status:** Approved (Stage I)
- On the Accurate Assessment of Climate Hazards Under Various Statistical Paradigms, Funding Organization: University of the Punjab, Lahore, Pakistan, Role: Principal Investigator, Funds: 200,000 PKR

Status: Approved and Completed

Improving Future Flood Monitoring and Forecasting in Relation to Climate Warming Using Simulated Multiple Time Series of Precipitation of Global Climate Models Funding Organization: University of the Punjab, Lahore, Pakistan, Role: Principal Investigator, Funds: 200,000 PKR Status: Approved

Awards and Research Honorariums

- Performance Based Research Award for the Year 2022 Awarding Organization: University of the Punjab, Lahore, Pakistan.
- Performance Based Research Award for the Year 2023 Awarding Organization: University of the Punjab, Lahore, Pakistan.
- Performance Based Research Honorarium for the Year 2023 Awarding Organization: University of the Punjab, Lahore, Pakistan.
- Qualified for the Performance Based Research Award for the Year 2024 Awarding Organization: University of the Punjab, Lahore, Pakistan.
- Qualified for the Performance Based Research Honorarium for the Year 2024 Awarding Organization: University of the Punjab, Lahore, Pakistan.

International Visit

Oct 2018 – Apr 2019

Country: Netherlands, Funding Organization: HEC Pakistan Purpose of Visit: To Enhance Research Capabilities

Invited Speaker

Conducted a workshop on "Academic Writing and Statistical Data Analysis in Physical and Biological Sciences" at UAF, PARS campus, Faisalabad.

CONFERENCES / SEMINARS / WORKSHOPS

- Conducted a workshop on "Introduction to Statistical Analysis for Medical Research using R Studio" at Institution of Allied Health Science, Gulab Devi Educational Complex, Firozepur Road, Lahore.
- Invited Speaker and conducted on the workshop entitled "Academic Writing and Statistical Data Analysis in Physical and Biological Sciences, UAF, PARS campus, Faisalabad.

CONFERENCES / SEMINARS / WORKSHOPS (continued)

- Attending the AHKNCRD-AARDO Collaborative International Training Workshop on "Disaster Management And Climate Change Adaptation
- Programing with Python

References

Dr. Ijaz Hussain,

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Dr. Marco Andreas Grzegorczyk,

Professor in Statistics, Room Number: 449 (Bernoulliborg), Nijenborgh 9, 9747 AG Groningen, Netherlands, Phone: +31 50 363 3985, E-mail: m.a.grzegorczyk@rug.nl