Dr. Md. Serazul Islam ------



Director, Institutional Quality Assurance Cell (IQAC), BOU Professor (Grade 2), Agricultural Engineering Coordinator, MSARL & MS in Irrigation and Water Management Program School of Agriculture and Rural Development (SARD) Bangladesh Open University (BOU), Gazipur-1705, Bangladesh Phone: +88-02 996691170 (IQAC) PABX: +88-02 09666730730 Ex. 168 (IQAC), 680 (SARD) Cell: +88 01716-798945 (WhatsApp), +88 01533-406350 e-mail: serazsard@bou.ac.bd, iqac@bou.ac.bd

Web link: https://www.bou.ac.bd/SARDFacultyMember/197906250649 Google scholar ID: https://scholar.google.com/citations?user=hGzXIwQAAAAJ&hl=en Linkedin ID: https://www.linkedin.com/in/dr-md-serazul-islam-797b3aa1/ ORCID ID: https://orcid.org/my-orcid?orcid=0000-0001-9812-3559

Home district: Rangpur, DoB: 25 June 1979; Married to Dr. Shahnaj Pervin, Scientist, BARI have one daughter and one son

Area of Specialization and Research Interest

Irrigation and Water Management, Integrated Water Resources Management, River Conservation Engineering, Flood Disaster and Risk Management, e-learning

Educational Qualification

- **Doctor of Engineering in Civil Engineering** (3 Years), Department of Civil Engineering, Graduate School of Engineering, Nagoya University, Japan under MEXT Fellowship Program (October 2009 to September 2012), 2012. (Awarded)
- Master of Science in Irrigation and Water Management (1 and half years), Bangladesh Agricultural University, Mymensingh, 2005. (Top Position)
- Bachelor of Science in Agricultural Engineering (4 Years), Bangladesh Agricultural University, Mymensingh, 2001 (exam. held in 2003). (First class First)
- Higher Secondary School Certificate (HSC), Rajshahi Board, 1996. (First Division)
- Secondary School Certificate (SSC), Rajshahi Board, 1994, (First Division with Star)

Professional Experiences

- October 2024 ~ to date: Director, Institutional Quality Assurance Cell (IQAC), BOU
- May 2022 ~ to date: Professor (Grade 2), Agricultural Engineering, SARD, BOU
- May 2018 ~ May 2022: Professor (Grade 3), Agricultural Engineering, SARD, BOU
- May 2013 ~ May 2018: Associate Professor, Agricultural Engineering, SARD, BOU
- Sep. 2008 ~ May 2013: Assistant Professor, Agricultural Engineering, SARD, BOU
- Nov. 2005 ~ Sep. 2008: Lecturer, Agricultural Engineering, SARD, BOU

List of Publications

- 1. Hossain MF, **Islam MS**. (2024). Impact of Transplants Age on the Nutritional Quality of Cherry Tomatoes. *Journal of Food and Agriculture* 17(2):1-15. **Sri Lanka**.
- 2. Hossain MF, Islam MS. (2024). Effects of Organic and Inorganic Fertilizers and Their Combination on Growth, Yield and Quality of Broccoli (*Brassica Oleracea* L. *var. italica*). *International Journal of Horticulture, Science and Technology (IJHST*). 11(4):515-522. Iran.
- 3. **Islam MS**, Hossain MF, Pervin S. (2023). Enhancing Broccoli (Brassica oleracea var. italica) Growth, Yield and Water Productivity through Irrigation and Mulching Techniques in Local Climate.

Asian Journal of Agricultural and Horticultural Research, 10(4): 440-454. India.

