CURRICULUM VITAE OF DR. MD. MONIRUL ISLAM

Professor Dr. Md. Monirul Islam, Citizen of Bangladesh, Male, Born Nov 1979. Address: Salimullah Muslim Hall House Tutor Building, University of Dhaka, Dhaka-1000, Bangladesh Email: Monirul.Islam@du.ac.bd; monirulislam153@yahoo.com, Phone: +8801716363505



Fields of Expertise

- Fisheries and aquaculture
- Environment and climate change
- Environmental governance
- Sustainable livelihoods
- Interdisciplinary research

Qualifications

- Post-doctoral research fellow, Interdisciplinary Centre for Conservation Science,
 Department of Zoology, University of Oxford, UK. 2016 2017. Research title: Scenario planning for aquatic biodiversity conservation under climate change: a developing country perspective. Supervisor: Professor EJ Milner-Gulland
- PhD in Sustainability Research, Sustainability Research Institute, School of Earth and Environment, University of Leeds, UK. Commonwealth Scholar. 2009 – 2013. PhD thesis title: Vulnerability and adaptation of fishing communities to the impacts of climate variability and change: Insights from coastal Bangladesh. Supervisors: Professor Jouni Paavola, Professor Klaus Hubacek, Dr Susannah Sallu
- Internship on Environmental Sustainability, International Environmental Research Centre, Gwangju Institute of Science and Technology, South Korea. March June, 2008. Supervisors: Professor Kyoung-Woong Kim, Dr. Sunbaek Bang
- Masters of Science, Fisheries (First class first position), Department of Fisheries, University of Dhaka, Bangladesh. 2001 2002. Thesis title: Determination of land cover changes and suitable shrimp farming area using remote sensing and GIS in south-western Bangladesh. Supervisors: Professor Md Kawser Ahmed, Dr M A Shahid
- Bachelor of Science (Honours) in Fisheries (First class second position), Department of Fisheries, University of Dhaka, Bangladesh. 1997 – 2001 (4 years). Project Title: Shrimp processing and preservation in Delta Fish Limited, Satkhira, Bangladesh

Teaching Experiences

- Professor, Department of Fisheries, University of Dhaka, Bangladesh. July 2018 Present
- Lecturer Associate Professor, Department of Fisheries, University of Dhaka, Bangladesh.
 July 2006 July 2018

Courses managed and taught in recent years

Rural sociology; Ocean dynamics and climate change; Introduction to environmental science; Coastal and marine fisheries management; Coastal zone management; Coastal and marine pollution; Climate change and marine environment; Aquatic pollution and biodiversity conservation; Fisheries oceanography; Fisheries and environmental impact assessment; Introduction to Geography; Marine biodiversity and conservation; Fish ecology; Aquatic pollution and toxicology; Fisheries resources and management; Aquaculture (freshwater); Fish harvesting and handling

Research Projects (Selected)

- Principal Investigator, Ministry of Education, Government of Bangladesh. 2019 2022. Project: Impact of Conservation Actions on Fish Biodiversity and Revision of Conservation Strategy in the Context of Climate Change and Blue Economy. I lead this project: designing, sample/data collection and analysis, report writing and financial management.
- Principal Investigator, Ministry of Science and Technology, Government of Bangladesh. 2019 2020. Project: Assessing Climate Change Induced Loss and Damage in Coastal Fisheries of Bangladesh. I lead this project: designing, sample/data collection and analysis, report writing and financial management.
- Principal Investigator. University Grants Commission, Bangladesh. 2019 2020. Ichthyodiversity of Tiakhali River. I led this project: designing, sample/data collection and analysis, report writing and financial management.
- Principal Investigator, Ministry of Science and Technology, Government of Bangladesh. 2018 –2019. Project: Identifying incremental, transformative and ecosystem-based adaptations in coastal fisheries system of Bangladesh. I led this project: designing, sample/data collection and analysis, report writing and financial management.
- **Project Director, University Grants Commission, Bangladesh**. 2018 –2019. Project: Barriers to Ecosystem-based adaptation in the Sundarbans mangrove-based fisheries. I led this project: designing, sample/data collection and analysis, report writing and financial management.
- Principal Investigator, Ministry of Science and Technology, Government of Bangladesh.
 2017 –2018. Project: Concentration of perfluoroalkyl acids (PFAAs) in inland water and fishes of Bangladesh and risk assessment. I led this project: designing, sample/data collection and analysis, report writing and financial management.
- Principal Investigator, Ministry of Science and Technology, Government of Bangladesh. 2015 2016. Project: Contribution of Bangladeshi fisheries sector to greenhouse gas emission and suggestions for climate smart fisheries. I led this project: designing, sample/data collection and analysis, report writing and financial management.
- Principal Investigator, International Foundation for Science, Sweden. 2014 2016. Project:
 Adaptation strategies and sustainable livelihoods: Addressing the impacts of climate variability
 and change on inland fishery-dependent people in Bangladesh. I led this project: designing,
 sample/data collection and analysis, report writing and financial management.

