



# PROCEEDINGS ICCS-12

## Vol. 23

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**12<sup>th</sup> Islamic Countries Conference on Statistical Sciences**

Statistics for Everyone and Everywhere

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at

**Qatar University, Doha, Qatar**

Jointly organized by



Islamic Countries Society  
of Statistical Sciences

Department of Mathematics,  
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Qatar University



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**Dr. Munir Ahmad  
Editor**

## CONTENTS

Foreword		viii
1. 001: Extended Generalized Gamma Distribution and Same its Applications	Bachioua Lahcene	1
2. 002: Physical Activity among Dubai Population Prevalence and Some Associated Factors	Hamid Y. Hussain, Nehad Hassan Mahdi, Fatma Al Attar and Nagy Hamid	17
3. 010: A Generalization of the Standard Half–Cauchy Distribution	Saleha Naghmi Habibullah	33
4. 014: Note on Joint Inclusion Probabilities Sampling Without Replacement	Muhammad Hanif and Aftab Ahmad	43
5. 015: On Finite Mixture of Inverse Weibull Distribution	Kareema Abulkadhun Makhrib	53
6. 017: <b>Weighted Reduced Major Axis Method for Regression Model</b>	<b>Anwar Saqr and Shahjahan Khan</b>	<b>61</b>
7. 018: <b>Slope Estimator for the Linear Error-in-Variables Model</b>	<b>Anwar Saqr and Shahjahan Khan</b>	<b>71</b>
8. 019: Shadow Learning in Undergraduate Mathematics: An Exploratory Study from UAE	Hana Sulieman	81
9. 022: Impact of Higher Order and Product Terms on Mean Square Error for Various Estimators	Muhammad Ismail, Muhammad Rashad, Muhammad Qaiser Shahbaz and Muhammad Hanif	89
10. 023: Some Exponential Chain Ratio and Product Type Estimator for Population Mean in Two Phase Sampling	Muhammad Noor-ul-amin and Muhammad Hanif	103
11. 025: On Bayesian Reliability Function Estimation of Burr-XII Distribution	Dhwyia Salman Hassan, Nashaat Jaisam Al-Anber and Abdulmunem Kadhim Hammadi	109
12. 028: Attitudes Towards Old Age and Age of Retirement Across the World: Findings from the Future of Retirement Survey	Hafiz T.A. Khan and George W. Leeson	121
13. 029: Contraceptive Needs and Use of Contraceptive Services by Pre-menopausal Women Age 50 Years and Over in Botswana	Njoku Ola Ama	133
14. 033: Survey Software use in the Maghreb: A Comparative Study Between Algeria, Morocco and Tunisia	Oula Bayarassou, Younès Boughzala, Le Sphinx MENA, Laila El Harouchi and Jean Moscarola	153
15. 034: A State Space Frame Work for Modeling and Forecasting Time Series	Muhammad Kashif and Muhammad Inayat Khan	165
16. 035: Cure Fraction Estimation for Mixture Cure Model with Censored Data	Noor Akma Ibrahim, Fauzia Ali Taweab, Jayanthi Arasan and Mohd. Rizam Abu Bakar	175