- 4. **Islam MS**, Pervin S. (2023). Enhancing Cauliflower Growth, Yield, and Water Management: Effects of Drip Irrigation and Manures under Black Polyethylene Mulching in a Local Climate. International Journal of Agriculture & Environmental Science, 10(5): 1-15. **Egypt.**
- 5. Islam MS. (2023). Effects of raised bed furrow irrigation and various mulching techniques on the growth, yield and water use efficiency of tomato cultivation. *International Journal of Horticultural Science and Technology* **10**(1): 33-40, **Iran.**
- Hossain MF, Islam MS. (2023). Floating agriculture: Local innovative crop production technology for the submerged ecosystem of the coastal region of Bangladesh. 2nd International Conference on Prospects and Challenges of Environment and Biological Sciences in Food Production System for Livelihood Security of Farmers (ICFPLS–2023) September 18–20, 2023 ICAR-CIARI, Port Blair, Andaman & Nicobar Islands, India.
- 7. Islam MS, Pervin S, Haque MA. (2022). Effects of irrigation and soil mulching in different growing environments on strawberry yield and quality. *International Journal of Agriculture and Environmental Research* 8(2): 347-357, India.
- 8. Pervin S, Aziz MG, **Islam MS**, Miaruddin M. (2021). Effect of various combinations of sodium chloride and sucrose concentrations on the quality of plum pickle during storage. *Annals. Food Science and Technology* **22**(3): 263-273, **Rumania.**
- 9. Pervin S, Aziz MG, Islam MS, Miaruddin M. (2021). Influence of various sucrose concentrations on the quality of prepared plum chutney during storage. *Advances in Food Science and Technology* 9(1): 1-7, UK.
- Parves M, Islam MS, Biswas SK. (2021). Assessment of wastewater irrigation practices and soil properties in the Gazipur district of Bangladesh. *Scholars Journal of Engineering and Technology* 9(7): 93-101, India.
- 11. Pervin S, Islam MS, Khan MHH, Molla MM, Chowdhury MGF. (2020). Influence of chitosan on postharvest quality and storability of papaya (*Carica papaya* L.) fruit. *BOU J Agric Rural Dev* **12**(2): 33-42, **Bangladesh**.
- 12. Islam MS. (2019). Causes of flood and mitigation practices in Bangladesh. *BOU J Agric Rural Dev* **11**(1): 83-92, **Bangladesh**.
- Pervin S, Islam MS, Miaruddin M. (2018). Influence of Blanching on the Nutritional Quality and Shelf Life of Yard Long Bean. *Research & Reviews: Journal of Food Science & Technology* 7(2): 27-33, India.
- 14. Islam MS. (2018). Experimental investigation on failure behavior of levee based on its bed material and river bed height relative to floodplain level. *BOU J Agric Rural Dev* **10**(1): 65-74, **Bangladesh**.
- 15. Hossain MF, **Islam MS**. (2018). Impact of climatic factors and water management on crop production in Bangladesh. *BOU J Agric Rural Dev* **10**(1):1-9, **Bangladesh**.
- 16. Pervin S, Miaruddin M, Islam MS. (2017). Packaging Effect on the Quality and Storage Stability of Processed Ginger Paste. *Journal of Scientific and Engineering Research* **4**(12):1-9, India.
- 17. Pervin S, Miaruddin M, Islam MS, Rahman MM, Khan MHH. (2017). Blanching effect on the quality and shelf life of pea. *Journal of Postharvest Technology* **5** (2): 47-54, India.
- 18. **Islam MS**, Tsujimoto T. (2015). Levee breaching process of a river and disaster on floodplain. *American Journal of Civil Engineering and Architecture* 3 (2): 39-44, **USA**.
- 19. **Islam MS**, Pervin S, Tsujimoto T, Tashiro T. (2015). Laboratory investigation on levee breach and risk on floodplain of alluvial fan river. *Journal of Multidisciplinary Engineering Science and Technology* **2** (10): 2886-2894, **Germany**.
- 20. Islam MS, Tsujimoto T. (2015). Numerical simulation on breach evolution process of a river levee

by overtopping. Journal of Emerging Trends in Engineering and Applied Sciences 6(1): 12-18, UK.

