CURRICULUM VITEA

Postal Address: Department of Maths/Stats/C.Sc,
The University of Agricultural Peshawar (Pakistan)
Home Address: H.No. F-3, Near Masjid-e-Wostha
University of Peshawar (Pakistan)
E-mail: zafarjan@aup.edu.pk, zafarjan@gmail.com
Phone No: 0092-91-9221172, 5853277, 9216572-75/Ext 3335
Mobile No: 0092- 0334-9466639

PROF. DR, ZAFAR MAHMOOD (PhD)

Personal Information

Father Name:	Awal Sher (Late)
Religion:	Islam
Nationality:	Pakistani
N.I.C. No:	17301-7210816-5

Education

PhD (Applied Statistics)	**M.Sc (Statistics)**
Year: 2010	Year: 1994
Course work (3.70 CGPA)	Division 1st
University of Peshawar , Pakistan	Gomal University D.I. Khan
University of Rochester, USA	
B.Sc (Maths-A, Physics, Statistics)	**F.Sc(Pre-Engg., Add. Maths)**
Year: 1991	Year: 1989
Division: 1st	Division 1st
University of Peshawar	BISE Peshawar
S.S.C (Science Group)	**B.Ed. (Science)**
Year: 1986	Year: 1996
Division 1st	Division 1st
BISE Peshawar	AIOU Islamabad

Other Education

Diploma in Computer Science and IT
Skill Development Council, Ministry of Labor & Manpower, Pakistan
Duration: One year; Grade A

A special Course on **Applied Econometrics** from 21-02-1998 to 30-06-1998 at Faculty of Rural Social Sciences NWFP Agricultural University Peshawar,
Duration: Four months

PhD Research Project Completed
Department of Biostatistics and Computational Biology,
University of Rochester, USA in 2007/2008

Awards received

- An indigenous Scholarship for PhD in 2004.
- Scholarship to visit USA for advance research in 2007.
- Best teacher award in Khyber Medical University Peshawar

Special Strength

Leader in data/applied research with experience in predictive modeling, simulation studies, advanced data analysis and data base decision making.

Research/Teaching Interests:

Applied Statistics/Biostatistics/Computational Statistics

Data Simulation and Resampling, Model Selection Strategies

Research in Social, Agriculture, Management, Engineering and Biological Sciences

Modeling the Effect of Climate Change on Human Diseases and Crop Production

Designing of Field Experiments/Projects for Data Based Predictions and Decision Making intended for solving Economic, Social and Scientific Problems

Courses Taught

Robust Statistics, Data Processing and Computer Programming, Applied Statistics, Statistical Quality Management, Advance Experimental Design, Advance Regression Analysis, Population and Demographic Studies, Sampling Methods, Categorical Data Analysis, Logic and Social Research Methods, Statistics for Social Sciences, Survival Analysis, Experimental Design, Descriptive and Inferential Statistics, Biostatistics and Probability, Econometrics, Statistical Computation, Descriptive and Inferential Biostatistics, Biostatistics and Epidemiology, Biostatistics and Research, Biostatistics and Medical Writing, Statistics in Educational Research, Business Mathematics and Statistics, Business Research Methods, Probability and Statistics

Projects Executed: **(Grant Support as Major P.I.)**

Two mega projects (Budget 5.21 million and 4.93 million) **completed**

Two projects (Budget 5.091 million and 3.83 million) submitted (One to the Government of Pakistan Ministry of National Food Security and Research (Economic Wing) and One to HEC under National Research Program for Universities (NRPU)

(Grant Support as Co-P.I.)