- Principal Investigator, Ministry of Science and Technology, Government of Bangladesh, 2014 – 2015. Project: Climate change impacts, vulnerability and sustainable adaptation strategies: insights from aquaculture of Bangladesh. I led this project: designing, sample/data collection and analysis, report writing and financial management.
- Research Assistant, School of Earth and Environment, University of Leeds, UK. October 2013 – December 2013. Project: Impacts of slum water supply improvements on city-level water and energy consumption (in three African cities). I conducted literature review and developed the research
- Associate Investigator, Ministry of Science and Technology, Govt. of Bangladesh. 2008 2009. Project: Impact of heavy metals and persistent organic pollutants on some freshwater fishes with special reference to the toxic effects of mercury (Hg) and arsenic (As) on fish reproduction, protein changes and cellular DNA damages. I helped with sample collection, data analysis, and report writing.

Additional Position and Membership

- Associate, Nature Based Solutions, Department of Zoology, University of Oxford, UK.
- Visiting Research Fellow, Interdisciplinary Centre for Conservation Science, Department of Zoology, University of Oxford, UK
- Associate, Centre for Climate Change Economics and Policy, London School of Economics and Political Science and University of Leeds, UK.
- Advisor, Ornob Health Care and Environmental Foundation (an NGO, Bangladesh).
- Advisor, C4RE (an NGO), Bangladesh.
- Member, Leeds University Alumni Association Bangladesh
- Member, Oxford University Alumni Association Bangladesh
- Member, Commonwealth Scholarship Alumni Association, Bangladesh
- Member, Asian Fisheries Acoustics Society, Japan
- Member, National Oceanographic and Maritime Institute (NOAMI), Dhaka, Bangladesh
- Member, Bangladesh Fisheries Research Forum (BFRF), Dhaka, Bangladesh

Research Supervised

- 2020. From ecosystem to community to transformational adaptation to climate change in a large wetland of Bangladesh
- 2019. Assessing economic and non-economic loss and damage on coastal fishery of Bangladesh to cyclone Bulbul
- 2019. Isolation of bioactive materials from the sea weeds of the Bay of Bengal
- 2019. Assessment of Resilience of Fishing Community to Coastal Disaster in Rangabali, Bangladesh
- 2018. Ecosystem and transformational adaptation in two coastal fishing communities of Bangladesh
- 2018. Heavy metals and pesticides in imported fishes of Bangladesh
- 2018. Isolation of bioactive materials from the fungus of the Bay of Bengal
- 2018. Measuring Resilience of Two Coastal Fishing Communities of Bangladesh

- 2017. Climate Change, Vulnerability and adaptation of Saint Martin's Island's community, Bangladesh
- 2017. Trace metal and nutritional analyses of giant freshwater prawns of different ecosystems and sizes
- 2017. Heavy metals in hilsa fish of different sizes and ecosystems
- 2017. Trace metals concentration in the fishes of ship breaking area.
- 2017. Evaluation of community based adaptation to climate change among fishing communities of Bangladesh
- 2017. Current status and improvement of 'beel nursery' for sustainable haor fisheries management
- 2017. Current status and future potential of fibre glass boats in Bangladesh
- 2016. Evaluation of fishing ban on the biodiversity of coastal fishes of Bangladesh
- 2016. Identifying and overcoming barriers to climate change adaptation in the fishing communities of Jessore, Bangladesh
- 2016. Does fishing ban crate positive impact on fish biodiversity? Evaluation of two fish sanctuaries of coastal Bangladesh
- 2016. Evaluating successful fisheries adaptation to climate variability and change in the Meghna river fisheries
- 2015. Impacts of climate variability and change on fisheries of the Padma river and adaptation strategies
- 2015. Current status of ox-bow lake (*baor*) fisheries and barriers to their management: cases form south-western Bangladesh
- 2014. Vulnerability of fisheries to climate change in Bangladesh: a composite index approach
- 2014. Assessment of aquaculture suitability of Gazipur district using geo-spatial technology based multi-criteria modelling
- 2014. Climate change impacts and adaptations: insight from the Jamuna river fishing communities, Bangladesh
- Heavy metal contamination in commercial fish feed and cultured fish