- 21. Islam MS, Tsujimoto T. (2015). Experimental and numerical approaches to overtopping levee breach effects in a river and floodplain. *American Journal of Civil Engineering* **3**(2): 31-42, **USA**.
- 22. Islam MS, Pervin S, Khair MA, Khan LR. (2015). Performance and operation suitability of developed hand and pedal pump for low-lift Irrigation. *Journal of Multidisciplinary Engineering Science and Technology* 2(2): 233-239, Germany.
- Pervin S, Miaruddin M, Islam MS, Rahman MM, Khan MHH. (2015). Effect of Blanching on the Quality of Frozen Product of Carrot. *Research & Reviews: Journal of Food Science & Technology* 4(3):1-9, India.
- 24. Pervin S, Miaruddin M, Islam MS, Chowdhury MGF, Rahman MM, Khan MHH. (2015) Standardization of bottling process for sweet corn. *Annals. Food Science and Technology* **16** (2): 236-242, Rumania.
- 25. Pervin S, Islam MS, Akanda AR, Rahman MS. (2014). Fertigation influence on the yield and quality of strawberry. *International Journal of Sustainable Crop Production* **9**(1): 16-22, **Bangladesh**.
- 26. Pervin S, Islam MS, Akanda AR, Rahman MS, Mila AJ. (2014). Effect of irrigation levels on the yield of groundnut. *International Journal of Experimental Agriculture* **4**(1): 17-21, **Bangladesh.**
- 27. **Islam MS,** Tsujimoto T. (2013). Levee breach with phenomena on river, levee and floodplain effect of bed materials, *Proceedings of 4th International Conference on Water and Flood Management (ICWFM 2013), March 9-11, BUET, Dhaka, Bangladesh.*
- 28. **Islam MS**, Tsujimoto T. (2013). Levee breach and successive disaster depending on landscape management on floodplain. *Advances in River Sedimentation Research*, pp. 2021-2026, Taylor & Francis, **England**.
- 29. Tsujimoto T, Islam MS. (2013). Danger of levee breach in river with higher relative river bed suggested by small-scale laboratory experiments and numerical analysis. *Advances in River Sedimentation Research*, pp. 2027-2033, Taylor & Francis, England.
- 30. Islam MS, Tashiro T, Tsujimoto T. (2012). Laboratory Experiments on Levee Breach and Inundation in Low-land Floodplain with Particular Reference to Relative Height of River Bed to Floodplain. *International Review of Civil Engineering* 3(3): 251-258, **Italy.**
- 31. Islam MS, Tsujimoto T. (2012). Comparisons of levee breach and successive disasters in floodplain between Bangladesh and Japan. *Procedia Engineering* 28: 860-865, Elsevier publication, **China.**
- 32. Islam MS, Tsujimoto T. (2012). Numerical approach to levee breach as a key of Flood disasters in low land. *International Journal of Civil Engineering* **4** (1): 23-39, **India**.
- 33. Tsujimoto T, Tashiro T, Islam MS & Yoshiike T. (2012). Effect of river bed height from floodplain level on levee breaching process through small-scale experiments Risk of disaster by levee breach in "Tenjo-Gawa" segment. *Advances in River Engineering* **18**:381-386, **JSCE**, **Japan**.
- 34. **Islam MS**, Tsujimoto T. (2011). Characteristics of flood disasters in low floodplain along a big river due to overflow levee breach. *International Journal of GEOMAT* **1** (1): 52-63, **Japan**.
- 35. Pervin S, Islam MS, Islam MN. (2009). Kinetics of air drying of common carp (*Cyprinus Carpio*) and their composition analysis. *Journal of Agricultural Engineering* **36**/AE: 101-108, **Bangladesh**.
- 36. Pervin S, Islam MS, Islam MN. (2008). Study of rehydration characteristics of Lablab bean seeds. *Journal of Agriculture and Rural Development* **6**(1&2): 157-163, **Bangladesh**.
- 37. Islam MS, Tsujimoto T. (2011). Numerical study on characteristics of levee breach flood disasters in alluvial floodplain. *Proceedings of International Conference on Geotechnique, construction materials and environment* **1**: 547-552, 21-23, November, Tsu city, Mie, Japan
- 38. Pervin S, Islam MS, Islam MN. (2007). Kinetics of drying of Lablab bean seeds and their

composition analysis. International Journal of BioResearch 3(3) 56-63, Bangladesh.

- 39. Islam MS, Hossain MZ, Khair A. (2007). Design and development of pedal pump for low-lift irrigation. *Journal of Agriculture and Rural Development* **5**(1&2): 116-126, **Bangladesh**.
- 40. **Islam MS.** (2006). Effect of abstraction on permeability and hydraulic gradient in a simulated unconfined aquifer using sand tank model. *Journal of Agriculture and Rural Development* **4** (1&2) 143-148, **Bangladesh**.
- 41. Islam MT, Islam MS, Hoque MN. (2006). Properties of some selected soil under Mymensingh district in Bangladesh. *Journal of Agriculture and Rural Development* 4(1&2): 149-153, Bangladesh.

