

**CURRICULUM VITAE**  
**OF**  
**MD. ISMAIL HOSSAIN**



**Home Address:** Village- South Sreepur (Kazi Bari), P.O.- DEPZ, P.S.- Ashulia,  
Upazila: Savar, District: Dhaka-1349, Bangladesh.

**Official Address:** Principal Scientific Officer & Head, Agricultural Statistics Division  
Bangladesh Rice Research Institute (BRRI),  
Joydebur, Gazipur-1701, Bangladesh.

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**Nationality:** Bangladeshi

**Date of birth:** 28 February 1973

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**KEY SKILLS & COMPETENCIES**

**Research:**

- Knowledge of research methodology and techniques.
- Knowledge of research in field experiment on experimental design and sampling design.
- Analytical approach to work
- Knowledge of project writing and management.
- Experience of statistical analysis, economic and socio-economic analysis etc by using computer software.
- Experience of Geographical Information System (GIS)
- Server Administration (Windows and Linux Track) and Network Administration

**Academic and Research experience:**

- Adjunct Faculty Member (Guest Teacher) in B.Sc (Ag.), M.Sc (ag.) and Ph.d Level, Bangabhandu Sheikh Mujibur Rahman Agriculture University (BSMRAU), Salna, Gazipur, Bangladesh.
- Experience as a Part-time lecturer in Zirabu Dewan Idris Collage, Zirabu, Savar, Dhaka, Bangladesh
- Experience as a resource speaker in computer training programme, Bangabhandu Sheikh Mujibur Rahman Agriculture University (BSMRAU), Salna, Gazipur, Bangladesh.
- Experience as a resource speaker in Statistical Analysis training programme (SATP), Hajee Mohammad Danesh Science and technology University (HSTU), Dinajpur, Bangladesh.
- Experience as a resource speaker in computer training programme, BARI, Gazipur, Bangladesh.
- Experience as a resource speaker in computer training programme, BRRI, Gazipur, Bangladesh.
- Experience as a resource speaker in computer training programme, BARC, Dhaka, Bangladesh.
- Experience as a resource speaker in computer training programme, BCDB, Gazipur, Bangladesh.

- Experience as a resource speaker in computer training programme, BLRI, Savar, Dhaka, Bangladesh.
- Experience as a resource speaker in computer training programme, CERDI, Gazipur, Bangladesh.
- Experience as a resource speaker in computer training programme, NATA, Gazipur, Bangladesh.

#### **Technical:**

- Knowledge and experience of website designing & publishing, email & internet.
- Knowledge and experience of geographical information system (GIS) and management information system (MIS) and IT.
- Technical knowledge and experience of R Software, SAS, SPSS, STATA, MS Word, MS Excel, MS Access, MSTAT, GenStat, CropStat, MS Power Point, DSSAT and ArcGIS.

#### **Field of Specialization**

- **Statistics** i.e. Agriculture Statistics, Sampling Design, Experimental Design and GIS

#### **PROFESSIONAL EXPERIENCE**

- **November 25, 1997 to December 28, 2000:** Part-time lecturer in Zirabu Dewan Idris Collage (HSC Level), Zirabu, Savar, Dhaka, Bangladesh.
- **November 27, 1997 to December 30, 2007:** Scientific Officer, Statistics Section, Agricultural Economics Division, BARI, Gazipur, Bangladesh.
- **December 31, 2007 to July 18, 2013:** Senior Scientific Officer, Agricultural Statistics Division, BRRI, Gazipur, Bangladesh.
- **July 19, 2013 to till date:** Have been working as a Principal Scientific Officer and Head, Agricultural Statistics Division, BRRI, Gazipur, Bangladesh
- **July 30, 2008 to till date:** Adjunct Faculty Member (Guest Teacher) in B.Sc (Ag.), M.Sc (ag.) and Ph.d Level, Bangabhandu Sheik Mujibur Rahman Agriculture University (BSMRAU), Salna, Gazipur, Bangladesh.
- **July 30, 2008 to till date:** External in B.Sc (Ag.), M.Sc (Ag.) and Ph.D level, Bangabhandu Sheik Mujibur Rahman Agriculture University (BSMRAU), Salna, Gazipur, Bangladesh.
- **January 18, 2011 to till date:** Fellow Member of Syllabus committee of Agriculture Statistics Division in M.Sc (Ag.) level, Sher-e-Bangla Agriculture University (SAU), Sher-e-Bangla Nagar, Dhaka, Bangladesh.
- **February 02, 2016 to till date:** External in B.Sc (Ag.), M.Sc (Ag.) and Ph.D level, Hajee Mohammad Danesh Science and technology University (HSTU), Dinajpur, Bangladesh.