17.	048: The Growth Pattern of Malaysian School Children and Adolescents Bong Yii Bonn, Asma Ahmad Shariff, Abdul Majid Mohamed and Amir Feisal Merican	183
18.	051: Forecasting Age-Specific Fertility Rates of Pakistan Using Functional Time Series Models Farah Yasmeen and Zahid Mehmood	193
19.	053: Discovering Diversity Profiles by Parametric Functional Analysis Tonio Di Battista and Paola Cappola	199
20.	056: On Resisting Outliers in Bivariate Data for Small and Moderate Samples Ezz Hassan Abdelfattah	207
21.	061: A Cake Baking Experiment using Fractional Factorial Split Plot (FFSP) Design Farah Yasmeen and Asim Jamal Siddiqui	217
22.	062: Growth Charts of Malaysian Preschool Children Asma Ahmad Shariff, Bong Yii Bonn, Abdul Majid Mohamed and Amir Feisal Merican	225
23.	063: Three Approaches for Forecasting the Traffic Accidents and Traffic Fatalities in Qatar Adil E. Yousif	233
24.	064: Spatial Relationship between Illiteracy and Unemployment at Governorate Level in Egypt-2006 Faisal G. Khamis	241
25.	073: Some Infinite Series of Non-Binary Neighbor Designs in Circular Blocks of Size Four and of Five Munir Akhtar, Rashid Ahmed and Fariha Yasmin	257
26.	074: Mean Residual and Mean Past Lifetime of MultiState Consecutive k-out- of-n:F Systems Elnaz Karimian	261
27.	076: Statistical Analysis of the Factors Affecting the Profitability of Commercial Banks in Pakistan Salahuddin and M. Zubair Khan	269
28.	077: A General Class of Regression Type Estimators When Study Variable is An Attribute Giancarlo Diana, Saba Riaz and Javid Shabbir	277
29.	090: Some Properties of Generalized Log-Pearson Distribution Zafar Iqbal and Munir Ahmad	285
30.	091: When Association Indices Fail and Information Indices Succeed Nader Ebrahimi, Nima Y. Jalali and Ehsan S. Soofi	297
31.	096: Modelling Diffusion of Innovations with Homogeneous and Heterogeneous Populations Md. Abud Darda, Renato Guseo and Cinzia Mortarino	329
32.	099: On Two-stage LAO Multi Hypotheses Testing for many Distinct Families of Probability Distributions Farshin Hormozinejad and Evgueni Haroutunian	345
33.	102: Generalized Extreme Value Distribution Mohammad Ahsanullah	359

34.	108: Comparison of Methods for Fitting Cox Models with Random Herd and Treatment-by-Herd Effects	A. Elghafghuf and Henrik Stryhn	367
35.	110: Statistical Inference in Infinite-order Cointegrated Vector Autoregressive Processes under Uncorrelated but Dependent Errors	Chafik Bouhaddioui	375
36.	111: Many Hypotheses Testing With Possibility of Rejection of Decision for the Pair of Families of Probability Distributions	Farshin Hormozinejad	381
37.	121: Copyright Protecting Using Visible Removable Watermarking	Ahmed Mohmed Abushaala and Zaineb Ateia Moammer Elghoul	395
38.	124: Resampling Method for the Adaptive Choice of Tuning Constant and Variable Selection in Robust Regression	Zafar Mahmood and Salahuddin	409
39.	127: Which Sector is Easily Accessible for Female as a Source of Income?	Mariam Abbas Soharwardi	427
40.	129: Distribution of the Number of Observations Near the i-th Dependent Progressively Type-II Censored Order Statistic	M. Rezapour, M.H. Alamatsaz and N. Balakrishnan	437
41.	139: Analysis of A Single Server Queuing System Using A New Service Time Distribution	Masood Alam and Sabir Ali Siddiqui	451
42.	143: Split Sample Bootstrap Method	Alamgir Khalil	457
43.	144: Causes and Measures to Control Infant Mortality in Rural Areas (A Case Study of Uch Sharif)	Mariam Abbas Soharwardi and Umar Farooq	475
44.	145: Some Recent Works on Two Phase Sampling for Ratio and Regression Estimation	M.S. Ahmed	487
45.	150: The Gender Disparity in Education (A Case Study of Regional Punjab)	Shahzad Mushtaq and Mariam Abbas Soharwardi	495
46.	152: <b>Linear Model Inference with Non-sample Prior Information</b>	<b>Shahjahan Khan, Budi Pratikno and Rossita M. Yunus</b>	<b>507</b>
47.	153: <b>Shrinkage Estimation of Elliptical Regression Model under Balanced Loss Function</b>	<b>M. Arashi and Shahjahan Khan</b>	519
48.	160: Distinguishing Astrophysical Signals Using Wavelet Approach	M. Ayub Khan Yousuf Zai and Khusro Mian	529
49.	161: Distance-based Partition of Multivariate Data	Maryam Tayefi and Sharad Gore	535
50.	164: Estimation for Stochastic Volatility Model: Quasi-likelihood Approach	Raed Alzghool	543
51.	166: Mapping of Stomach Cancer incidence rate in Iran from 2003 to 2007 using Area-to-Area Poisson Kriging	Naeimehsadat Asmarian, Amir Kavousi, Masoud Salehi and Behzad Mahaki	553

