

CURRICULUM VITAE

1. PERSONAL INFORMATION

Name : **S.M. MOFIJUL ISLAM, PhD**
Father's name : Late Md. Sadek Ali Sardar
Mother's name : Mst. Sukhjan Bibi
Date of birth : June 05, 1982
Nationality : Bangladeshi by birth
Designation : Senior Scientific Officer
Soil Science Division
Bangladesh Rice Research Institute (BRRI), Gazipur, Bangladesh
Present address : Senior Scientific Officer
BRRI Regional Station, Satkhira
Bangladesh Rice Research Institute, Gazipur 1701, Bangladesh
Mobile number : +88-01718160966
Email : mislambri@gmail.com
Permanent address : Village: Badhondunga, Post office: Brahamarajpur, District: Satkhira
Bangladesh
Field of Specialization: Soil Science and Environmental Soil Science

2. EDUCATIONAL QUALIFICATION

Degree	Education Board/ University	Year	Major	Division/ Class	Marks (%)
Secondary School Certificate	Jashore	1997	Science	First	75.5
Higher Secondary Certificate	Jashore	1999	Science	First	64.1
Bachelor of Science in Agriculture (Honours)	BAU Bangladesh	2005	Agriculture	First	60.93
Master of Science	BAU Bangladesh	2007	Plant Pathology	CGPA-3.781 (out of 4.0)	75-79
PhD	KU Bangladesh	2019	Environmental Soil Science	Satisfactory	N/A

BAU and KU indicate Bangladesh Agricultural University and Khulna University, respectively

3. JOB EXPERIENCES AND QUALIFICATION

3.1 Appointments:

Designation	Duration	Department	Organization
Scientific Officer	7 years (12 November 2007 to 14 December 2014)	Soil Science Division	BRRI, Gazipur, Bangladesh
Senior Scientific Officer	3 years (15 December 2014 to date)	Soil Science Division	BRRI, Gazipur, Bangladesh

3.2 Area of research:

Environmental soil science, soil chemistry, soil fertility and plant nutrition, and analytical chemistry.

3.3 Association to major projects:

- ❖ Co-coordinated project on Soil Fertility and Fertilizer Management for Crops and Cropping Patterns (BRRI Part): **Co-Principal Investigator** (May 2011-30 June 2014).

- ❖ Co-coordinated project on Arsenic in soil water plant system (BRRI Part): **Co-Principal Investigator** (June 2011- 30 June 2014).
- ❖ Integrated Agricultural Productivity Project (IAPP) BRRI-Component: **Working Scientist** (December 2011-December 2013).
- ❖ Integrating Greenhouse Gas (GHG) Emissions Mitigation into the Feed the Future Bangladesh Fertilizer Deep Placement Rice Intensification Project: **Junior Scientist** (November 2012-September 2015).
- ❖ Mitigating Greenhouse Gas (GHG) Emissions from Rice-based Cropping Systems through Efficient Fertilizer and Water Management: **Co-Principal Investigator** (September 2015- till date).
- ❖ GHG emission measurements in Bangladesh in 2018 Boro and 2019 Boro project: **Collaborating Scientist** (January 2018 – June 2019)
- ❖ Increasing fertilizer use efficiency and resilience in saline soils: **Collaborating Scientist** (January 2020 – June 2020)

4. OTHER RELATED INFORMATION

4.1 Language skill:

Name of language	Reading	Writing	Speaking
Bengali	Excellent	Excellent	Excellent
English	Excellent	Good	Good

4.2 Membership:

- ❖ Bangladesh Association for Advancement of Science (BAAS).
- ❖ BRRI scientist association (BRRISA)
- ❖ Krishibid Institution of Bangladesh (KIB)