One project (Budget 3.591,270 /- million) sponsored by HEC under National Research Program for Universities (NRPU) is in well **progress**

Two projects **submitted; One** project to the Government of Pakistan Ministry of National Food Security and Research (Economic Wing) and **Two** projects to HEC, Pakistan

Projects Evaluated: 21 research projects submitted to HEC Pakistan under the subject NRPU
1 research project submitted to PARC Islamaabad
47 research projects submitted to Higher Education, Archives and Library Department, Government of Khyber Pakhtunkhwa Under the Subject Higher Education Research Endowment Fund

PhD/MPhil Thesis Evaluated: 15 MPhil Scholars

Research Papers Evaluated: >10 research papers for National/International journals

Research Papers Presented in Conferences: >15 research papers in National/International conferences

Seminar/Workshops Organized: 02

- Organized a two days seminar/workshop on "**Statistical Facts and Data Analytics of Child Nutrition Status in Flood Hit Areas of Khyber Pakhtunkhwa**" on January 5-6, 2017". held at the Department of Mathematics, Statistics & Computer Science, The University of Agriculture Peshawar sponsored by HEC funded project under the subject NRPU.
- Organized a two days seminar/workshop on " **Data Exploration, Visualization & Analysis Using Statistical Softwares** on January 9-10, 2018." held at the Department of Mathematics, Statistics & Computer Science, The University of Agriculture Peshawar sponsored by HEC funded project under the subject NRPU and DFCA.

International Conferences Organized: 02

- Organized a Two-Days International Conference/Forum on "Global Infrastructure Construction and Education for One Belt One Road Initiative 2019 (GICEBRI)" on 29-30th August, 2019 held at the Institute of Biotechnology & Genetic Engineering (IBGE), The University of Agriculture, Peshawar sponsored by Shanghai Jiao Tong University under the subject Global Engagement Program
- Organized a Two-Days International Conference on "Strategies for Insuring Food Security in the Changing Climate at The University of Agriculture Peshawar - Pakistan on dated 23-24 October, 2019 jointly organized by The University of Agriculture Peshawar, Food and Agriculture Organization of the UN, Pakistan Science Foundation, Pakistan Society of Scientific Research and Sustainable Land Management Project-II KP.

Conference/Seminar/Workshops Attended In >30 Conferences participated as Recourse Person/Key-Note Speaker/Chair of Sessions/Participant

Projects: (**Support as Consultant**)

Actively involved in **preparing** and **executing** research projects for various NGOs and Research Scholars

Consulting **Expertise: (i).** Annual & Quarterly Report Preparation;

(ii). Exploring findings, data analysis, interpretations and conclusions related to research projects

Book(s) Published:

Resampling Techniques in Regression Analysis for Model Simplification: Model Selection Strategies LAP LAMBERT Academic Publishing: ISBN 978-3-659-14290-1

Research Papers Published >35 research papers published in National/International Journals

- **Students supervised as Major Supervisor** and completed degree (MPhil level) = **13**
- **Students supervised as Co-Supervisor** and completed degree (MPhil level) > **10**
- **Students supervised as Co-Supervisor** and completed degree (PhD level) > **05**
- **Students supervising as Major Supervisor** (MPhil level) = 04 (Statistics in UAP);
- 01 (AIOU Islamabad)
- **Member(Minor)** = >30 Scholars Approx. (MS/MSc(H)/Mphil in Social/Agriculture and Management Sciences)
- **Projects** = 5 (2 completed + 1 in progress + 2 submitted)
- **Developing Courses and Syllabus:** Developed and prepared courses and syllabus for BS, MSc and MPhil Statistics; Biostatistics and Epidemiology Courses for Doctors in Physiotherapy in KMU

Professional experience	[1995-continue] The University of Agriculture Peshawar **Faculty Member** <u>**Current Designation**</u>: **Professor**

[1998-2000]   IBMS Agricultural University Peshawar
[2011-   ]
[2010- 2010]   Peshawar Business School, Uni. Of Peshawar
[2010-2016]   IPMR, Khyber Medical University Peshawar
[2011-2102]   A.I.O. University
[2011-2015]   Benazir Women University Peshawar
[2011- 2011]   IMSc. Peshawar
[2012- 2015]   City University Peshawar
[2012- 2014   ]   Khyber Girls Medical College Peshawar
[2013-   ]   Rehman Medical College Peshawar
[2014-   ]   Post Graduate Nursing College Peshawar
[2014- 2015]   ISPaR Bacha Khan University