Awards, Honours and Fellowships

- Prize for the Poster on "Transformative adaptations to climatic hazards from coastal fishing communities, Bangladesh", presented in the International Conference on Earth and Environmental Sciences & Technology for Sustainable Development, Organised by Faculty of Earth and Environmental Sciences, University of Dhaka; held at Hotel Intercontinental, Dhaka, Bangladesh from 25-30 Jan 2020.
- University Grants Commission Gold Medal Award 2016 was given to my co-authored paper Ahmed, K., Islam, M.M., Yousuf, A.H.M and Alam, S. 2016. <u>A long-term trend in precipitation of different spatial regions of Bangladesh and its teleconnections with El Niño/Southern Oscillation and Indian Ocean Dipole</u>. Journal of Theoretical and Applied Climatology, 1-14. The award was given to the first author.
- Commonwealth Fellowship 2016 for doing independent research
- Darwin fellowship award (UK) 2016 for conducting research on enhancing the resilience of Bangladesh's fisheries to climate change, to support government in implementing the CBD and Sustainable Development Goals.
- Received "Letter of Commendation" from the School of Earth and Environment, University of Leeds for excellent research publication: Islam, M. M., Sallu, S., Hubacek, K. and Paavola, J.

- 2014. <u>Vulnerability of fishery-based livelihoods to the impacts of climate variability and change:</u> Insights from coastal Bangladesh. Regional Environmental Change 14(1): 281-294.
- Commonwealth Scholarship (General)-2009 for studying PhD in the University of Leeds, UK
- Scholarship for a 4-month Spring Internship Programme (3 March- 20 June, 2008) at the International Environmental Research Centre, Gwangju Institute of Science and Technology, South Korea, under the UNU-IERC Joint Programme on Environmental Sustainability.
- Dhaka University undergraduate scholarship (1998 to 2001)
- Several scholarships, fellowships or bursaries to attend conferences, trainings and workshops.

Publications

Journals/Books

- Islam, M.M. (Contributing author) 2021. Cyclone Alia in Bangladesh: Impact, adaptation and way forward. In: Stringer et al. Chapter 8: Poverty, livelihoods and sustainable development (section on physical capital and adaptation), AR6 Climate Change 2021: Impacts, Adaptation and Vulnerability. Intergovernmental Panel on Climate Change (In press).
- Ahmed, M.A., Yeasmin, F., Islam, M.M., Barman, A., Hossain, Z. 2020. Climate Change Induced Livelihood Vulnerability and Adaptation of St. Martin's Island's Community, Bangladesh. In: Jakariya, K & Islam, M.N. (Eds). Climate Change in Bangladesh. Springer Nature Switzerland AG. (In Press)
- Islam, M.M., Rahman, M.A., Paul, B. & Khan, M.I. 2020. <u>Barriers to Climate Change Adaptation:</u> insights from the Sundarbans Mangrove-Based Fisheries of Bangladesh. Asian Fisheries Science (In Press).
- Islam, M.M., Islam, M.M., Ahmed, M.K., Khan, M.I., Imteazzaman, A.M. and Hossain, Z. 2020. Measuring Resilience of Coastal Fishing Communities of Bangladesh to Climatic Impacts. In: Jakariya, K & Islam, M.N. (Eds). Climate Change in Bangladesh. Springer Nature Switzerland AG. (In Press)
- Islam M. M., Islam, F., Akter, M.S., Kundu, G.K., Barman, A. & Khan, M.I. 2020. Transformative Adaptations to Climate Change: Cases from the Jamuna River Fishing Communities of Bangladesh. Journal of Fisheries and Environment (In Press)
- Islam, M.M. 2020. Vulnerability and adaptation of Bangladeshi coastal fishing communities to climate change: implications for policy and scaling-up. In: Jakariya, K & Islam, M.N. (Eds). Climate Change in Bangladesh. Springer Nature Switzerland AG. (In Press)
- Islam, M.M., Kundu, G.K. & Khan, M.I. 2020. <u>Aquaculture: A faster growing greenhouse gas</u> emission sector for Bangladesh. International Journal of Ecology & Development. (*In press*)
- Mostafiz, F., Islam, M.M., Saha, B., Hossain, M.K., Moniruzzaman, M & Al-Mamun, M.H. 2020.
 <u>Bioaccumulation of trace metals in freshwater prawn, Macrobrachium rosenbergii from farmed and wild sources and human health risk assessment in Bangladesh</u>. Environmental Science and Pollution Research. 27:16426–16438
- Kundu, G.K., Islam, M.M., Saha, S., Hasan, M.F. Mondal, G., Paul, B., and Mustafa, M.G. 2020.
 Patterns of fish community composition and biodiversity in riverine fish sanctuaries in Bangladesh: implications for hilsa shad conservation. Ecology of Freshwater Fish. 29(2): 364-376
- Islam, M.M. (Contributing author) 2019. Fisheries management in Bangladesh in the context of climate change. In: Huq, S., Chow, J., Fenton, A., Stott, C., Taub, J. and Wright, H. (Eds) Confronting Climate Change in Bangladesh. Springer, Cham.