## ADMINISTRATIVE EXPERIENCE

- Working as a Head in Agricultural Statistics Division at BRRI, Gazipur, Bangladesh from June 29, 2009 to till date.

## OTHER EXPERIENCE

- **Reviewer:** *International Journal of Bio Research*. BRRI, Gazipur, Bangladesh.
- **Reviewer:** *Eco-Friendly Agriculture Journal*. BRRI, Gazipur, Bangladesh.

## EDUCATION

- **Ph.D in Statistics 2011** . Jahangirnagar University, Savar, Dhaka, Bangladesh.  
**Dissertation:** Comparative Study of Predictive Estimators and Classical Estimators for finite population mean using different sampling schemes. Ph.D thesis (2011), Department of Statistics, Jahangirnagar University (JU), Savar, Dhaka Bangladesh.
- **M.phil in Statistics 2000**. Jahangirnagar University, Savar, Dhaka, Bangladesh.  
**Dissertation:** The class of Generalized estimators for finite population mean under different sampling schemes. M.Phil. thesis (2000), Department of Statistics, Jahangirnagar University, Savar, Dhaka Bangladesh.
- **M.Sc in Statistics, 1993**. Jahangirnagar University, Savar, Dhaka, Bangladesh.  
**Dissertation:** Comparison of some estimators using simulation technique. M.Sc. Report (1993). Jahangirnagar University, Dhaka, Bangladesh.
- **B.Sc (Hons) in Statistics, 1992**. Jahangirnagar University, Savar, Dhaka, Bangladesh.
- **Higher Secondary Certificate (HSC/Alim-Science Group), Equivalent to O Levels. 1989**, Bangladesh Madrasha Education Board, Dhaka, Bangladesh. (Including Physics, Chemistry and Mathematics)
- **Secondary School Certificate (SSC/Dakhil-Science Group), Equivalent to A Levels. 1987**, Bangladesh Madrasha Education Board, Dhaka, Bangladesh. (Including Physics, Chemistry, Mathematics and Biology)

## THESIS AND REPORT:

- Hossain, M.I. (2011).** Comparative Study of Predictive Estimators and Classical Estimators for finite population mean using different sampling schemes, Unpublished Ph.D thesis, Department of Statistics, Jahangirnagar University (JU), Savar, Dhaka, Bangladesh.
- Hossain, M.I. (2000).** The class of generalized estimators for finite population mean under different sampling schemes, Unpublished M.Phil. thesis, Department of Statistics, Jahangirnagar University (JU), Savar, Dhaka Bangladesh.
- Hossain, M.I. (1993).** Comparison of some estimators using simulation technique, Unpublished M.Sc. report (Partially Research), Department of Statistics, Jahangirnagar University (JU), Savar, Dhaka Bangladesh.

## HONORS AND AWARDS

- University Award-2011 at Ph.d level, Jahangirnagar University, Savar, Dhaka 1342, Bangladesh.
- University Award-2000 at M.Phil level, Jahangirnagar University, Savar, Dhaka 1342, Bangladesh.
- University scholarship at B.Sc. level, Jahangirnagar University, Savar, Dhaka 1342, Bangladesh.
- Board scholarship-1987, 12-th position in combined merit list from Bangladesh Madrasha Education Board, Dhaka, Bangladesh.

## SAPECIAL SKILLS

**Teamwork:** I have successfully undertaken various team project/report within both academic and non academic environment.

### **Project and Report:**

**Report: Hossain, M.I.,** M.F. Karim and M.M.Rouf (2000). Recommended cropping patterns for farms of Magura sadar thana based on soil properties. A report on the application of GIS in agricultural planning. Organized by BARC, Dhaka. Held on 2 May-30 June, 2000.

**Project: Hossain, M.I.,** N.M.F. Rahman (2014). Stochastic Frontier Analysis and Data Envelopment Analysis for Efficiency and Environmental Awareness of Paddy Farmers in Bangladesh. Founded by Ministry of Science and Technology under Special Allocation for Science and Technology, Bangladesh, Held on June, 2013 to July, 2014.

