

Mohammad Rezoan Bin Hafiz Pranto

Bangladesh Rice Research Institute, Gazipur, Bangladesh, 1701

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Educational Qualification

Master's in Environmental Engineering (88% marks)
Suzhou University of Science and Technology, China

September 2022-July 2024

Master of Science in Sustainable Agriculture and Food Security (3.16/4.00)
Bangladesh Agricultural University, Mymensingh

January 2017-January 2019

Bachelor of Science in Agricultural Engineering (2.86/4.00)
Bangladesh Agricultural University, Mymensingh

January 2012-December 2016

Professional Experience

Scientific Officer, Irrigation and Water Management Division

October 2019-Present

Bangladesh Rice Research Institute (BRRRI)

- Involved in Developing Technologies that Permit More Efficient Water Use
- Assessed Cropping Pattern that Increases Crop Production in the Irrigated Environment
- Applied Engineering Principles in Crop Production

Research Interests

GIS and Remote Sensing in Agriculture, Soil and Water System, Agricultural Irrigation and Drainage, Water Modeling and Simulation, Environmental Engineering, Drought Mitigation, Water Quality and Treatment

Publications

- Paul, P.L.C., Jahan, A., Roy, D., Bell, R.W., Hossain, M.B., **Pranto, M.R.B.H.** "Rice growth and yield responses to saline water irrigation are related to Na^+/K^+ ratio in plants." In *PLoS ONE*, 2024 [DOI](#)
- Hossain, M.B., Roy, D., **Pranto, M.R.B.H.** "Strategies of water resource utilization and agricultural water management in the coastal saline zone of Bangladesh." In *Irrigation and Drainage*, 2024 [DOI](#)
- Roy, D., Mahmud, M.N.H., Paul, P.L.C., Hossain, M.B., Yesmin, M.S., **Pranto, M.R.B.H.**, Islam, M.T. "Paddy Field Water Movement Through Soil Profiles Under Different Water Management Practices: A HYDRUS 1D Model Study." In *Bangladesh Rice Journal*, 2021 [DOI](#)
- Pranto, M.R.B.H.**, Hossain, M.B., Roy, D., Paul, P.L.C. "Suitability of Municipal Wastewater for Crop Irrigation in Mymensingh Municipality Area of Bangladesh." In *The Agriculturists*, 2021 [Link](#)
- Islam, A.K.M.S., Alam, M.A., Kamruzzaman, M., **Pranto, M.R.B.H.** "Business Viability of Small Combine Harvester in Haor Areas." In *European Journal of Agriculture and Food Sciences*, 2021 [DOI](#)
- Kundu, P.K., Parvez, M.F., Acharjee, D.T.K., Debnath, A., **Pranto, M.R.B.H.** "Rainfall Induced Saline Soil Management through Leaching." In *North American Academic Research*, 2020 [DOI](#)

Conference Paper

- Roy, D., Hossain, M.B., **Pranto, M.R.B.H.**, Islam, M.T. "Drought Management by Integrated Approaches in T. Aman Rice Season to Escalate Rice Productivity in Drought Prone Regions of Bangladesh." In *Springer*, 2022 [DOI](#)

Ongoing Research Program

- Assessment of Water Resources Availability Suitable for Irrigation to Increase Crop Production in Tidal Areas
- Yield and Water Productivity of Boro Rice Affected by Transplanting Time and Water Management
- Determining Minimum Irrigation Water Requirement of Rice in Different Regions of Bangladesh through Water Balance from On-Farm Demand and Model Simulation
- Optimizing Tidal Water Resources for Climate-Resilient Irrigation in the Barishal Region

Workshops

- Intervention in Surface Water Utilization through Integrated Minor Irrigation Schemes for Escalating Water and Land Productivity in the Coastal Region

- Upscaling of Improved Water Management Practices for Sustainable Productivity in the Haor Areas
- Commonwealth Scientific and Industrial Research Organization (CSIRO) and University of Southern Queensland (USQ) Funded Inception Workshop on “Groundwater Sustainability and Rice Production in North-West Bangladesh”

Training

- GIS And Remote Sensing Application to Assess Suitable Surface Water Resources for Crop Production
- Research Methodology and Scientific Report Writing
- Advanced Research Data Management using R Studio
- Project Monitoring and Reporting
- Sustainable Development Planning and Management
- GIS and Remote Sensing Application to Assess Crop Area Coverage and Surface Water Resources
- Disaster Risk Management

Professional Development (MOOC Platform)

- “Soil and Water Conservation Engineering - Introduction to Soil Erosion”
- “Water Resources Management and Policy” from the University of Geneva
- “The Sustainable Development Goals – A global, transdisciplinary vision for the future”
- “Global Environmental Management” from the Technical University of Denmark

Courses Learned

Ground Water Engineering, Pumps and Wells, Soil and Water Conservation Engineering, Irrigation and Drainage Engineering, Fluid Mechanics, Hydraulics, Soil Science, Probability and Statistics, Environmental Impact Assessment, Water Supply and Wastewater Treatment Technology, GIS and Remote Sensing, etc.

Statistical Analysis & Programming

- Python
- R
- ArcGIS Pro
- CropStat

Membership

- Institution of Engineers, Bangladesh (M-44735)
- Krishibid Institution of Bangladesh (05-16-29621)

Awards

- Ministry of Commerce (MOFCOM) scholarship funded by the Government of People's Republic of China

Academic service

- Worked as A Reviewer in the Asian Soil Research Journal

References

Dr. Li Dapeng

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Dr. Debjit Roy

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