- Islam, M.M. (Contributing author) 2019. In: Lucks, D., Burgass, M., Lynn, I., Piergallini, I., and Beauchamp, E. Monitoring Evaluation and Learning Handbook for SDG 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development, International Institute for Environment and Development, London
- Islam, M.M., Barman, A., Kundu, G.K.K., Kabir, M.K. and Paul, B. 2019. <u>Vulnerability of inland and coastal aquaculture to climate change: evidence from a developing country</u>. Aquaculture and Fisheries, 4(5):183-189.
- Mondal, G., Saha, S., Islam, M.M., Kundu, G.K., Paul, B., Hasan, M.F. and Mustafa, M.G. 2019.
 Reassessment of the threatened status of IUCN red listed Indian river shad *Gudusia chapra* (Hamilton, 1822) from Bangladesh. Dhaka University Journal of Biological Sciences 28(1): 71-82.
- Paul, B., Hasan, M.F., Islam, M.M., Kundu, G.K., Mondal, G., Saha, S. and Mustafa, M.G. 2019.
 Evaluation of the status of threatened catfish *Bagarius bagarius* (Hamilton, 1822) from the Padma and Meghna river stretches of Bangladesh. Dhaka University Journal of Biological Sciences 28(1): 111-119
- Islam, M.M., Akhi, S.A. and Faruque, M.H. 2019. <u>Limnology and Fisheries of the Kushiyara River, Bangladesh</u>. Journal of Scientific Research 11 (1): 65-82
- Nahiduzzaman, M., Islam, M.M. and Wahab, M.A. 2018. Impacts of Fishing Bans for Conservation on Hilsa Fishers' Livelihoods: Challenges and Opportunities. In: Nishat, B., Mandal, S. and Pangare, G. (eds). Conserving Ilish, Securing Livelihoods: Bangladesh-India Perspectives. Academic Foundation, New Delhi. Pp 65-82.
- Reid, H., Ali, M.L., Islam, M.M. and Hicks, C. 2018. <u>Mainstreaming adaptation benefits for Bangladesh's freshwater ecosystems</u>. IIED Briefing Paper. International Institute for Environment and Development (IIED), London
- Swiderska, K, King-Okumu, C and Islam, M. M. (2018) <u>Ecosystem-based adaptation: a handbook</u> for EbA in mountain, dryland and coastal ecosystems. International Institute for Environment and Development, London.
- Khan, M.I.; Kundu, G.K.; Akter, M.S.; Mallick, B.; Islam, M.M. 2018. <u>Climatic Impacts and Responses of Migratory and Non-Migratory Fishers of the Padma River, Bangladesh</u>. Social Sciences 7(12):254.
- Islam, M. M., Kar, C., Kundu, G., Mondal, G., & Khan, M. S. (2018). <u>Current status and barriers to fisheries comanagement: Evidences from an Oxbow lake of Bangladesh</u>. Bangladesh Journal of Zoology, 46(2), 105-116.
- Khan, M.I., Islam, M.M., Kundu, G.K. and Akter, M.S. 2018. <u>Understanding the Livelihood Characteristics of the Migratory and Non-Migratory Fishers of the Padma River, Bangladesh</u>. Journal of Scientific Research 10 (3), 261-273
- Mandal, R.N., Das, S., Sarker, M.M.S., Kundu, G.K., Faruque, M.H., Paul, B., Islam, M.M. 2017.
 Aquaculture Habitat Suitability Assessment in Gazipur District, Bangladesh Using Geo-Spatial Technology. International Journal of Environment and Development 32(4):58-75.
- Jannat, M., Ahmed, M.K., **Islam, M.M.,** Kundu, G.K. and Kamruzzaman, M. 2017. <u>Shrimp Post-Larvae Nursing in Earthen Ponds, Bangladesh</u>. Journal of Scientific Research 9(1): 97-107.
- Kundu, GK., Alauddin, M., Akter, M.S., Khan, M.S., Islam, M.M., Mondal, G., Islam, D., Mohanta, L.C. and Huque, A. 2017. Metal contamination of commercial fish feed and quality aspects of farmed tilapia (Oreochromis niloticus) in Bangladesh. Bioresearch Communications 3(1): 345-353.
- Islam, M.M., Mohammed, E.Y. and Ali, L. 2016. <u>Economic incentives for hilsa shad fish management: legal and institutional framework analysis</u>. Marine Policy, 68: 8–22.