## RELEVENT EXPERIENCE:

### *a. Summary of the relevant research employment experiences:*

- Computerization of Bangladesh Rice Research Institute (BRRI) research management Information system.
- Computerization of data collection from Bangladesh Rice Research Institute (BRRI) research experiments.
- Computerization of the particulars of Bangladesh Rice Research Institute (BRRI) scientists.
- Documentation, Statistical and Socio-economic analysis and mapping of major cereal crops using GIS, RS and GPS, IT.
- Documentation, Statistical and Socio-economic analysis and mapping of major CDP crops using GIS, RS and GPS, IT.

***b. Technology Developed:***

- Development of a new model for stability analysis
- Characterization of Rainfed T.Aman rice growing environment
- Characterization of Boro rice growing environment
- Characterization of Wheat growing environment
- Determination of the smallest plot size for estimating different plant characters and plot yield of transplanted rice
- Determination of environmental index of BIRRI Experimental Stations with respect to BIRRI varieties
- Delineation of suitable areas of growing BIRRI Varieties
- Determination of the stability index of BIRRI varieties
- Determination of the genetic coefficients of BIRRI varieties
- Development of yield forecasting model for rainfed T.Aman rice
- Development of Geo-referenced database of BIRRI varieties
- Construction of adoption and productivity maps of BIRRI varieties in Bangladesh
- Development of a GIS-based socio-economic data base for Bangladesh Country Almanac
- Identification of Arsenic risk area contaminated from ground water irrigation.
- Determination of spatial variability of soil arsenic contamination from irrigation water in the command areas and its effects on grain and straw.
- Extrapolation of domain of a proven resource conservation technology.
- Adoption and productivity maps of BIRRI varieties in Kapasia Upazila
- Probability mapping of minimum temperature during the period of Boro rice cultivation
- Estimation technique for estimating area and production of rice in Bangladesh.
- Probability of low temperature stress at different growth stages of Boro rice

***c. Field Research Experiment / Programme (Developed, Supervised and Executed):***

- Optimum Sampling for Measuring Different Plant Characters of Brinjal (*Solanum melongena*).
- Optimum Sampling for Measuring Different Plant Characters of Okra (*Abelmoschus esculentus* L. Moench).
- Development/standardization of the model for stability analysis
- Characterization of Rainfed T.Aman rice growing environment
- Characterization of Boro rice growing environment
- Characterization of Wheat growing environment
- Determination of the smallest plot size for estimating different plant characters and plot yield of transplanted rice
- Comparison of traditional method with modified management of experimental plots
- Listing of the varieties with stability measures by season
- Listing of the varieties losing stability over time and location
- Identification of bio-physical factors affecting stability of varieties
- Development of season, year and location-wise database on yield of BIRRI varieties

- Determination of environmental index of BRRI Experimental Stations with respect to BRRI varieties
- Determination of the stability index of BRRI varieties
- Determination of the factors affecting producer's decision on varieties for rice cultivation
- Determination of the factors affecting for consumer's preference to rice varieties
- Development of mathematical models for producer's, producers cum consumer's and consumer's preference to different rice varieties
- Determination of the genetic coefficients of BRRI varieties
- Development of yield forecasting model for rainfed T.Aman rice
- Geo-referenced database of BRRI varieties
- Adoption and productivity maps of BRRI varieties in Bangladesh
- Development of a GIS-based biophysical and socio-economic data base for Bangladesh Country Almanac (BCA).
- Creation of the maps of the spatial variation of arsenic level in irrigation water (STW) in different project sites.
- Spatial variation of soil arsenic contamination resulting from irrigation water in the command areas and its effects on grain and straw.
- Identification of the low risk and high risk sites in the command areas.
- Integration of project results with AEZ database and secondary arsenic data of STW water and map the arsenic risk area for irrigated rice (Boro).
- Construction of micro elevation map of Faridpur command area
- Spatial database on soil chemical properties of Gazipur Upazilla
- A GIS-based analysis for increasing productivity of rice -wheat systems in Bangladesh
- Extrapolation of domain of a proven resource conservation technology-crop establishment by Chinese hand tractor seeder in rice-wheat systems
- Construction of adoption and productivity maps of BRRI varieties in Kapasia Upazila
- Determination of the spatial dependency of adoption and yield on land soil and cropping pattern.
- Identification of the biophysical and socio-economic constrains to higher yield of early released BRRI varieties
- Construction of suitability maps of BRRI varieties
- Creating the map the submergence areas used for rice cultivation
- Delineation of submergence areas suitable for growing newly developed submergence tolerant BRRI varieties
- Management and maintain ICT at Bangladesh Rice Research Institute
- Maintain updated research management information system at BRRI
- Management and maintain BRRI Website through regular updating the information and documents.
- Maintain information on genetic resources of BRRI Gene Bank
- Make the information on genetic resources of BRRI Gene Bank available to the users
- Probability mapping of minimum temperature during the period of Boro rice cultivation