5. TRAINING INFORMATION

5.1 Local Training:

Training Title	Date	Organizer	Venue
Basics of MS Office	09-21 July, 2005	Graduate Training Institute (GTI)	GTI, Mymensingh.
Use of Fertilizer Recommendation Guide	7-9 Jan., 2008	Bangladesh Agricultural Research Council (BARC)	BARC, Dhaka.
Hybrid rice development and seed production	6-10 April, 2008	Bangladesh Rice Research Institute (BRRI)	BRRI, Gazipur.
One Month Rice Production Training Course	27 July -25 August, 2008	Bangladesh Rice Research Institute	BRRI, Gazipur.
Research Methodology	15-27 Nov., 2008	Bangladesh Agricultural Research Council	GTI, Mymensingh.
Use of Manual for Fertilizer Analysis	15-18 June, 2009	BARC	BARC, Dhaka

Training Title	Date	Organizer	Venue
Foundation Training Course for NARS Scientists (Batch-20)	30 Sept.2009-27 Jan., 2010	Bangladesh Agricultural Research Council	Bangladesh Academy for Rural Development (BARD), Comilla.
Breeder Seed Production and Preservation of Rice.	23-25 May,2010	Bangladesh Rice Research Institute	BRRI, Gazipur.
Technology of Hybrid Rice Cultivation	11-22 May, 2011	Economic and Social Commission for Asia and the Pacific (ESCAP)	BRRI, Gazipur.
Application of ICT in Agriculture using GIS on ArcView & ArcGIS Technology	11-15 December, 2011	Bangladesh Rice Research Institute	BRRI, Gazipur,
Soil Fertility and Fertilizer Management for Crops and Cropping Patterns	07-08 February, 2012	Bangladesh Agricultural Research Council	BARC, Dhaka.
Use and Maintenance of Modern Lab Equipments for NARS Scientists	20-22 March, 2012	Bangladesh Agricultural Research Institute (BARI)	BARI, Gazipur.
On-Farm Research Methodology	15-20 April, 2012	Bangladesh Agricultural Research Institute	BARI, Gazipur.
E-File management	11-12 Febr 2019	A2i	Agargaon, Dhaka
Basic Molecular Biology and Disease Resistance	23-28 March 2019	Plant Pathology Division, BRRI	BRRI, Gazipur
Agricultural Research Methodology	22-26 December 2019	BRRI	BRRI, Gazipur.

5.2 Foreign Training:

Training Title	Date	Organizer	Venue
Soil Fertility Management and Fertilizer Use	30 June-26 July 2012	MASMARDI, Malaysia	MARDI Serdang, Selangor, Malaysia.
Soil Fertility Management and Fertilizer Use	27 July-7 August 2012	MASMARDI, Malaysia	Faculty of Agro-based Industry, University Malaysia Kelantan, Jeli Campus.
Greenhouse Gas Emission Trials and Measurements	8 April - 3 May 2013	IFDC, USA	Muscle Shoals, Alabama, USA.

5.3 In-country Workshop/Conference:

Title	Date	Organizer	Venue
International workshop on Balanced fertilization for increasing and sustaining crop production	30 Mar-01 Apr. 2008	International Potash Institute.	Dhaka
Inception Workshop on Coordinated Project on Soil Fertility and Fertilizer Management for Crops and Cropping Patterns	28 July, 2011	BARC	BARC, Dhaka

Title	Date	Organizer	Venue
Research Review and Planning Workshop of Soil Management Program of NARS Institutes	12-14 September, 2011	BARC	BARC, Dhaka
Review and Monitoring Workshop on SPGR funded project of BIRRI	22 December, 2011	BIRRI	BIRRI, Gazipur
Program Planning Workshop of IAPP	02 January, 2012	BIRRI	BIRRI, Gazipur
Annual Research Review Workshop	2- 7 February 2019	BIRRI	BIRRI, Gazipur
Annual Research Review Workshop	28 Nov – 5 Dec 2019	BIRRI	BIRRI, Gazipur

5.4 Foreign Workshop/Conference:

Title	Date	Organizer	Venue
Regional workshop on improvement and development of emission factor for methane from rice cultivation	1-4 February 2016	Indonesian Agricultural Environment Research Institute	Pati, Indonesia

6. AWARD RECEIVED

Awarded Crest of Honor and Certificate (2nd prize) in recognition of Annual Gobeshona Prize for best Research Paper on Climate Change in Bangladesh (<http://gobeshona.net/annual-gobeshona-prize/#sthash.QfO8e6Rh.dpbs>).