52.	182: A better Approach in Hypothesis Testing	M. Shafiqur Rahman	559
53.	188: Organization Learning as a Mediating Mechanism Between TQM and Organizational Performance: A Review and Directions	Shahid Mehmood and and Faisal Qadeer	565
54.	193: Cooperation Between NSOs and Academic Institutes to Build Capacity in Official Statistics-Qatar Perspective	Wadha Al-Jabor and Pinar Ucar	573
55.	194: Age Estimation of School Going Children of Karachi, Larkana and Quetta by Number of Erupted Teeth using Median Regression	Nazeer Khan and Sundus Iftikhar	585
56.	200: Common Functional Principal Component (CFPC) Models for Coherent Mortality Forecasting	Farah Yasmeen, Rob J. Hyndman and Sidra Zaheer	593
57.	211: The Performance of Robust-Diagnostic F in the Identification of Multivariate Outliers	Habshah Midi and Nor Mazlina Abu Bakar	601
58.	214: Modelling the Age Specific Fertility Rates of Rural and Urban Areas of Pakistan during 1984-2007	Muhammad Zakria, Muhammad Yaseen, Faqir Muhammad and Sajid Mahmood	607
59.	216: Phase Zero Intron Interrupt the Coding Sequences in DNA by Cyclic Permutation	Naila Rozi and Nasir Uddin Khan	619
60.	224: Determinants of Male Participation in Reproductive Healthcare Services: A Cross-sectional Study	Md. Shahjahan	625
61.	227: A survey of R Software for Parallel Computing	Esam Mahdi	633
62.	228: Estimating the Population Mean using Stratified Extreme Ranked Set Sample	Mahmoud Ibrahim Syam, Kamarulzaman Ibrahim and Amer Ibrahim Al-Omari	647
63.	229: Spatial Analysis of Malaria Incidence in Afghanistan Using Combined Estimating Equations	Oyelola A. Adegboye, Denis H.Y. Leung, You-Gan Wang and Danelle Kotze	655
64.	236: $2^n$ Metric binary system to measure data quality	Redouane Betrouni	665

## FOREWORD

The 12<sup>th</sup> Islamic Countries Conference on Statistical Sciences (ICCS-12) was held at Qatar University, Doha, Qatar on December 19-22, 2012. A total of 22 technical sessions were held during the four day conference. About 120 research papers out of 239 papers received, were presented, discussed and appreciated by the conference participants. There were seven sessions on the Theory and Applications of Statistics, two sessions on survey sampling, three sessions on demography and population studies, three sessions on economic and business statistics, three on medical and bio-statistics and one session each on mathematical studies, statistical education, environmental statistics, and statistical communications.

There were eight key-note speakers and these are:

1. **Dr. Munir Ahmad** (Pakistan) -  
*ISOSS: History, Challenges and Future Developments*
2. **Dr. Shahjahan Khan** (Australia) -  
*Linear Model Inference with Non-sample Prior Information*
3. **Dr. Muhammad Hanif** (Pakistan) -  
*Has Sample Survey Sampling Undergone A Scientific Revolution?*
4. **Dr. Edward Wegman** (USA) -  
*Big Data: Technology and Analysis*
5. **Dr. Abdel H. El-Shaarawi** (Egypt/Canada) -  
*Environmental Control and Economic Development*
6. **Dr. Mohammad Fraiwan Al-Saleh** (Jordan) -  
*Statistical Ideas that are Rarely Mentioned in Classrooms*
7. **Dr. Aman Ullah** (USA) -  
*Robustify Financial Time Series Forecasting with Bagging*
8. **Dr. Ehsan S. Soofi** (USA) -  
*When Association Indices Fail and Information Indices Succeed*

Beside the above, there were four invited speakers and these are:

1. **Dr. Mohammad Ahsanullah** (USA) -  
*Generalized Extreme Value Distribution*
2. **Dr. Ismail Bin Mohd.** (Malaysia) -  
*Biparaboloid-Ellipsoid Programming with Different Axis*
3. **Dr. Hafiz T.A. Khan** (United Kingdom) -  
*Attitudes Towards Old Age and Age of Retirement Across the World: Findings from the Future of Retirement Survey*
4. **Dr. Mohammad Yahyah** (United Kingdom) -  
*Application of Statistics in the Pharmaceutical Industry*