- Estimating area and production of rice in Bangladesh.
- Probability of low temperature stress at different growth stages of boro rice

***d. Notable Research Contribution***

- Major contributor for development of a new model for stability analysis
- Major contributor for characterization of Rainfed T.Aman rice growing environment
- Major contributor for characterization of Boro rice growing environment
- Major contributor for characterization of Wheat growing environment
- Major contributor for determination of the smallest plot size for estimating different plant characters and plot yield of transplanted rice
- Major contributor for determination of environmental index of BRR I Experimental Stations with respect to BRR I varieties
- Major contributor for determination of the stability index of BRR I varieties
- Major contributor for determination of the genetic coefficients of BRR I varieties
- Contributor for Development of yield forecasting model for rainfed T.Aman rice
- Major contributor for creating adoption and productivity maps of BRR I varieties
- Major contributor for identification of as risk area contaminated from ground water irrigation.
- Major contributor for relationship of as loading with micro elevation of soil
- Major contributor for probability mapping of minimum temperature during the period of Boro rice cultivation
- Contributor for Estimation technique for estimating area and production of rice in Bangladesh.
- Contributor of 25% rice increase action plan
- Major contributor for estimating temperature stress at different growth stages of Boro rice.

***e. Project conducting Experiences***

- Arsenic analysis and stability analysis of BRR I varieties under FFP (Food for Progress), worked as a Co-Investigator, Funded by Cornell University, USA and Duration June 2010-July 2013
- Impact assessment of climate change on production market of rice in Bangladesh, worked as a Co-Investigator, Funded by JIRCAS, Japan, Duration August 2011-December 2013
- Integrated Agricultural Productivity Project (IAPP), worked as a Co-Investigator (Core Scientist), Funded by GOB and Duration July 2011-June 2016
- Yield assessment through crop-cuts, Worked as a Principal Investigator (PI), Funded by GOB and Duration June 2009-July 2011
- Development and modification of computer programme (software), Worked as a Principal Investigator (PI), Funded by GOB and Duration June 2008-July 2013
- Probability mapping of weather variable, Worked as a Co-Investigator, Funded by GOB and Duration June 2009-July 2016

- Genetic coefficient of BRRI varieties using crop modeling, Worked as a Co-Investigator, Funded by GOB and Duration June 2008-July 2016
- Spatial database on BRRI varieties, Worked as a Principal Investigator, Funded by GOB and Duration June 2009-July 2016

*f. Additional activities are given below:*

- Providing training program for manpower development of Bangladesh rice Research Institute (BRRI) Scientists in Statistical analysis, computer processing and analysis of data.
- Developing a computer management database for all kind of records of experiments conducted by the section till to date to date in order to build data bank of research information and finally processing the information to produce reports for efficient and effective research management of the institute.
- Improving the statistical standards and application in agricultural research.
- Disseminating statistical method in almost all corners of agricultural research.
- Conducting biometrics analysis and develop appropriate experimental and data analysis techniques for agricultural research.
- Assisting Bangladesh Rice Research Institute (BRRI) scientists with design of experimental methodology, sample survey, statistical modeling, statistical design, analysis and interpretation of agricultural research and to advice on the collection and management of field data.

**EXTERNAL AND EXPERT MEMBERSHIPS:**

- External in B.Sc (Ag.), M.Sc (ag.) and Ph.d Level, Bangabhandu Sheikh Mujibur Rahman Agriculture University (BSMRAU), Salna, Gazipur, Bangladesh.
- Expert member of Syllabus committee in B.Sc (Ag.), M.Sc (ag.) level, Department of Agricultural Statistics Sher-e-Bangla Agriculture University (SAU), Sher-e-Bangla nagar, Dhaka, Bangladesh.
- Expert member of Syllabus committee, BBA and MBA level in Agribusiness, Faculty of Agribusiness, Sher-e-Bangla Agriculture University (SAU), Sher-e-Bangla nagar, Dhaka, Bangladesh.
- External in B.Sc (Ag.), M.Sc (Ag.) and Ph.D level, Hajee Mohammad Danesh Science and technology University (HSTU), Dinajpur, Bangladesh.
- Expert member of Technical Evaluation Committee of Integrated Agricultural Productivity Project (IAPP-BRRI), Bangladesh Rice Research Institute (BRRI), Gazipur, Bangladesh.
- Expert member of different Examination and Evaluation Committee BRRI, Gazipur, Bangladesh.
- Expert member of Taskforce Committee of ASICT, BARI, Gazipur, Bangladesh.



