

Personal Profile

Md. Golam Jilani Helal

Department of Agroforestry and Environmental Science,
Sher-e-Bangla Agricultural University, Dhaka-1207, Bangladesh.

Date of Birth: 1st June 1991

Nationality: Bangladeshi

Sex: Male

Religion: Islam

WhatsApp: +8801714856510

E-mail: helalafes@sau.edu.bd



Academic qualifications:

Graduation

Master of Science in Agroforestry and Environmental Science,
Sher-e-Bangla Agricultural University, Dhaka, Bangladesh.

Thesis title: “Role of roadside plantation on climate change mitigation through carbon sequestration of Dhaka Northern City”

Year: 2013- 2015

Undergraduate

Bachelor of Science in Agriculture, Sher-e-Bangla Agricultural University,
Dhaka, Bangladesh. (Exam. held in 2013).

Year: 2009- 2012

Professional experiences:

Associate Professor: Department of Agroforestry and Environmental Science, Sher-e-Bangla Agricultural University, Dhaka-1207, Bangladesh. Duration: October 15, 2023- Present.

Assistant Professor: Department of Agroforestry and Environmental Science, Sher-e-Bangla Agricultural University, Dhaka-1207, Bangladesh. Duration: February 1, 2017- 14, October, 2023.

Lecturer: Department of Agroforestry and Environmental Science, Sher-e-Bangla Agricultural University, Dhaka-1207, Bangladesh. Duration: October 14, 2014- January 30, 2017.

Assistant Provost: Kazi Nazrul Islam Hall, Sher-e-Bangla Agricultural University. (2022-24)

Research Experience:

Research interest: Modern agro-technology, plant nutrient management, soil organic matter, tree crop interaction, crop-weed interaction, herbicide resistance, plant diversity, ecology and ecosystem management.

Student Supervision (Master’s):

As Supervisor: Total students - 12 (10 completed, 2 student continuing his research)

As Co-supervisor: Total students – 12 (10 completed, 2 students continuing their research)

Some Research projects (As Associate investigator):

Sl. No	Name of the Project	Duration	Funding
1.	Soil Nutrient Dynamics, Soil Quality Index, and Stoichiometry Under Different Agricultural Land Use Systems: Long-term Mono-Cropping Fate Versus Multiple Cropping Reality.	2025	Ministry of Science and Technology, Bangladesh
2.	Enhancing Rice Yield and Enrichment of Soil Nutrients through Optimizing Planting Density of Legume <i>Leuceana leucocephala</i> Tree: A Lower Inorganic Cultivation Strategy.	2024-25	Ministry of Science and Technology, Bangladesh
3.	Effects of different land-use types and biodiversity on above-belowground carbon and soil nutrients dynamics: A direct field approach investigation.	2023-24	Ministry of Science and Technology, Bangladesh
4.	Performance of brinjal in association with moringa-based agroforestry system.	2020-21	Ministry of Science and Technology, Bangladesh
5.	Effect of different phytohormones on root and shoot development of moringa cuttings.	2019-20	Ministry of Science and Technology, Bangladesh
6.	Bio-efficacy of microbial-infused municipal solid waste compost on growth promotion, yield and induction of disease resistance in chili.	2019-20	Ministry of Science and Technology, Bangladesh

Publications:

1. N. Parvin, K. M. A. Sayeed, M.S. Jaman, S. Akter, M. Hossain, M. Jamil, M. F. Rabbee, F. Islam, S. Das, **M.G.J. Helal**, M. S. Islam, X. Zhang, P. Pongsivapai, M.U. Husen, M. Tamanna. (2025). Mixed plant stands and diversity promote soil organic carbon content more than single plant stands in the urban forest of Dhaka city, Bangladesh. *Ecological Frontier*. 45(2): 316-327.
2. Rahman, M.M., Rahman, M.S., **Helal, M.G.J.**, Roni, M.Z.K. and Uddain, J. (2025). Potential impacts of gibberellic acid to promote salinity tolerance in tomato. *Journal of Applied Horticulture*. 7(1): 51-56.
3. Mahbub, S.U.B., Naher, N., Helal, M.G.J., Marma, L., Amin, M.R., Talucder, M.S.A. and Khan, A.U. (2025). Effects of urbanization on homestead size and tree species diversity among farmers in Comilla district. *Bangladesh J. Agric.* 50:1(117-131). <https://doi.org/10.3329/bjagri.v50i1.82940>.
4. Roy, M., Helal, M., **Helal, G. J.**, & Kausar, H. (2024). Productivity and Profitability of Moringa-Brinjal-Based Agroforestry Farming System. *Journal of Science and Technology Research*, 5(1): 9–20. <https://doi.org/10.3329/jscitr.v5i1.74000>.