- Ahmed, M. K., Shaheen, N., Islam, M. S., Habibullah-Al-Mamun, M., Islam, S., Islam, M. M., Kundu, G.K. & Bhattacharjee, L. 2016. <u>A comprehensive assessment of arsenic in commonly consumed foodstuffs to evaluate the potential health risk in Bangladesh</u>. Science of the Total Environment, 544, 125-133.
- Dewhurst-Richman N, Mohammed EY, Ali ML, Hassan K, Wahab MA, Ahmed ZF, Islam MM, Bladon A, Haldar GC, Ahmed CS, Majumder MK, Hossain MM, Rahman A and Hussein B. 2016.
 Balancing carrots and sticks: Incentives for sustainable hilsa fishery management in Bangladesh.
 International Institute for Environment and Development (IIED), London
- Ahmed, K., Islam, M.M., Yousuf, A.H.M and Alam, S. 2016. <u>A long-term trend in precipitation of different spatial regions of Bangladesh and its teleconnections with El Niño/Southern Oscillation and Indian Ocean Dipole</u>. Journal of Theoretical and Applied Climatology, 1-14.
- Ahmed, M.K., Baki, M.A., Kundu, G.K., Islam, M.S., Islam, M.M. and Hossain, M.M. 2016.
 Assessment of human health risks from heavy metals in fish collected from Buriganga River,
 Bangladesh. SpringerPlus (2016) 5:1697.
- Ahmed, M.K., Sultana, S., Halim, S. and Islam, M.M. 2016. <u>Marketing system of freshwater</u> prawn in three coastal districts of Bangladesh. Aquaculture Economics and Management, 20(3).
- Islam, M.M., Mohammed, E.Y. and Ali, L. 2016. Economic incentives for sustainable hilsa fish
 management in Bangladesh: institutional framework, gaps and capacity strengthening strategy
 and action plan. Bangladesh Centre for Advanced Studies, Dhaka, Bangladesh. DOI:
 10.13140/RG.2.2.29837.13283
- Islam, M.M. 2015. Nangra nangra, Sisor rabdophorus, Pseudolaguvia muricata, Paramugil parmata, Liza parsia, Liza subviridis, Mugil cephalus, Rhinomugil corsula, Sicamugil cascasia, Anguilla bengalensis, Pisodonophis boro, Pisodonophis cancrivorus, Platycephalus indicus In: IUCN Bangladesh. Red List of Bangladesh Volume 5: Freshwater Fishes. IUCN, International Union for Conservation of Nature, Bangladesh Country Office, Dhaka, Bangladesh. pp. [57, 93, 105, 151, 152, 200 204, 249, 270, 305].
- Ahmed, M.K., Al-Mamun, H.A., Islam, M.M., Akter, M.S. and Khan, M.S. 2015. <u>Toxicological assessment of arsenic induced hematological alterations and chromosomal aberrations in tilapia Oreochromis mossambicus</u>. Human and Ecological Risk Assessment: An International Journal, 21(1), 146-156.
- Ahmed, M.K., Parvin, E., Islam, M.M., Akter, M.S., Khan, S. & Al-Mamun, M.H. 2014. <u>Lead- and cadmium-induced histopathological changes in gill, kidney and liver tissue of freshwater climbing perch Anabas testudineus (Bloch, 1792)</u>. Chemistry and Ecology, 30(6), 532-540.
- Islam, M. M., Sallu, S., Hubacek, K. and Paavola, J. 2014. Migrating to tackle climate variability and change? Insights from coastal fishing communities of Bangladesh. Climatic Change, 124:733-746.
- Islam, M. M., Sallu, S., Hubacek, K. and Paavola, J. 2014. <u>Limits and barriers to adaptation to climate variability and change in Bangladeshi coastal fishing communities</u>. Marine Policy, 43:208–216.
- Islam, M. M., Sallu, S., Hubacek, K. and Paavola, J. 2014. <u>Vulnerability of fishery-based livelihoods to the impacts of climate variability and change: Insights from coastal Bangladesh</u>. Regional Environmental Change, 14(1): 281-294.
- Islam, M.M., Mohammed, E.Y. and Ali, L. 2014. <u>Economic incentives for hilsa shad fish</u> management: <u>legal and institutional framework analysis</u>. International Institute for Environment and Development (IIED), London, UK.
- Ahmed, M.K., Mamun, H. A., Hossain, M.M.A., Arif, M., Parvin, E., Akter, M.S., Khan, M.S.,
 Islam, M.M. 2011. <u>Assessing the genotoxic potentials of arsenic in tilapia (Oreochromis</u>