## **PROFESSIONAL MEMBERSHIPS**

### *a. Life Member*

- Bangladesh Statistical Association, Bangladesh
- Alumni Association, Department of Statistics, J.U., Bangladesh
- Associate Member, Bangladesh Computer Society (BCS), Bangladesh (AM-BCS, No. 06272)
- Graduate Member, Jahangirnagar University, Dhaka, Bangladesh.

### *b. Ordinary Member*

- Bangladesh Assoc. for the Advancement of Science (BAAS).
- Bangladesh Biggani Somitee ( Bangladesh Scientist Association).
- Bangladesh Agricultural Research Institute Scientist Association (BARISA)
- Agriculturists Forum of Bangladesh (AFB), Date- 05.05.2002
- Bangladesh Agricultural Economist's Association, Date- 22.09.2002
- Bangladesh Rice Research Institute Scientist Association (BRRISA)

## **TRAINING EXPERIENCE**

### **◆ In Country**

- Computer Training on MS word, MS Excel, Fox pro and SPSS win (Jan. 1997 to December 31, 1997), Institute of Technology, Dhaka, Bangladesh.
- The Cost and Return Analysis in Agriculture (November 8. to November 17,1998), BJRI,Dhaka, Bangladesh.
- Induction Training (February 1 to March 25, 1999) BARI, Joydebpur, Gazipur,Bangladesh.
- Spread Sheet Analysis (September 25 to September 30, 1999) GTI, BAU, Mymensing, Bangladesh.
- Data Management (October 23 to November 04, 1999) GTI, BAU, Mymensing, Bangladesh.
- Application of GIS in Agriculture Planning (May 02 to June 30, 2000), BARC, Dhaka, Bangladesh.
- Foundation Training Course for NARS Scientists (November 05 to February 18, 2001), Bangladesh Academy for Rural Development (BARD), Comilla, Bangladesh.
- Computer Application Course on MS word, MS Excel, MS Power Point and SPSS win, (January 28 to February 12, 2001), Bangladesh Academy for Rural Development (BARD), Comilla, Bangladesh.
- Computer Application Course on MS word, MS Excel, MS Power Point and SPSS win (Jan. 28, 2001 to February 21, 2001), Bangladesh Academy for Rural Development (BARD), Comilla, Bangladesh.
- Statistical Analysis by Using Computer Packages (April 17 to May 01, 2004) GTI, BAU, Mymensing, Bangladesh.
- Training on Web site Designing and Publishing (December 14 to February 18, 2004), APTECH Computer Center, Uttara, Dhaka, Bangladesh.
- Training workshop on Metadata (May 14 to May 17, 2006) , NAWG, SAAKTI, Rajshahi, Bangladesh.
- Training Course on AWhere-ACTA & GIS based Bangladesh Country Almanac (BCA), (May 29 to May 30, 2006), BARI, Joydebpur, Gazipur, Bangladesh.