5. **Helal, M.G.J.**, Islam, M.A., Nur, I.J., Habib, Z.F.B., Islam, M.S. and Hossain, M.K. (2023). Moringa leaf extract enhances growth promotion and yield in the sustainable cultivation of chili (*Capsicum annum L.*). *Int. J. Bus. Soc. Sci. Res.* 11(1): 77–82. <http://www.ijbssr.com/10.55706/ijbssr11115>.
6. Fahim, M.M.B., **Helal, M.G.J.**, Sultana. T., Habib, Z.F.B., Husen, M.U. and Halim. A. (2023). Growth and yield performance of tomato (*Lycopersicum esculentum L.*) at different building heights of rooftop gardening. *Int. J. Environ. Clim. Chang.* **13**(8):1593-1605.
7. Iffat, J. N., Motaleb, H. S., Tania, H., Tasnia, F., Sazedatur, R., Benazir, I., **Helal, M. G. J.** and Forhad, H. (2022). Evaluation of ecosystem services of rooftop gardens in Dhaka, Bangladesh. *Curt. Res. Env. Sust.* 4: 100166.
8. Islam, M.S., Rahman, M., Hossain, M.F., Sultana, T. and **Helal, M.G.J.** (2022). Implication of Vetiver grass: a case study in hill tract region, Bangladesh. *IJBSSR.* 10(1): 24-29. ISSN: 2309-7892.
9. Shahnaz, S., Huq. AKM.M., **Helal, M.G.J.**, Halim, A., Moniruzzaman, M. and Hossain, K. (2021). Organic amendment enhances seed germination and initial seedling development of *Moringa oleifera* lam. *J. Expt. Biosci.* **12**(2):17-24
10. Sumona, S. R., Ahmed, A., **Helal, M.G.J.**, and Kausar, H (2020). Performance of red amaranth during the early establishment period of *Moringa oleifera* L. plantation. *Eco-friendly Agril. J.* **13**(11): 47-55.
11. Ahmed, A., **Helal, M. G. J.**, Naher, N., Hasan, M. and Kausar, H. (2020). Performance of stem amaranth during the early establishment period of Moringa plantation. *J. Sher-e-Bangla Agric. Univ.* 11(2): 1-8
12. **Helal, M. G. J.**, Jaman, M. S., Islam, M. M., Islam, M.T. and Islam, F. (2015). Environmental inceptions of water management Organizations of Mymensingh district. *Bangladesh. J. Environ. Sci.* **29**: 157-162.
13. Jaman, M. S., Hossain, M. F., Islam, M.S., **Helal, M. G. J.**, Jamil, M and Rahman, M.M. (2016). Quantification of Carbon Stock and Tree Diversity of Home gardens in Rangpur District, Bangladesh. *Int. J. Agric. For.* **6**(5): 169-180.

Award and Scholarship

- “Dean’s Award”, for B.Sc. Ag. (Hons) Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka, 1207.
- “National Science and Technology (NST) Fellowship (2013-14)” for MS research work, Ministry of Science and Technology, Bangladesh.

Events Participation:

- International Conference: 1, National conference: 22,
- Workshops and training: 18, Scientific Webinar: 30

Statistical expertise and involvement in unique events:

- Training on “Advance Research Methodology- **SPSS, STATA and R**”. Sher-e-Bangla Agricultural University, Dhaka, 20th January - 1st February 2022
- International Training on “Need, Scope, Process and Importance of Germplasm Exchange”. CIFOR- ICRAF, Kenya and BSMRAU, Bangladesh. December 5-6, 2021.
- Workshop on “Young Scientists Congress” at Bangladesh Academy of Science, National Museum of Science & Technology Bhavan, Agargaon, Dhaka-1207 from October 27- 28, 2016.
- Training program on “Forestry and Agroforestry Technologies for Professionals” at BARC Conference Room, Farmgate, Dhaka, April 21-23, 2015.

Language Skill: Bangli (Mother tongue), Hindi (speaking only), English (IELTS – 6.5)

Other experiences:

- **Question Moderator and examiner** of written examination for the Department of Climate and Disaster Management, Jashore University of Science and Technology, Bangladesh.
- **Moderate question paper** for the written examination of technical subjects in Non-Government Teachers’ Registration and Certification Authority (NTRCA), Government of the People’s Republic of Bangladesh.
- **Examiner** of the written test of technical subjects in Non-Government Teachers’ Registration and Certification Authority (NTRCA), Government of the People’s Republic of Bangladesh.

Memberships:

- Bangladesh Academy of Science (BAS)
- Krishibid Institution of Bangladesh (KIB).
- Bangladesh Society of Environmental Science.
- Sher-e Bangla Agricultural University Alumni Association (SAUAA), Bangladesh.



Md. Golam Jilani Helal