7. PUBLICATION

7.1 Full length research paper

International

Islam, S.M.M., Gaihre, Y.K., Islam, M.R., Akter, M., Mahmud, A.A., Singh, U., Sander, B.O., 2020. Effects of water management on greenhouse gas emissions from farmers' rice fields in Bangladesh. *Science of The Total Environment*, 734, doi.org/10.1016/j.scitotenv.2020.139382

Islam, S.M.M., Gaihre, Y.K., Biswas, J.C., Singh, U., Ahmed, M.N., Sanabria, J., Saleque, M.A., 2018. Nitrous oxide and nitric oxide emissions from lowland rice cultivation with urea deep placement and alternate wetting and drying irrigation. *Scientific Reports*, DOI:10.1038/s41598-018-35939-7

Islam, S.M.M., Gaihre, Y.K., Biswas, J.C., Jahan, M.S., Singh, U., Adhikary, S.K., Satter, M.A., Saleque, M.A., 2018. Different nitrogen rates and methods of application for dry season rice cultivation with alternate wetting and drying irrigation: Fate of nitrogen and grain yield. *Agricultural Water Management*, 196, 144-153. doi.org/10.1016/j.agwat.2017.11.002

Islam, S.M.M., Gaihre, Y.K., Shah, A.L., Singh, U., Sarkar, M.I.U., Satter, M.A., Sanabria, J., Biswas, J.C., 2016. Rice yields and nitrogen use efficiency with different fertilizers and

- water management under intensive lowland rice cropping systems in Bangladesh. [Nutrient Cycling in Agroecosystems](#), 106, 143-156. doi 10.1007/s10705-016-9795-9.
- Islam, S.M.M.**, Masum, M.M.I., Fakir, M.G.A., 2009. Prevalence of seed borne fungi in sorghum of different locations of Bangladesh. [Scientific Research and Essay](#), 4, 175-179.
- Sarkar, M.I.U., Jahan, A., Haque, M.M., **Islam, S.M.M.**, Ahmed, M.N., Islam, M.R., 2019. Long term effects of integrated plant nutrition system on rice yield, nitrogen dynamics and biochemical properties in soil of rice-rice cropping system. [Asian Journal of Soil Science and Plant Nutrition](#), 4, 1-14.
- Gaihre, Y.K., Singh, U., **Islam, S.M.M.**, Huda, A., Islam, M.R., Sanabria, J., Satter, M.A., Islam, Md.R., Biswas, J.C., Jahiruddin, M., Jahan, M.S., 2018. Nitrous oxide and nitric oxide emissions and nitrogen use efficiency as affected by nitrogen placement in lowland rice fields. [Nutrient Cycling in Agroecosystems](#), 110, 277-291.
- Ferdous, N., Biswas, S.K., Habiba, K.K., Haque, M.A., Hosen, M.B., **Islam, S.M.M.**, Howlader, M.Z., 2018. Milling and cooking properties of 129 varieties of local rice germplasm cultivars of Bangladesh. [European Journal of Food Science and Technology](#), 6, 1-10.
- Gaihre, Y.K., Singh, U., **Islam, S.M.M.**, Huda, A., Islam, M.R., Satter, M.A., Sanabria, J., Islam, Md.R., Shah, A.L., 2015. Impacts of urea deep placement on nitrous oxide and nitric oxide emissions from rice fields in Bangladesh. [Geoderma](#), 259-260, 370-379.
- Shah, A.L., Naher, U.A., **Islam, S.M.M.**, Hasan, Z., Panhwar, Q.A., Shamshuddin, J., 2013. Occurrence of arsenic in soils, ground water and rice plants in selected districts of Bangladesh. [Jokull Journal](#), 63, 122-131.
- Masum, M.M.I., **Islam, S.M.M.**, Islam, M.S., Kabir, M.H., 2011. Estimation of loss due to post harvest diseases of potato in markets of different districts in Bangladesh. [African Journal of Biotechnology](#), 10, 11892-11902.
- Masum, M.M.I., **Islam, S.M.M.**, Fakir, M.G.A., 2009. Effect of seed treatment practices in controlling of seed-borne fungi in sorghum. [Scientific Research and Essay](#), 4, 22-27.