National Research Project

- Islam, M.S. (Chief investigator). 2023-2024. Optimizing deficit irrigation and organic mulching to improve cherry tomato growth, yield and water productivity, BOU internal fund, (Report Submitted).
- Islam, M.S. (Chief investigator). 2022-2023. Response of irrigation methods and soil mulches on growth, yield and water productivity of broccoli, BOU internal fund, Finished.
- Islam, M.S. (Chief investigator). 2020-2021. Influences of irrigation and organic manures on performance of cauliflower growth and yield under drip irrigation and black polyethylene mulching, BOU internal fund, Finished.
- Islam, M.S. (Chief investigator). 2019-2020. Effect of growth, yield and quality of strawberry under irrigation and soil mulches for different cultivation environments, BOU internal fund, Finished.

Islam, M.S. (Chief investigator). 2018-2019. Effects of irrigation and mulching on tomato yield under raised bed and furrow irrigation, BOU internal fund, Finished.

International Research Project

On-going

- Researcher at MAGENDA Research Project funded by Europe Union (EU)
- Deputy Director (Administration and Procurement) of BOU EARN CELL for skilling out-ofschool youth NEET of the secondary level. In collaboration with DYD and funded by World Bank.

Past Experiences

A study on functional and conservational investigation of river embankments in Bangladesh from April 2007 to September 2009 (Mie University, Japan).

PhD Student Supervised

PhD Thesis (proposed) in Irrigation and Water Management: No. of Student- 01 (One)

Assessment of Solar Pump Irrigation for Boro Rice Cultivation in Bangladesh

Masters Student Supervised

MS Thesis in Irrigation and Water Management: No. of Student- 07 (Seven)

- 1. Geospatial Analysis of the Morphological Dynamics of the Feni River for Effective Riverbank Management
- 2. Study on design and evaluation of buried pipe irrigation system for reducing diesel pump dependency at Singair upazilla in Manikgonj
- 3. Investigating subsurface lithology, geotechnical properties, and their influence on groundwater availability in the Inani Anticline of Cox's Bazar, Bangladesh

- 4. Assessment of sub-surface lithology and aquifer geometry of the Chattogram District, Bangladesh
- 5. Evaluation of wastewater irrigation practice and soil properties at Sutrapur union in Kaliakair Upazilla
- 6. Improvement of drainage systems from Sonadanga to Moyur bridge in Khulna city
- 7. Assessment of water distribution systems for selected district meter area of Dhaka city

Project Report of Master in Sustainable Agriculture and Rural Livelihood: No. of Student-11 (Eleven)

- 1. Factors contributing farmers' decision to grow vegetable-based farming systems at Gazipur district in Bangladesh
- 2. Analysis of irrigation practices and factors influencing farmers' decision to grow tea in the northern region of Bangladesh
- 3. Prospect of an integrated hill farming system in the Sylhet region of Bangladesh
- 4. Analysis of water saving irrigation practices and factors influencing farmers' toward *Boro* rice cultivation in Kurigram district in Bangladesh
- 5. Livelihood status of Sharankhola upazila in Bagerhat utilization with sustainable and climateadapted farming system
- 6. Factors Contributing Farmers' Decision to Adopt Maize-Based Farming Systems at Kachua Upazilla in Bangladesh
- 7. Adaptive capacities in the livelihoods of coastal communities through climate-resilient farming system in Assasuni upazila, Satkhira
- 8. Strengthening climate-resilient agriculture to increase production among vulnerable farmers in the bill region, Madaripur
- 9. Assessment of land use dynamics and socioeconomic sustainability among jhum cultivators in Khagrachhari
- 10. Assessment of social vulnerabilities and livelihood challenges of tea garden laborers in Moulvibazar
- 11. Study on the integration of salt-tolerant rice varieties for sustainable livelihoods in Cox's Bazar

Study Material Developed

- Editor (3rd edition). 2009. Farm Machineries (BAE 2303), SARD, BOU
- Editor (2nd edition). 2009. Irrigation System and Management (BAE 3202), SARD, BOU
- Editor (2nd edition). 2009. Fundaments of Computer and Its Uses (BAE 5208), SARD, BOU