- mossambicus) using alkaline comet assay and micronucleus test. Chemosphere, 84 (1): 143–149.
- Ahmed, M.K., Das, M., Islam, M.M., Akter, M.S., Islam, S., and Al-Mansur, M.A. 2011. Physico-chemical properties of tannery and textile effluents and surface water of river Buriganga and Karnatoli, Bangladesh. World Applied Sciences Journal, 12 (2): 152-159.
- Ahmed, M.K., Parvin, E., Arif, Islam, M. M., Akter, M. S., Khan, M. S. 2011. Genetic damage induced by lead chloride in different tissues of fresh water climbing perch *Anabas testudineus* (Bloch). Environmental Monitoring and Assessment, 182 (1-4): 197-204.
- Parvin, E., Ahmed, M.K., Islam, M. M., Akter, M. S., Kabir, M. A. 2011. <u>Preliminary acute toxicity bioassays of lead and cadmium on fresh water climbing perch</u>, <u>Anabas testudineus</u> (Bloch).
 Terrestrial and Aquatic Environmental Toxicology 5 (1), 55-58.
- Das, M., Ahmed, M.K., Islam, M.S., Islam, M.M., and Akter, M.S. 2011. <u>Heavy metal in industrial effluents (tannery and textile) and adjacent rivers of Dhaka city, Bangladesh</u>. Terrestrial and Aquatic Environmental Toxicology 5(1): 8-13.
- Ahmed, M.K., Parvin, E., Arif, M., Akter, M. S., Khan, M. S. and Islam, M. M. 2010.
 <u>Measurements of genotoxic potential of cadmium in different tissues of fresh water climbing perch Anabas testudineus (Bloch), using the comet assay</u>. Environmental Toxicology and Pharmacology, 30 (1): 80–84.
- Islam, M. M., Bang, S., Kim, K-W., Ahmed, M. K. and Jannat, M. 2010. <u>Heavy metals in frozen and canned marine fish of Korea</u>. Journal of Scientific Research, 2 (3): 549-557.
- Ahmed, M. K., Islam, S., Rahman, S., Haque, M. R. and Islam, M. M., 2010. <u>Heavy metals in water, sediment and some fishes of Buriganga River, Bangladesh</u>. International Journal of Environmental Research, 4(2): 321-332.
- Hasan, A., Ahmed, K., Akhand, A.A., Ahsan, N and Islam, M. 2010. <u>Toxicological effects and molecular changes due to mercury toxicity in freshwater snakehead (*Channa punctatus* Bloch, 1973). International Journal of Environmental Research 4(1): 91-98.
 </u>
- Das, M., Ahmed, M.K., Begum, F., Parveen, S., **Islam, M.M.** and Begum, M. 2010. Microbial load in tannery and textile effluents and their receiving rivers of Dhaka. Dhaka University Journal of Biological Sciences 19(1): 73-81.
- Ahmed, M.K., Ahmed, S., Rahman, S., Haque, M.R. and Islam. M.M. 2009. <u>Heavy metals concentration in water, sediments and their bioaccumulation in some freshwater fishes and mussel in Dhaleswari River, Bangladesh</u>. Terrestrial and Aquatic Environmental Toxicology 3(1): 42-47.
- Ahmed, M.K., Hasan, M., Alam M.J., Ahsan, N., Islam, M.M. and Akter, M.S. 2009. Effect of gamma radiation in combination with low temperature refrigeration on the chemical, microbiological and organoleptic changes in *Pampus chinensis* (Euphrasen, 1788). World Journal of Zoology 4 (1): 09-13.
- Ahmed, M.K., Biswas, D.R., Islam. M.M., Akter, M.S., Kazi, A.I., Sultana, G.N.N. 2009. <u>Heavy metal concentrations in different organs of fishes of the river Meghna, Bangladesh</u>. Terrestrial and Aquatic Environmental Toxicology 3(1): 28-32.
- Akter, M.S., Ahmed, M.K., Akhand, A.A., Ahsan, N., Islam. M.M., and Khan, M.S. 2009. <u>Arsenic and mercury induce death of *Anabas testudineus* (Bloch) involving fragmentation of chromosomal DNA. Terrestrial and Aquatic Environmental Toxicology 3(1): 33-41.
 </u>
- Yousuf, A.H.M., Ahmed, M.K., Rahman, M.M. and **Islam, M.M.** 2009. PCR-RAPD analysis between *Penaeus monodon* and *Macrobrachium rosenbergii* using DNA fingerprinting. Bangladesh Journal of Zoology 37 (1), 165-173