Visiting Faculty

[Jan, 1999 to Dec, 1999]   UGC Funded Project "Analyzing Daily Rainfall Data in
                                            NWFP

Part time Researcher

[2015-2016]   Two HEC funded projects under the subject NRPU

Principle Investigator

[2017-2018]   One HEC funded project under the subject NRPU

Co-Principle Investigator

Other Professional Experience	• Twenty six years professional experience of teaching and research in the University of Agricultural Peshawar • More than 10 years administrative experience as Student Proctor, PI of two mega projects, Co-PI of one mega project and in-charge Computer Laboratory
Additional Professional activities	• Member of Academic Council, The University of Agriculture Peshawar • Member of Board of Faculty of Rural and Social Sciences, The University of Agriculture Peshawar • Member of Board of Faculty of Animal Husbandry and Veterinary Sciences, The University of Agriculture Peshawar • Member of Departmental Technical Review Committee (DTRC) of the Department of Statistics, Faculty in of Physical and Numerical Sciences, Abdul Wali Khan University Mardan • Member of Technical Committee for Review of Research Proposals Under Higher Education Research Endowment Fund, Higher Education , Archives and Library Department, Government of Khyber Pakhtunkhwa • Member of Graduate Studies Committee in the University of Peshawar, Benazir Women University Peshawar, University of Malakand Chakdara Lower Dir and City University of Science and Information Technology Peshawar • Member of Board of Studies (BOS) in the Department of Maths, Stats & C.Sc., Department of Agriculture Economics, Department of Agronomy, Institute of

Developmental Studies, Department of Water Management, Department of Human Nutrition, Department of Agricultural Mechanization and Department of Islamiyath, The University of Agriculture Peshawar, Pakistan.

- Convener quantification committee of student's admission for the session 2014.
- Convener Strategic Vision/Mission in the Department of Maths, Stats & C.Sc., The University of Agriculture Peshawar, Pakistan.
- Focal Person QEC in the Department of Maths, Stats & C.Sc., The University of Agriculture Peshawar, Pakistan.
- Member Ethical Committee in the Department of Maths, Stats & C.Sc., The University of Agriculture Peshawar, Pakistan
- Coordinator Admission in the University of Agriculture Peshawar
- Examination duties as Hall Incharge in University of Agriculture Peshawar and University of Peshawar
- External examiner for the examination of B.S, M.Sc and MPhil students of
- University of Peshawar, Islamia College University, Abdul Wali Khan University, Malakand University and Gomal University D.I. Khan.
- Assistant Election Officer for the Agriculture University Teachers
- Association (AUTA)
- Subject expert of the selection board in appointing the candidates for the posts of Assistant Professor and Lecturers in the Islamia College University Peshawar, University of Peshawar, Gomal University Dera Ismail Khan and University of Swat

Computer Skills

MS. Office, Fortran, C++, R, S+, Python, , Internet
Statistical Packages.
MSTATC, SPSS, MINITAB, SAS, ENA for Smart
SHAZAM, NCSS, Statistix, STATA, EViews, Gretl
Python, R and S+ etc
Moreover, I have produced my own software codes/programs in FORTRAN and R for my research work

Some significant Publications

- Ijaz ul Haq , **Zafar Mehmood**, Nadar Khan , Muhammad Nadeem Khan , Muhammad Israr , Ejaz Ali Khan , Muhammad Nisar , Muhammad Ijaz Ahmad & Majid Ali (2021). Risk Factors of Mid-upper Arm Circumference (MUAC) Based Child Malnutrition in the Flood-affected Areas of Pakistan: A Cross-sectional Study.*Ecology Of Food And Nutrition;* tps://doi.org/10.1080/03670244.2021.1872024