Video and Audio Programs

- No of video program: 30
- No of audio program: 24

On-going Academic and/or Administrative Responsibilities/Duties

- Chairman, BOU Laboratory School Management Committee, Bangladesh Open University, Gazipur from October 2024 to date
- Member of Academic Council, Bangladesh Open University from 30/06/2014 to 22/10/2017 & 18/05/2018 to date
- Member, Research Ethical Committee, Bangladesh Open University, Gazipur from 07/04/2022 to date
- Member, Academic and Financial Regulation Committee of M.Phil & PhD Program at Bangladesh Open University, Gazipur from 11/04/2022 to date
- **APA representative,** School of Agriculture and Rural Development, Bangladesh Open University, Gazipur from July 2021 to date
- **Member of School Committee**, School of Agriculture and Rural Development, Bangladesh Open University, Gazipur from 09/10/2006 to 30/09/2012 and 30/01/2018 to date

- Content Developer of e-learning Center (School Representative), BOU from 02/03/2021 to date
- Coordinator, Master in Sustainable Agriculture and Rural Livelihood (MSARL) from 12/03/2024 to date
- **Coordinator, MS in Irrigation and Water Management** for MS in Agricultural Sciences, SARD, BOU from 20/04/2017 to date
- Coordinator, BOU Website Update and On-line Course Material Development as concern part of SARD from 28/01/2016 to date
- Member of Master in Sustainable Agriculture and Rural Livelihood (MSARL) Curriculum Committee, SARD, BOU from 17/01/2017 to date
- Member of Agriculture and Rural Development Curriculum Committee, SARD, BOU from 09/10/2006 to 30/09/2009 (1st) 03/04/2013 to 10/11/2015 (2nd) & 11/11/2015 to date (3rd)
- Member of Language, Education and Others Curriculum Committee, SARD, BOU from 11/11/2015 to date
- Member of Youth Development Related Curriculum Committee, SARD, BOU from 21/09/2021 to date

Past Academic and/or Administrative Responsibilities/Duties

- Member, BOU Laboratory School Management Committee, Bangladesh Open University, Gazipur from 16/05/2022 to October 2024
- Coordinator, Bachelor of Agricultural Education (BAgEd) Program, SARD, BOU from 04/05/2009 to 30/09/2009 (1st time) 01/07/2019 to 22/04/2024 (2nd time)
- Member of Academic Team of e-learning Center (School Representative), BOU from 08/03/2017 to 01/03/2021
- Convener of Agro Processing Sub-Committee for Course Development of Master in Sustainable Agriculture and Rural Livelihood (MSARL) Program, SARD, BOU from 07/05/2017 to 30/06/2019
- Member of Field Lab Establishment Committee, SARD, BOU in 2016 & 2017
- Convener of Sub-Committee for BAgEd Course Books Update (Agricultural Engineering Group), SARD, BOU in 2014 & 2015
- Convener of Sub-Committee for BAgEd Course Books Update (Computer Group), SARD, BOU in 2014 & 2015
- Convener of Syllabus and Course Layout Preparation committee for MS in Irrigation and Water Management, SARD, BOU from 28/05/2014 to 08/09/2015
- Coordinator of Media, SARD, BOU (Co-ordinate TV and Radio program preparation act as a member of preview committee, prepare TV and Radio telecast schedule etc.) from 20/03/2013 to 19/04/2015
- Member Secretary of Position Paper Preparation Committee for the Master in Sustainable Agriculture and Rural Livelihood Program, SARD, BOU from 03/03/2014 to 28/04/2014
- **Member of Regulation Preparation Committee** for the Master in Sustainable Agriculture and Rural Livelihood Program, SARD, BOU from 17/11/2014 to 15/12/2014
- Member of B.Sc. Ag. (Hons) Draft Syllabus & Curriculum Preparation Committee, SARD, BOU from 29/08/2008 to 30/09/2009

Training/Short Course/Workshop after Joining at BOU

- Information Right Act-2009 implementation and guidelines at BOU related workshop organized by BOU at Gazipur campus on 28 June 2022.
- **OBE curriculum concept-model & development strategy related workshop** organized by IQAC, BOU at Gazipur campus on 6-7 June 2022.
- Teaching learning process and assessment for quality education related training organized by IQAC, BOU at Gazipur campus on 01 June 2022.
- Curriculum development: Format, content and implementation related workshop

organized by IQAC, BOU at Gazipur campus on 19 May 2022.

