

Mirza Md Tasnim Mukarram (He/Him)

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EDUCATION

United International University (UIU) PGD in Data Science	Dhaka, Bangladesh July 2024
Dhaka School of Economics, University of Dhaka Masters in Environmental Economics	Dhaka, Bangladesh July 2023
Military Institute of Science & Technology Bachelor of Science in Civil & Environmental Engineering.	Dhaka, Bangladesh January 2019

WORK EXPERIENCE

University of IOWA, Department of Geographical & Sustainability Sciences Graduate Teaching Assistant (GTA)	Iowa, USA August 2024-Till Date
Bangladesh Army- HQ 24 Engineer Construction Brigade Further Development of Comilla University Project Associate Environmental Engineer <ul style="list-style-type: none">Mapping land cover, natural assets, fragile urban system, climate risk, and vulnerable hotspots.City profile, vulnerability assessment, and Greenhouse Gas emission report preparation.Developed project reports and Terms of Reference (ToR).Identify potential climate change and environmental protection-related projects.Project monitoring and managementPreparing high-quality military maps for various projects and research worksRemote sensing database creation, monitoring, and ensuring the quality of datasets.Identify potential climate change and environmental protection-related projects.	Dhaka, Bangladesh February 2021 – July 2024
Climate Change Laboratory, Green Laboratory Testing Services-BEPZA GIS & Water Quality Specialist <ul style="list-style-type: none">Monitoring and conducting water and soil quality parameter testsConducting field visits and surveyWriting project reportsPreparing confidential water quality mapsData acquisition from satellite and ground-based platforms.Land suitability analysis.Project completion report preparation.	Dhaka, Bangladesh January 2020 – January 2021
Department of Civil Engineering, Military Institute of Science & Technology Graduate Research Assistant (GRA) <ul style="list-style-type: none">Land suitability analysis.Project completion report preparation.GIS mapping and statistical data analysisLand use map preparation using Rapid Eye and Landsat images.Data acquisition from satellite and ground-based platforms.Performing laboratory experimentsConducting field visits outside Dhaka (FGD, KII, PI, etc.)EIA consultancyPreparing PowerPoints for seminars and conferences	Dhaka, Bangladesh January 2019-December 2019

AWARDS & ACHIEVEMENTS

<ul style="list-style-type: none">Best Research Project Award- 2018 among all engineering departments at MIST.	Dhaka, Bangladesh
<ul style="list-style-type: none">Full Fund Scholarship from Korean Water Forum to attend the 5th Asia Pacific Youth Parliament for Water (APYPFW) 2016 at DGIST, Daegu, South Korea	Daegu, South Korea
<ul style="list-style-type: none">Full Fund Scholarship to attend the 9th Session of World Urban Forum as a Delegate in 2017	Kualalumpur, Malaysia Dhaka, Bangladesh
<ul style="list-style-type: none">Cherag Roy Memorial Scholarship under Wild Life Conservation to attend Bangladesh Python Project 2016	Dhaka, Bangladesh

- Awarded as The Planter of the Week at **Green in a Bottle Recycling Campaign**, North South University, Bangladesh Dhaka, Bangladesh
- **3rd Place** in Bangladesh at the **International Public Speaking Competition 2016** by the English-Speaking Union (ESU) of Bangladesh Dhaka, Bangladesh
- **2nd place** at Project Showcasing in **Environment Fest 2018**, Bangladesh University of Professionals Dhaka, Bangladesh
- **2nd place** at Project Showcasing in **Nuclear Fest 2018**, MIST

SKILLS

Computer Skills: ArcGIS, Google Earth Engine, Python, Machine Learning, SPSS, STATA, Microsoft Office Products, Photoshop, Video Editing.

Languages: English (Full professional proficiency, IELTS Score: 7.5), Bangla (Native), Urdu and Hindi (Speaking)

PEER REVIEWED PUBLICATIONS (4 out of 6)

- **Mukarram, M.Md.T.**, Kafy,A,A.Rukiya, Q.U., Chowdhury, Md.A., Das.(2023). Perception of coastal citizens on prospect of community-based rainwater harvesting system for sustainable water resource management. Resources, Conservation & Recycling (**IF-13.2, Cite Score:20.3, Elsevier**). <https://doi.org/10.1016/j.resconrec.2023.107196>.
- Das, A., Shuvo, R. M., **Mukarram, M. M. T.**, & Sharno, M. A. (Year). Energy Policy Landscape in the Developing Countries: A Stern Review and Meta-Analysis of Energy Policies of Bangladesh. Energy Strategy Reviews (**IF-8.2, Elsevier-Under Review**)
- Das.,A., Azeez.,S., **Mukarram, M.Md.T.** & Rakib.,A.,A. GIS Based Multi-Criteria Land Suitability Assessment for Future Urban Development in The Country Park Peripheries of Hong Kong. (**Heliyon- 1st Revision since June 2023**)
- Khan, M.A.K., Ferdous, J., **Mukarram, M.Md.T.**, Nawshin, N. and Rahman, M.T.U. Exploring safe water availability in southern coastal Bangladesh: An integration between insights of local people and water quality parameters. (Under submission)