- Iftikhar Azim, Jian Yang, Muhammad Farjad Iqbal, **Zafar Mahmood**, Muhammad Faisal Javed, Feiliang Wang, and Qing-feng Liu (2021). Prediction of Catenary Action Capacity of RC Beam-Column Substructuresunder a Missing Column Scenario Using Evolutionary Algorithm. *KSCE Journal of Civil Engineering*, DOI 10.1007/s12205-021-0431-0

- Iftikhar Azim, Jian Yanga, Muhammad Faisal Javed, Muhammad Farjad Iqbala, **Zafar Mahmood**, Feiliang Wanga, Qing-feng Liua (2020). Prediction model for compressive arch action capacity of RC frame structures under column removal scenario using gene expression programming. Structures; Volume 25, June 2020, Pages 212-228

- Syed M Amir, Yonggong Liu, Ashfaq A Shah, Umer Khayam and **Zafar Mahmood** (2020). Empirical Study On Influencing Factors Of Biogas Technology Adoption in Khyber Pakhtunkhwa. *Energy & Environment.* Vol. 31(2) 308–329
  https://doi.org/10.1177%2F0958305X19865536

- **Zafar Mahmood**, Syed Muhammad Asim, Mashal Khan, Nadar Khan (2019). Nutritional Status of Preschool and School Going Children in Flood-Hit Areas of Khyber Pakhtunkhwa, Pakistan. Pak Pediatr J ; 43(4): 278-83

- Jan I., Akram W., Khan N.P., Asim S.M., **Zafar Mahmood** , Ahmad M.N. and Ahmad S.S. (2017). Adoption of improved cookstoves in Pakistan: A logit analysis. *Biomass and Bioenergy.* 103: 55-62

- **Z.Mahmood**, Salahuddin & Peter Salzman (2016). Improved Resampling Technique for the Choice of Stopping Criterion and Model Selection in Stepwise Logistic Regression. Pak. J. Statist. Vol. 32(1), 21-36

- **Z.Mahmood**, Salahuddin (2015). Resampling Method for the Adaptive Choice of Tuning Constant in Robust Regression. Pak. J. Statist. Vol. 31(3), 281-294.

- **Z.Mahmood**, Salahuddin (2015). A Novel Resampling Method for Variable Selection in Robust Regression. Pak. J. Statist. Vol. 31(3), 327-338.

- I.Khan, H.Zada, S.K.Khalil, M. Sharif, **Z.Mahmood** (2014). Biological Control of Sugarcane Top-Borer, *Scirpophaga excerptalis* (Walker) (Lepidoptera: Crambidae) Through Different Release Levels of *Telenomus benejiciens* (Zehntner) (Hymenoptera: Scelionidae). J. of Agric. Sc. & Tech. Vol. 16, No. 3, 497-503.

- Z.Hussain, **Z.Mahmood**, Y.Hayath (2011). Modeling the Daily Rainfall Amounts of North-West Pakistan for Agricultural Planning. Sarhad J. of Agric. Vol.27 (2), 313-321.

- **Z.Mahmood**, Salahuddin (2011). A Cross-Validation Approach to Optimize Unequal Cutoff Values in Stepwise Regression. Pak. J. Satatis. Vol. 27(2), 197-211.

- **Z.Mahmood**, N.Akhtar, M.Amin, M.Idrees (2011). Causes of Unemployment Among the Educated Segments in Peshawar Division, Pakistan: A Statistical Study. Sarhad J. of Agric. Vol.27 (1), 139-142.

- **Z.Mahmood**, N.Khan, S.Muneer, M.Farooq (2011). Determination of Ambient Air Quality Status of Hayatabad Township, Peshawar, Pakistan. Int. J. Contemp. Resear. in Bussi. Vol. 3(2), 946-955.

- **Z.Mahmood**, Salahuddin, B.Jan, Z.Hussain, M.Idrees (2007). Adjustments of the Treatments effects by Controlling Covariates in Agriculture Research". Sarhad J of Agric., Vol.23, No.2, 509-513.