- **Citizen charter work planning implementation training workshop** organized by BOU at Gazipur campus on 12 May 2022.
- **GPRS software related training workshop** organized by BOU at Gazipur campus on 31 March 2022.
- **GPRS software related training** organized by BOU at Gazipur campus on 27 December 2021.
- APA: preparation and implementation training workshop organized by BOU at Gazipur campus on 12 December 2021.
- Commonwealth higher education consortium for youth work training workshop partnership between Commonwealth Secretariat, University of West Indies, COL and BOU at BRAC CDM, Gazipur from 20-22 November 2019.
- Worhshop on e-learning: Use of Moodle organized by International University of Business Agriculture and Technology (IUBET) on 25 February 2018.
- National Conference on Food Security in Bangladesh organized by Interdisciplinary Centre for Food Security (ICF) Bangladesh Agricultural University from 07-08 October, 2017.
- **OER Capacity Building Programme for BOU Academics** jointly organized by Bangladesh Open University and CEMCA from 03-05 April, 2017.
- ICT and e-learning System jointly organized by Bangladesh Open University and KOICA from 15-28 May, 2013.
- Research Methodology for Social Science Researchers sponsored by Bangladesh Academy for Rural Development (BARD) and participant organization, organized by BARD, Comilla from 6-24 April, 2008.
- Fourth Gender and Development Course organized Bangladesh Public Administration Training Centre (BPATC), Dhaka from 16-20 March, 2008.
- Production of Quality Mixed Media Courseware for Open and Distance Learning (ODL) under the auspices of the Bangladesh Open University, UNESCO and CEMCA from 2-6 March, 2008.
- Academic and Research Writing/Editing organized by Bangladesh Open University from 19-22 November, 2007.
- **Tutor Training Workshop on Diploma in Youth in Development Work** organized jointly by CYP Asia Center and Bangladesh Open University from 27-29 March, 2007.
- Capacity Building for Open and Distance Learning (ODL) Materials organized by Bangladesh Open University from 12-19 March, 2006.

Editor/member of Journal and other Publications

- Working as Editorial Board Member, Journal of Agriculture and Rural Development, Bangladesh Open University from 26 September 2021 to date
- Working as Associate Editor, Institutional Engineering and Technology, Green Global Foundation Journals (<u>http://ggfjournals.com/content/editorialBoard/iet</u>) from 2013
- Working as **Editorial Board Convener** of Bachelor of Agricultural Education (BAgEd) Program Handbook preparation Committee, SARD, BOU in 2024
- Working as **Editorial Board Member Secretary** of Master in Sustainable Agriculture and Rural Livelihood Program Handbook preparation Committee, SARD, BOU in 2024
- Working as **Editorial Board Member Secretary** of MS in Agricultural Science Program Handbook preparation Committee, SARD, BOU in 2024

Recognition and Merit Awards

- **Professor S. M. Nazmul Haque Smrithy Gold Medal** (2014) from Bangladesh Agricultural University (BAU), Mymensingh
- Awarded Monbukagakusho Scholarship from the Japanese Government throughout the

doctoral course (Oct. 2009 to Sep. 2012) under Civil Engineering Special Program

- University Prize (2011) for securing first position in B. Sc. Ag. Engg. from Bangladesh Agricultural University, Mymensingh
- Md. Nurul Hossain Gold Medal (2001) in recognition of meritorious performance in obtaining graduation degree among all faculties in the year of 2001 in BAU.
- Cash money an "**Ramapathi Nath Memorial Award**" (2000) in recognition of securing the highest cumulative marks in part 1 to final examinations in the faculty of Agricultural Engineering and Technology in the year of 2000.
- American Association of Bangladeshi Engineers and Architect (AABEA) Scholarship (2001)

Member of professional and learned bodies

- Member, Engineering Institution of Bangladesh (IEB), Bangladesh.
- Member, Bangladesh Society of Agricultural Engineering (BSAE), Bangladesh.
- Member, Japanese Society of Civil Engineering (JSCE), Japan.



(Prof. Dr. Md. Serazul Islam)