- Short Course on Remote Sensing and GIS in Water Management (September 02 to September 06 2006), DCA, BUET, Dhaka, Bangladesh.
- Training Course on Hybrid Rice Development and Seed Production (November 02 to November 04, 2009), BRRI, Joydebpur, Gazipur, Bangladesh.
- Training Course on Spatially Explicit Analysis: Dealing with Survey, Census data and Maps (December 23 to December 31, 2009), BARC, Dhaka, Bangladesh.
- Training Program on Statistical Analysis of Field Experiment Data Using CROPSTAT (January 11 to January 13, 2010), IRRI-BRRI, Joydebpur, Gazipur, Bangladesh.
- Econometric Analysis through different computer software's (May 16 to May 20, 2010), BARC, Dhaka, Bangladesh.
- Breeder seed production and preservation of Rice (June 18 to June 20, 2011), BRRI, Joydebpur, Gazipur, Bangladesh.
- Research Methodology (September 10 to September 22, 2011) GTI, BAU, Mymensingh, Bangladesh.
- "e-Governance" (April 01 to April 05, 2012), BARC, Farmgate, Dhaka, Bangladesh.
- Training course on (A) Server Administration (Linux Track), (B) Server Administration (Windows Track) and (C) Network Administration (July 08 to July 30, 2012), BARC, Farmgate, Dhaka, Bangladesh.
- Capacity Development for Farm Management Strategies to Improve Crop-Water Productivity Using AquaCrop Model (October 8 to October 12, 2012), BRRI, Joydebpur, Gazipur, Bangladesh.
- Application Software for Agricultural Research and Development for NARS Scientist (November 18 to November 29, 2012), BARI, Joydebpur, Gazipur, Bangladesh.
- E-File Management System (January 13 to January 17, 2013), PACC, Ministry of Public Administration, Dhaka, Bangladesh.
- Decision Support System for Agrotechnology Transfer (DSSAT) Training Course (February 09 to 13, 2013), BRRI, Joydebpur, Gazipur, Bangladesh.
- Training course on Website Development and Red Hat Linux (RHCE-6) (March 03 to March 14, 2013), BARC, Farmgate, Dhaka, Bangladesh.
- Open Source Biometrical Computing with R (June 15 to 17, 2013), BARI, Joydebpur, Gazipur, Bangladesh.
- Administrative and Financial Management (October 27 to November 09, 2013), Bangladesh Academy for Rural Development (BARD), Comilla, Bangladesh.
- Characterization of Rice Growing Environments for Dissemination of Stress Tolerant Varieties in South Asia (March 27 to 29, 2014), IFAD, IRRI, Chittagong, Bangladesh.
- Project Development and Management (April 20 to 24, 2014), BARC, Dhaka, Bangladesh.
- Green Super Rice (GSR) Training course on Crop management Skills (September 06 to 07, 2015), BARC, Dhaka, Bangladesh.
- Training course on Financial management (November 23 to 26, 2015), National Agriculture Training Academy (NATA), Gazipur, Bangladesh.
- Training course on Advance Microsoft Excel & Advance Microsoft Power Point (June 03 to 05, 2016), Bangladesh Institute of Management (BIM), Dhaka, Bangladesh.

#### ◆ In Aboard

- Training on Geographical Information System (GIS) (June 17 to July 18, 2012) Environmental Science Research Institute (ESRI), Singapore.
- Participation in discussion meeting on joint research project between BRRI and JIRCAS and paper presented on “Development of Agricultural Technologies in Developing Countries to Respond to Climate Change”, 15-19<sup>th</sup> February, 2016, JIRCAS, Tsukuba, Japan.

#### FOREIGN TRAVEL

- Saudi Arab, Holly Hajj (01 January to 14 February, 2005)
- Saudi Arab, Holly Hajj (16 October to 15 October, 2011)

#### PRESENTATIONS

##### a. International:

- Fourth International Symposium on Optimization & Statistics “Annual Conference of Information Theory & Applications” on December 8-10, 1998. Department of Statistics & Operation Research, Aligarh Muslim University, Aligarh-202002, India.
- Sixth Islamic Countries Conference on Statistical Sciences (ICCS-VI) and All Pakistan Statistical Conference, University of the Punjab, Lahore on August 27-31, 1999, Pakistan.
- International Rice Congress (IRC 2014), Bangkok, Thailand on October 27 to November 1, 2014. The paper entitle “Forecasting Aus Rice Production in Bangladesh using Box Jenkins Approach” and authors Niaz Md. Farhat Rahman, **Hossain M.I** and Md. Shahjahan Kabir.

##### b. National:

- 20<sup>th</sup> Bangladesh Science Conference on November 27-30, 1998. Bangladesh Engineering University of Technology (BUET), Dhaka, Bangladesh.
- 7th National Statistical Conference-Statistics in the New Millennium on December 01-02, 2000. Bangladesh National Museum Auditorium, Dhaka, Bangladesh.
- 8th National Statistical Conference on January 07-08, 2003. Bangladesh National Museum Auditorium, Dhaka, Bangladesh.
- Role of BARI in Agriculture Development of Bangladesh on October 17, 2002. Bangladesh Agricultural Research Institute (BARI), Gazipur-1701, Bangladesh.
- Asia Regional Conference on October 02-04, 2002. Bangladesh Chin Maitry Bhaban, Dhaka, Bangladesh.