National

- Islam, S. M. M.**, Khatun, A., Rahman, F., Hossain, A.T.M.S., Naher, U.A., Saleque, M.A., 2015. Rice response to nitrogen in tidal flooded non-saline soil. [Bangladesh Rice Journal](#), 19, 65-70.
- Shah, A.L., Naher, U.A., Hasan, Z., **Islam, S.M.M.**, Rahman, M.S., Panhwar, Q.A., Shamshuddin, J., 2016. Arsenic management in contaminated irrigation water for rice cultivation. [Pertanika Journal of Tropical Agricultural Science](#), 39, 155-166.

- Siddique, M.A., Islam, N., Islam, M.Z., **Islam, S. M. M.**, Hussain, J., 2014. Effect of N level on growth and yield of T. Aman rice cv. Surjomoni. *International Journal of Sustainable Crop Production*, 9, 33-37.
- Mamun, M.A.A., **Islam, S.M.M.**, Rahman, M.M., 2012. Effect of mixed fertilizer on weed growth and performance of transplant Aman rice. *Bangladesh Agronomy Journal*, 15, 25-32.
- Saha, P.K., **Islam, S.M.M.**, Akter, M., Zaman, S.K., 2012. Nitrogen response behavior of developed promising lines of T. Aman Rice. *Bangladesh Journal of Agricultural Research*, 37, 207-213.
- Emran, Al, Karim, S.M.R., **Islam, S.M.M.**, Mamun, M.A.A., Khan, M.Q., 2011. Herbicidal weed control in Boro rice. *SAARC Journal of Agriculture*, 9, 45-54.
- Rahman, M.M., Islam, M.A., Shahidullah, S.M., **Islam, S.M.M.**, Begum, H., 2010. Physiognomic variation in BRRI developed T. Aman Rice (*Oryza sativa* L.) varieties. *The Agriculturist*, 8, 32-37.
- Islam, M.Z., **Islam, S.M.M.**, Islam, M.S., Azim, M.R., Hossain, M.S., 2010. Effect of different levels of soil moisture on growth and yield attributes of some high yielding potato varieties. *Eco-friendly Agriculture Journal*, 3, 324-326.
- Hussain, M.M., Shahe Alam, M., Kabir, M. H., Khan, A.K., **Islam, S.M.M.**, 2009. Water saving technique in rice cultivation with particular reference to alternate wetting and drying method: an overview. *The Agriculturists*, 7, 128-136.
- Sarker, A.B.S., Rahman, M.B., Yasmeen, R., Islam, M.A., **Islam, S.M.M.**, 2007. Effect of crop establishment methods on the performance of Boro rice (*Oryza sativa* L.) in the cooler region under light texture soil condition. *The Agriculturists*, 5, 95-100.

7.2 Short Communication

- Naher, U.A., Rahman, F., **Islam, S.M.M.**, Sarkar M.I.U., Biswas, J.C., 2015. Isolation of arsenic oxidizing-reducing bacteria and reclamation of As (III) in *in vitro* condition. *Bangladesh Rice Journal*, 19, 94-96.

7.3 Book Chapter

- Naher, U.A., Shah, A.L., Sarkar, M.I.U., **Islam, S.M.M.**, Ahmed, M.N., Panhwa, Q.A. Othman, R., 2015. 'Fertilizer Consumption Scenario and Rice Production in Bangladesh', in Hamdan, J., Jusop, S., (eds.), *Advances in Tropical Soil Science*. Volume 3, University Putra Malaysia Press, Serdang, pp. 81-98.