- Islam, D., Mustafa, M.G., Wahed, M.A., Khaleque, M.A. and **Islam, M.M.** 2008. Investigation on the performance of solar tunnel dryer for dehydration of *Gudusia chapra* and *Channa striatus* over traditional sun drying. Dhaka University Journal of Biological Sciences, 17(2): 169-172.
- Islam, M.M., Ahmed, M.K., Shahid, M.A., Hoque, S and Islam, D. 2009. <u>Determination of land cover changes and suitable shrimp farming area using remote sensing and GIS in Southwestern Bangladesh</u>. International Journal of Ecology and Development, 12(W09): 28-41.
- Akter, R., Ahmed, M.K., Mollah, M.A.R. and **Islam, M.M.** 2008. Effects of pre-exposure acclimation to diazinon (60EC) on the mortality of freshwater murrel, *Channa punctatus* (Bloch, 1793). Bangladesh Journal of Environmental Science, 13 (2): 367-371.
- Ahmed, K.,Akhand, A.A., Hasan, M., Islam, M and Hasan, A.. 2008. <u>Toxicity of arsenic (sodium arsenite)</u> to fresh water spotted snakehead *Channa punctatus* (Bloch) on cellular death and <u>DNA content</u>. American-Eurasian Journal of Agricultural & Environmental Sciences 4 (1): 18-22.
- Akter, M.S., Ahmed, M.K., Akhand, A.A. and Islam, M.M. 2008. <u>Acute toxicity of arsenic and mercury to fresh water climbing perch</u>, *Anabas testudineus* (Bloch). World Journal of Zoology, 3 (1): 13-18.
- Yousuf, A.H.M., Ahmed, M.K., Yeasmin, S., Rahman, M.M. and Islam, M.M. 2008. <u>Prevalence of microbial load in shrimp</u>, <u>Penaeus monodon and prawn</u>, <u>Macrobrachium rosenbergii from Bangladesh</u>. World Journal of Agricultural Sciences, 4 (S): 852-855.
- Yousuf, A.H.M., Ahmed, M.K., Yeasmin, S., Rahman, M.M. and Islam, M.M. 2008 Reduction of bacterial pathogens in *Penaeus monodon* and *Macrobrachium rosenbergii* using several chemical interventions. World Journal of Agricultural Sciences, 4 (S): 856-861.
- Jahan, S.A., Ahmed M.K., Mollah, M.A.R, Hasan, M.M. and Islam, M.M. 2007. Toxic effects of malathion (57 EC) on *Heteropneustes fossilis* (Bloch, 1822). Bangladesh Journal of Zoology, 35 (1): 153-160.
- Jannat, M., Ahsan, N., Islam, M.M., Raknuzzaman, M., Naser, M.N. and Begum, F. 2007.
 Bacterial load of raw hilsha (*Tenualosa ilisha*) collected from catching points, open market and departmental shop. Bangladesh Journal of Microbiology, 24(2): 160-162.
- Islam, D., Mustafa, M.G., Wahed, M.A., Khaleque, M.A., Naser, M.N. and **Islam, M.M.** 2007. Comparative assessment of traditional sun dried and solar tunnel dried pomfret (*Pampus argenteus*) under different storage conditions. Bangladesh Journal Zoology, 35 (2): 331-340.
- Akter, R., Ahmed, M.K., Mollah, A.R., Islam, M.M. and Hasan, M.M. 2007. Acute toxicity of diazinon 60EC to freshwater snakehead, *Channa punctatus* (Bloch 1793). Bangladesh Journal of Zoology, 35 (2): 403-407.
- Haque, M.R., Ahmed, M.K., Mannaf, M.A. and Islam, M.M. 2006. Seasonal variation of heavy metal concentrations in *Gudusia chapra* inhabiting the Sundarban mangrove forest. The Journal of NOAMI, 23 (1): 1-12.
- Hasan, M.M., Jahan, S.S., Ahmed, M.K., **Islam, M.M.** and Khan, N. 2006. Presence of formaldehyde in some commercially important food fishes of Dhaka city. Bangladesh Journal of Environmental Science, 8 (2): 15-19.
- **Islam, M.M.,** Ahmed, M.K., Shahid, M.A., Hoque, S. and Islam, D. 2005. Prawn, fish and paddy culture in shrimp farms in the south-western Bangladesh. The Journal of NOAMI, 22(2):61-73.

Conference Proceedings and Presentations (Abridged)

 Islam, M.M., Rahman, M.A., Mondal, G. & Khan, M.I. 2020. Transformative adaptations to climatic hazards from coastal fishing communities, Bangladesh. Poster presented in the International Conference on Earth and Environmental Sciences & Technology for Sustainable Development,