## PROFICIENCY IN LANGUAGES

LANGUAGE	Speaking	Reading	Writing
<i>Bengali</i>	excellent	excellent	excellent
<i>English</i>	good	good	good
<i>Arabic</i>	fair	good	good
<i>Urdu</i>	fair	good	good

## PUBLICATIONS

### International:

- Ahmed, M.S. Rahman, M.S. and **Hossain M.I.** (2000). "Some Estimators of Finite Population variance Using Multivariate Auxiliary Information." *International Journal of Information and Management Sciences*, Tamkang University, Taiwan, Vol.11, No.1, pp.49-54, March, 2000.
- Hossain, M.I.**, Ahmed, M.S and Rahman, M.H. (2002.) "Beta Mixture of Transformed Chi-Square family of Distributions." *The Egyptian Statistical Journal*, Cairo University, Egypt. Vol.45 No.1, pp.26-31,
- Hossain M.I.** and Ahmed, M.S. (2001). "A Class of Predictive Estimators in two-stage Sampling Using Auxiliary Information." *Journal of Information and Management Sciences*, Tamkang University, Taiwan, Vol.12, No.1, pp.49-55, March, 2001.
- Hossain, M.I.**, Ahmed, M.S, Hossain, M.Z. and Ali,M.A. "A Class of Predictive Estimators in Multi-stage Sampling Using Auxiliary Information." *International Journal of Information and Management Sciences*, Tamkang University, Taiwan, Vol.14, No.1, pp.79-86, March, 2003.
- Hossain, M.I.**, M.I, Rahman, M.S and Ahmed, M.S. (2003). Second Order Properties of some Estimators Under Double Sampling. "STATISTICS IN TRANSITION", Journal of the Polish Statistical Association, Warsaw School of Economics, Warszawa, Poland. Vol. 6, N0.4, pp. 543-554.
- Aziz, M.A, M.A.K Majumder, M. S. Kabir, **Hossain M.I.**, and Rahman N.M.F, Farhana Rahman and Shakir Hosen (2015). "Groundwater Depletion with Expansion of Irrigation in Barind Tract: A Case Study of Rajshahi District of Bangladesh". *International Journal of Geology, Agriculture and Environmental Sciences*, WOAR Journals, India, Volume – 3, Issue – 1 February 2015, Page 32-38, IJGAES ISSN: 2348-0254, Website: [www.woarjournals.org](http://www.woarjournals.org).

### National:

- Hossain, M.I.**, Ali,M.A. and Ahmed, M.S. (2001). Predictive Estimation of Finite Population Mean Under Regression Estimator in Multi-stage Sampling Using Auxiliary Information. *Jahangirnagar University Journal of Science*, Savar, Dhaka, Bangladesh Vol. 24, pp.207-214.
- Rahman, M.H and **Hossain, M.I.**, Ahmed, M.S. (2001). A class of Beta Mixture Distribution. "Journal of Statistical Studies". Jahangirnagar University, Savar, Dhaka, Bangladesh. Vol.21, pp.45-59.

- Hossain M.I.**, Hossain, M.A. Baset, M.A. and Ahmed, M.S. (2000). Predictive Estimation of Finite Population Mean Under Regression Estimator in two-stage Sampling Using Auxiliary Information. *The Bangladesh Journal of Scientific Research*. The Bangladesh Association for the Advancement of Science, Dhaka, Bangladesh Vol.18, No.2, pp.185-190, December, 2000.
- Ahmed. Selim., Gomasta. A.R., Islam. M.S., Hossain.M.A, and **Hossain, M.I** (2002). Effect of Low Temperature and External-Internal Nitrogen and Phosphorous Status on Adventitious Root Growth of Rice Varieties. "Journal of Biological Science, Rajshahi University, Rajshahi, Bangladesh. Vol.10, pp. 41-45.
- Hossain, M.Abul, Hossain, M.A. and **Hossain, M.I**. (2003). Performance of Sesame Genotypes for Yield and Yield Contributing Characters in Flood Plain Soil of Rajshahi. "Bangladesh Journal of Genetics and Biotechnology", Bangladesh Genetical Society, Rajshahi University, Bangladesh, Vol.4 (1&2): pp.7-10.
- Begum, Sl, Sultana, R., Khatun, F., Yasmin, S and **Hossain, M.I**. (2003). Variability and Character Association in Sorghum (*Sorghum bicolor* L.) Moench. "Bangladesh Journal of Genetics and Biotechnology", Bangladesh Genetical Society, Rajshahi University, Bangladesh, Vol.4 (1&2): pp.11-13.
- Biswas, G.C., Hossain, M.Abul, Hossain.M.A, Yasmin, S. and **Hossain, M.I** (2003). Incidence and Damage of Hairy Caterpillar (*Spilarctia Obliqua* Wlk. Lepidoptera: Arctiidae) in Sesame Genotypes. Bangladesh Agriculturist" A Journal of Krishi Foundation, Bangladesh. Vol.1, pp. 27-29.
- Hossain M.I**, Hossain, M.A, Begum.M, Ahmed, M.S. and Fakir, H.K (2003). Second Order Biases and Mean Square Errors of Some Estimators Under Double Sampling. "Bangladesh Journal of Agricultural Science", Bangladesh Agricultural University, Mymensingh, Bangladesh. Vol. 30 (2), pp. 271-280.
- Hossain M.I** and Ahmed, M.S., Miah, A.B.M.A.S and Ali, M.A. (2004). A Class of Predictive Estimators in Three-stage Sampling. "Journal of Statistical Studies". Jahangirnagar University, Savar, Dhaka, Bangladesh. Vol.24, pp.19-30.
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#### **AENSI Journal:**