7.4 Abstracts

- Islam, S.M.M.**, Shah, A.L., Biswas, J.C., Satter, M.A., Gaihre, Y.K., Adhikary, S.K., Saleque, M.A., 2015. 'Effects of nitrogen sources and water management practices on rice yield and nitrogen use efficiency in Boro rice', in Saleque, M.A., Kashem, M. A., Ali, M.A.,

Kabir, M.S., (Eds.), Bangladesh Rice Research Abstract 2014. Bangladesh Rice Research Institute, Gazipur 1701, Bangladesh.

7.5 Proceedings of Workshop/Seminar/Symposium

International

- Islam, S.M.M.,** Gaihre, Y.K., Biswas, J.C., Singh, U., Ahmed, M.A., Sanabria, J., Saleque, M.A., Sander, B.O., 2018. Impacts of urea deep placement with intermittent irrigation on nitrous oxide and nitric oxide emissions and nitrogen use efficiency from lowland rice cultivation. Presented on 16 October 2018 in International Rice Congress, Singapore.
- Islam, S.M.M.,** Gaihre, Y.K., Islam, M.R., Ahmed, M.A., Akter, M., Singh, U., Biswas, J.C., Saleque, M.A., Sander, B.O., 2019. Impacts of fertilizer and water management on greenhouse gas emissions and nitrogen use efficiency from lowland rice cultivation. Presented on 8 January 2019 in International Conference on Climate Knowledge, Dhaka, Bangladesh.
- Islam, S.M.M.,** Gaihre, Y.K., Islam, M.R., Salahuddin, A., Sander, B.O., 2020. Mitigation of greenhouse gas emissions through water management-technical and dissemination issues. Presented on 22 January 2020 in International Conference on Climate Knowledge, Dhaka, Bangladesh.

National

- Islam, S.M.M.,** Biswas, J.C., Gaihre, Y.K., Satter, M.A., Singh, U., Adhijary, S.K., Saleque, M.A., 2016. 'Greenhouse Gas emission from rice field at BRRI farm, Gazipur', in Satter, M.A., Hossain, M.B., Bokhtiar, S.M., Ahmmed, S., (eds.), 2016, Proceedings of the research review and planning workshop on soils program of NARS institutes, 2015, Bangladesh Agricultural Research Council, Farmgate, Dhaka, Bangladesh, 8-10 August 2015, pp. 161-167.
- Islam, S.M.M.,** Shah, A.L. 2011. 'Long-term missing element experiment', in Satter, M.A., Hasan, A.A., Bokhtiar, S.M., Hossain, M.B., (eds.), 2012, Proceedings of the research review and planning workshop on soils program of NARS institutes, 2011, Bangladesh Agricultural Research Council, Farmgate, Dhaka, Bangladesh, 12-14 September 2011, pp. 154-155.
- Islam, S.M.M.,** Shah, A.L. Saha, P.K Zaman, S.K. Ali, G., Moinuddin, F.M., 2011. 'Long-term missing element trial at BRRI regional stations', in Satter, M.A., Hasan, A.A., Bokhtiar, S.M., Hossain, M.B., (eds.), 2012, Proceedings of the research review and planning workshop on soils program of NARS institutes, 2011, Bangladesh Agricultural Research Council, Farmgate, Dhaka, Bangladesh, 12-14 September 2011, pp. 156-157.
- Islam, S.M.M.,** Akter, M., Saha, P.K., Shah, A.L., 2011. 'Effect of double and triple rice cropping on yield maximization under perpetual wetland condition', in Satter, M.A., Hasan, A.A., Bokhtiar, S.M., Hossain, M.B., (eds.), 2012, Proceedings of the research review and planning workshop on soils program of NARS institutes, 2011, Bangladesh

Agricultural Research Council, Farmgate, Dhaka, Bangladesh, 12-14 September 2011, pp. 160-161.

Saha, P.K., **Islam, S.M.M.**, Satter, M.A., Gaihre, Y.K., Singh, U., 2014. 'Quantification of nitrogen losses and rice yield with different nitrogen and water management practices in a triple rice cropping system at BRRI', *Greenhouse Gas (GHG) Emissions from Rice Field: Finding Mitigation Options from Fertilizer Deep Placement and Alternate Wetting and Drying*, Proceedings of the national workshop, Bangladesh Agricultural Research Council, Farmgate, Dhaka, Bangladesh, 26-27 August, pp. 19-20.