- Organised by Faculty of Earth and Environmental Sciences, University of Dhaka; held at Hotel Intercontinental, Dhaka, Bangladesh from 25-30 Jan 2020. *This one own the 3rd prize.*
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- Rahman, M.A., Khan, M.I., Paul, B. & Islam, M.M. 2020. Barriers to Adaptation to Climate Change in the Sundarbans Mangrove-Based Fisheries with special reference to Ecosystem-based Adaptation. Paper presented in the International Conference on Earth and Environmental Sciences & Technology for Sustainable Development, Organised by Faculty of Earth and Environmental Sciences, University of Dhaka; held at Hotel Intercontinental, Dhaka, Bangladesh from 25-30 Jan 2020.
- Moshfeka, H., Sohrab, M.H., Begum, M.N., Akhter, S., Roni, S.R., Islam, M.M. & Farhana Afroz, F. 2020. Exploring fungal endophytes and their bioactive potentials from seaweeds of the Bay of Bengal. Paper presented in the International Conference on Earth and Environmental Sciences & Technology for Sustainable Development, Organised by Faculty of Earth and Environmental Sciences, University of Dhaka; held at Hotel Intercontinental, Dhaka, Bangladesh from 25-30 Jan 2020.
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- Rahman, M.A. and Islam, M.M. 2019. Adaptations of the Sundarbans fishing communities to climatic hazards. Presented in the 8th Biennial Conference & Research Fair, Bangladesh Fisheries Research Forum (BFRF) from 30-31 March 2019 in BARC, Dhaka.
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- Khan, M.I., Kundu, G.K., Akter, M.S., Mallick, B and Islam, M.M. 2017. Impacts of Climate Change on migratory and non-migratory fishers of the Padma River in Bangladesh and their response strategies". Paper was presented in the 'WIDER development conference: Migration and Mobility' hosted by UNU-WIDER and ARUA, and held on University of Ghana, Legon, Accra, Ghana on October 5-6, 2017.

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- Islam, M.M. and Golder, M.I. 2016. Presented paper on "The use of economic incentives for fisheries management in Bangladesh" as an expert on fisheries science, in the international workshop on "Upscaling solutions for poverty reduction and ecosystem management through conditional transfers" held in the Kings College, University of Cambridge, UK on 14th September 2016, organised by International Institute for Environment and Development, London.
- Islam, M.M., Mohammed, E.Y. and Ali, L. 2016. Economic incentives for sustainable hilsa fish management in Bangladesh: Institutional framework, gaps and capacity strengthening strategy and action plan. Paper presented at the "Sustainable Management of Hilsa Fishery in the Bay of Bengal Region". Held at Pan Pacific Sonargaon Hotel, Dhaka, Bangladesh, on 4-5 May 2016.
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- Ahmed, M.K and Islam, M.M. 2008. Adaptation Strategies in Coping with the Impacts of Global Climate Change on the Coastal Environment and Resources of Bangladesh. International Symposium on "Effects of Climate Change on World Oceans" held in Copenhagen, Denmark from 9-12 March, 2009.
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- Islam, M.M., Bang, S. and Kim, K.Y. 2008. Heavy metals in frozen and canned marine fish of Korea. Paper presented in IERC internship programme research results presentation, held in International Environmental Research Center, Gwangju Institute of Science and Technology, South Korea, on June 13th 2008.
- Akter, M.S., Ahmed, M.K., Akhand, A.A., Ahsan, M.N. and Islam, M.M. 2008. Arsenic and mercury induce death of *Anabas testudineus* (Bloch) involving fragmentation of chromosomal DNA. Paper presented in the 3rd Fisheries Conference and Research Fair held between 16-17 January 2008 organized by Bangladesh Fisheries Research Forum (BFRF), Bangladesh.
- Islam, M.M., Ahmed, M.K., Shahid, M.A., and Hoque, S. 2006. Present Status of Shrimp, Prawn and Fish Culture in Shrimp Farms in the Southwestern Bangladesh. Poster presented in 2nd Fisheries Conference and Research Fair (12-13 January) 2006. Bangladesh Fisheries Research Forum (BFRF), Bangladesh.

Contribution in Scientific/Strategic Meeting/Conference as an International Expert

- Scientific Committee member of the first international conference on 'Environmental Non-Migration: Framework, Methods and Cases' held from 19 21 June 2019 at the Technical University of Dresden, Germany.
- International expert in the conference on Inclusive blue economy; held in London from 22-25 February 2019.
- International expert on small-scale fisheries in the symposium on Inclusive blue economy, held in San Jose, Costa Rica from 8-14 March 2019.
- Scientific Committee member of the 4th International Research symposium-Investing in Biodiversity and Ecosystem Services (ISIBES 2018) with the theme of "Caring Nature – Creating Wealth". Held in the Rajarata University of Sri Lanka, from 17th – 18th October, 2018.
- International expert in the symposium on developing Monitoring, Evaluation and Learning Handbook for SDG -14 (Life Below Water), held in Dakar, Senegal 2018.
- International expert on use of economic incentives for fisheries management in the international workshop on "Upscaling solutions for poverty reduction and ecosystem management through conditional transfers" held in the University of Cambridge, UK on 14th September 2016.

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