- Niaz Md. Farhat Rahman, **Hossain M.I.**, Aziz M.A, Baten M.A, and Kabir M.S. "Prospect of Boro Rice Production in Bangladesh". *Advance in Environmental Biology*, 7(14) December 2013, Pages:4542:4549, home page: <http://www.aensiweb.com/aeb.html>.
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## **POSTER**

Niaz Md. Farhat Rahman, **Hossain M.I** and Md. Shahjahan Kabir. Forecasting Aus Rice Production in Bangladesh using Box Jenkins Approach. Paper presented and published as a Poster-P602 in International Rice Congress (IRC 2014) at Bangkok, Thailand on October 27 to November 1, 2014.

## **ABSTRACT**

**Hossain M.I**, Hossain, M.A, Islam,M.S, and Yasmin, S. “Optimum Sampling for Measuring Different Plant Characters of Brinjal.” *8th National Statistical Conference*, January 7-8, 2003, Bangladesh National Museum Auditorium, Dhaka, Bangladesh.

Islam M.S., Hossain **M.I**, **Hossain** M.A. and Masud, A.T.M. Determination of optimum sampling for measuring different plant characters of Bottle Gourd at National Statistical Conference on April 15-16, 2005. Planning Commission, Sher-e-Bangla Nagar, Dhaka, Bangladesh.

Niaz Md. Farhat Rahman, **Hossain M.I** and Md. Shahjahan Kabir. Forecasting Aus Rice Production in Bangladesh using Box Jenkins Approach. Paper presented (As a Poster) in International Rice Congress (IRC 2014) at Bangkok, Thailand on October 27 to November 1, 2014.

Niaz Md. Farhat Rahman, **Hossain M.I** and Md. Shahjahan Kabir. Effects of Climate Change on Rice Yield in Bangladesh. Paper presented International workshop on impacts of climate change on agriculture and adaptation to extreme events in Bangladesh. BRRI and JIRCAS (japan) collaboration, BRRI, Gazipur, October 05, 2015.

## **COURSE WORK IN EDUCATION LEVEL**

### *Master of Philosophy*

#### **Relevant Course work:**

Sample Survey and Bio-statistics

### *Master of Science*

#### **Relevant Courses:**

Theory of Inference, Design of Experiment, Demography, Sampling Techniques, Bio-Statistics, Research Methodology, Multivariate Analysis & Analysis of Categorical Data, Survey Sampling.



## **Bachelor of Science**

### **Relevant Courses:**

Descriptive Statistics, Elements of Probability, Statistical Inference, Linear Algebra, Mathematical Analysis, Design of Experiment, Economic & Official Statistics, Sampling Distribution, Distribution Theory, Operation Research, Non-Parametric Methods, Industrial & Educational Statistics, Computer Program and Data Analysis, Analysis of Variance, Regression Analysis, Sampling Methods, Demography, Econometrics & Income Distribution, Probability Theory & Stochastic Process, Calculus-1, Linear Algebra, Algebra, Calculus-II & Differential Equations, Analytical Geometry of two and three Dimension, Mathematical Methods & Statistics, Micro Economics (General Economics- A), Micro Economics (General Economics-B), Agriculture Economics Development of Bangladesh.

## **SUPERVISION OF POST-GRADUATE STUDENTS**

### **Completed: 03**

MS = 02 (Jahangirnagar University, Savar, Dhaka & East West University, Dhaka), Co-supervisor.

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## **AREA OF INTEREST**

- Sampling Design/ Sample Survey
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- Mathematical Statistics
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- Stochastic Process
- Demography
- Bio-Statistics
- GIS and Remote sensing
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Signature.....  .....