Rahman, M.S., Akter, M., **Islam, S.M.M.**, Saha, P.K., Shah, A.L., 2011. 'Effect of continuous wetland intensive rice cropping on soil fertility and productivity', in Satter, M.A., Hasan, A.A, Bokhtiar, S.M., Hossain, M. B., (eds.), 2012, Proceedings of the research review and planning workshop on soils program of NARS institutes, 2011, Bangladesh Agricultural Research Council, Farmgate, Dhaka, Bangladesh, 12-14 September 2011, pp. 158-159.

7.6 Technology

Islam, S.M.M., Ahmed, M.N., Akter, M., Islam, M.R., 2019. Alternate wetting and drying irrigation (AWD) reduces greenhouse gas emissions compared to conventional practices. Presented on 01 December 2019 in Annual Research Review Workshop, BRRI, Gazipur, Bangladesh.

Islam, S.M.M., Biswas, J.C., Gaihre, Y.K., Satter, M.A., Singh, U., Adhikary, S.K., Saleque, M.A., 2015. 'Mitigation strategy of nitrous oxide (N₂O) and nitric oxide (NO) emission from rice field', in Biswas, J.C., Islam, A., **Islam, S.M.M.**, (Eds), 2016. Dhan Chase Mati O Shar Babostapona. Soil Science Division, Bangladesh Rice Research Institute (BRRI) publication no. 208, BRRI, Gazipur.

Zaman, S.K., Shah, A.L., Rahman, M.S., Islam, A., **Islam, S.M.M.**, 2014. 'Arsenic uptake reduction through aerobic rice cultivation', in Biswas, J.C., Islam, A., **Islam, S.M.M.**, (Eds), 2016. Dhan Chase Mati O Shar Babostapona. Soil Science Division, Bangladesh Rice Research Institute (BRRI) publication no. 208, BRRI, Gazipur.

7.7 Leaflets

Islam, S.M.M., Ahmed, M.N., Akter, M., Islam, M.R., 2020. Alternate wetting and drying irrigation (AWD) reduces greenhouse gas emissions over conventional practices. Soil Science Division, Bangladesh Rice Research Institute (BRRI) publication no. 292, BRRI, Gazipur.

Shah, A.L., Rahman, M.S., **Islam, S. M. M.**, Hasan, M. Z., Hassan, A. A., 2013. Arsenic in soil-water-rice plant of some selected upazilla. Soil Science Division, Bangladesh Rice Research Institute (BRRI) publication no. 193, BRRI, Gazipur.

7.8 Booklets

Biswas, J.C., Islam, A., **Islam, S.M.M.**, 2016. Dhan Chase Mati O Shar Babostapona. Soil Science Division, Bangladesh Rice Research Institute (BRRI) publication no. 208, BRRI, Gazipur.

8. SCIENTIFIC ARTICLES REVIEWER

International

As a potential reviewer, I reviewed many scientific articles of reputed international journals that are as follows:

SN	Title of Journals	No. of articles reviewed	Publisher
1	Achieves of Agronomy and soil science	2	Taylor & Francis
2	Soil Biology and Biochemistry	1	Elsevier
3	Soil & Tillage Research	1	Elsevier
4	Journal of Plant Nutrition	1	Taylor & Francis
5	Agricultural Water Management	2	Elsevier
6	International Journal of Plant Production	1	Springer
7	Rice Science	1	Elsevier
8	Science of the Total Environment	1	Elsevier
9	Scientific African	1	Elsevier

9. REFEREES

Bjoern Ole Sander Climate Change Specialist International Rice Research Institute (IRRI), 4031, Los Banos, Laguna Philippines Email: b.sander@irri.org	Dr. Upendra Singh Director International Fertilizer Development Center Muscle Shoals, AL, USA Email: usingh@ifdc.org
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