CONFERENCE PROCEEDINGS

- **Mukarram, M. M. T.**, & Rahman, M. T. U. (2023). Innovative Smart Boat Device for Real-Time Surface Water Quality Monitoring: A Low-Cost and Environmentally Sustainable Solution. In Proceedings of the International Conference on Planning, Architecture and Civil Engineering. Rajshahi University of Engineering & Technology, Rajshahi, Bangladesh.
- **Mukarram, M. M. T.**, & Das, A. (2023). Probing the Potential of Green Markets Towards Sustainable Tourism Development of Bangladesh: An Economic and Environmental Perspective. In Proceedings of the International Conference on Planning, Architecture and Civil Engineering. Rajshahi University of Engineering & Technology, Rajshahi, Bangladesh.
- Das, A., & **Mukarram, M. M. T** (2023). Co-Management of Localized Common Pool Natural Resource: Proposal for a Sustainable Fisheries Management Regime in Bangladesh. In Proceedings of the International Conference on Planning, Architecture and Civil Engineering. Rajshahi University of Engineering & Technology, Rajshahi, Bangladesh.
- Khan, M.A.K., Ferdous, J., **Mukarram, M.M.T.**, Nawshin, N. and Rahman, M.T.U. (2020). “Spatio-temporal variation of groundwater quality in Mongla Upazila using Inverse Distance Weighted Model.” Proceedings of the International Conference on Earth and Environmental Sciences & Technology for Sustainable Development (ICEEST 2020), 25-27 January 2020, Dhaka, Bangladesh
- Nawshin, N., Ferdous, J., **Mukarram, M.M.T.** and Khan, M.A.K. (2020). “Salinity Intrusion in Coastal Area of Bangladesh: Change in Crop Production System.” Proceedings of the 4th International Conference on Sustainable Development 2020, 18-19 February 2020, Dhaka, Bangladesh.
- **Mukarram, M.M.T.**, Khan, M.A.K., Ferdous, J., Rahman, M.T.U. and Nawshin, N. (2020). “Exorbitant shrimp cultivation inhibiting agro based livelihoods in Mongla Upazila of Bangladesh.” Proceedings of the 4th International Conference on Sustainable Development 2020, 18-19 February 2020, Dhaka, Bangladesh.
- Ferdous, J., **Mukarram, M.M.T.**, Khan, M.A.K. and Nawshin, N. (2020). “Local warming triggered by wetland loss in Dhaka city.” Proceedings of the 4th International Conference on Sustainable Development 2020, 18-19 February 2020, Dhaka, Bangladesh.
- Khaled,A.M., **Mukarram, M.M.T.**, Ashraf.,A., Islam,A., Rafid,S.A., Rahman,M. (2020). “Sensor Based Automated Rooftop Rainwater Collection System For Residential Use And Rainwater Quality Assessment Of Dhaka City.” Proceedings of 5th International Conference on Advances in Civil Engineering (ICACE-2020), 21-23 December 2020, CUET, Chattogram, Bangladesh.

SHORT COURSES

- Google Earth Engine Study Hacks, Dhaka, Bangladesh
- Statistical Data Analysis NBICT Lab, Bangladesh
- STATA for Statistics and Data Analysis Bohubrihi, Dhaka, Bangladesh
- Urban Climate Change Short Course on “Building Climate Resilient Migrant Friendly Cities” 7th Annual ICCCAD (Duration: 5 days, Dhaka, Bangladesh) ICCCAD, Dhaka, Bangladesh
- Introductory E-course on Climate Change, (Duration: 1 month) UNCC: E-learn, Online Platform
- Causes of Climate Change (Duration: 1 month) University of Bergen, Online Platform
- Mapping & Spatial Analysis with ArcGIS Bohubrihi, Dhaka, Bangladesh
- Complete Course on ArcGIS

WORKSHOPS AND TRAININGS

- Zero Hungers, Zero Emissions University Workshop hosted by International Center for Climate Change and Development (ICCCAD) as a part of project organized by the Environmental Change Institute at University of Oxford, Oxfam BD (Duration: 5 days, Savar, Bangladesh) Savar, Bangladesh
- City Energy & Climate Action Plan Training on How to Set Targets & Develop a Plan Action Asia (Duration: 7 days, Kualalampur, Malaysia) Kualalampur, Malaysia
- Youth Organizations Role & Youth Advocacy to Achieving Sustainable Development Goals Green Dialogue Series: Sustainable Environment for Developing World hosted by (Duration:1 day, Dhaka, Bangladesh) Dhaka, Bangladesh

SESSION GUEST SPEAKER & FACILITATOR

- Workshop speaker & facilitator at “VNEC Earth Carnival 2018” hosted by Viquarrunnessa Earth Club, VNC, Dhaka, Bangladesh
- Workshop speaker facilitator at “**Workshop on Climate Change Resilience, Adaptation & Mitigation**” hosted by Department of Environmental Water Resources & Coastal Engineering Department, MIST, Dhaka, Bangladesh
- Workshop speaker facilitator at “**Workshop on Introduction to Climate Change Science**” hosted by Alpha Team Organization, Bangladesh University of Professionals, Dhaka, Bangladesh

LEADERSHIP & VOLUNTARY SKILLS

Name of the Project: **Climate Educate Project**

Designation:

- a. Regional Manager of South Asia (Nov 2018 – June 2019)
- b. Project Advocacy Head Bangladesh (Oct 2016 – Oct 2018)

Department: Climate Education and Advocacy

Responsibilities:

- Conducting climate change education related workshops, trainings and seminars in schools
- Preparing climate change education related documents
- Project Planning and Communication

Name of the Project: **Climathon | A global climate action program (2019)**

Organization: Gen Lab

Designation: Climate Mentor

Department: Program Management

Responsibilities:

- Training youths and participants
- Event management

Name of the Event: **World Water Congress & Exhibition**

Organization: International Water Association (IWA)

Designation: Paper abstract reviewer

Department: Reviewer Committee

Responsibilities:

- Abstract reviewing

PROFESSIONAL AFFILIATION

- Institute of Engineers Bangladesh (IEB), A-23821
- Asian Cities Climate Change Resilience Network (ACCCRN)
- Global Youth Climate Network