# Curriculum Vitae of Dr. M. Shahjahan Mondal

Professor, Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh

# **Education**

Ph.D. Water Resources Central Queensland University, Australia 28 Nov 2005
 M.Sc. Engg. Water Resources BUET, Dhaka 23 Mar 2000
 B.Sc. Engg. Civil BUET, Dhaka Jul 1997

# **Academic Awards**

- Dr. Rashid Gold Medal from BUET for best academic performance within the university
- Sharfuddin Gold Medal from BUET for best academic performance in the Civil Engineering Faculty

# **Employment**

Professor, IWFM, BUET:
Associate Professor, IWFM, BUET:
Assistant Professor, IWFM, BUET:
Lecturer, IWFM, BUET:
22 Oct 2011 to present date
7 Aug 2007 to 21 Oct 2011
23 Aug 2000 to 6 Aug 2007
22 Oct 1997 to 22 Aug 2000

# **Administrative Positions Held**

Director, IWFM
Provost, Ahsan Ullah Hall
Assistant Provost, Sher-e-Bangla Hall
31 Dec 2019 to 7 Jan 2022
18 Sep 2018 to 11 Jan 2021
31 Oct 2006 to 10 Jan 2008

### **Member of Professional Body**

Fellow, The Institution of Engineers, Bangladesh (IEB)

### Visiting Fellow/Scholar

• Visiting Fellow: Graduate School of Environmental Science, Okayama University, Japan under the Education for Sustainable Development program of UNESCO-Chair funded by the Ministry of Science, Japan (Oct 31, 2007 to Jan 29, 2008).

 Doctoral Scholar: Faculty of Informatics and Decision Sciences, Central Queensland University, Australia (Apr 11, 2002 to Apr 22, 2005).

# **Research/Academic Collaborative Projects**

- Working as the Country Coordinator of the study on 'Built Water Storage in South Asia.'
  The lead organization is IWMI, Sri Lanka, and the partners are GWP-SAS, Sri Lanka,
  Bangladesh Water Partnership, and IWFM (BUET). The project is being sponsored by
  U.S. Department of State, Bureau of South and Central Asian Affairs. Duration: three
  years (October 2022 to September 2025).
- Working as the Co-Lead of the study on 'Gendering Water and Climate Science Research in South Asia.' The lead organization is University of Peradeniya, Sri Lanka, and the partners are IWFM (BUET) and Nepal Engineering College, Nepal. The project is being sponsored by International Development Research Centre (IDRC), Canada. Duration: three years (August 2022 to July 2025).
- Working as the Principal Investigator of the study on 'Improving Water Management in Micro-Watersheds of Southwest Bangladesh through Physical Intervention and Community Participation.' The research study is being sponsored by the Solidaridad Network Asia. Duration: two years (1 March 2023 to 29 February 2024).
- Working as the Principal Investigator of the study on 'Monitoring and assessment of morphological changes of the Feni River near the proposed LGED two bridges.' The research study is being sponsored by the Local Government Engineering Department, Dhaka. Duration: two years (5 January 2022 to 4 January 2024).
- Worked as the Principal Investigator of the project on 'Assessing Health Impacts of Urban Flooding under Changing Climate: A Case Study in Dhaka City.' The project is being sponsored by the U.S. Department of State. Duration: 20 months (October 2021 to May 2023).
- Worked as a Project Leader (Bangladesh side) of the project on 'IDRC-South Asian Water (SAWA) Leadership Program on Climate Change.' The lead organization is SaciWATERs, India and the partners are IWFM (BUET), University of Peradeniya (Sri Lanka), Anna University (India) and Nepal Engineering College (Nepal). The project is being sponsored by International Development Research Centre (IDRC), Canada. Duration: five years (November 2017 to October 2022).
- Worked as a Project Leader (Bangladesh side) of the project on 'Understanding the Hydro-climatic Drivers of Cholera Outbreaks.' The lead organization is University of Notre Dame, USA and the partners are IWFM (BUET) and ICDDRB. The project is being sponsored by University of Notre Dame, USA. Duration: four years (May 2019 to April 2023).
- Worked as a Project Leader (Bangladesh side) of the project on 'Linking key water-related drivers of public health challenges in Bangladesh: implications for transboundary water allocation.' The lead organization is University of Notre Dame, USA and the partners are IWFM (BUET) and ICDDRB. The project was sponsored by the University of Notre Dame, USA. Duration: two years (May 2017 to April 2019).
- Worked as a Project Leader (Bangladesh side) of the project on 'IDRC-South Asian Water (SAWA) Fellowship Project.' The lead organization was SaciWATERs, India and the partners were IWFM (BUET), University of Peradeniya (Sri Lanka), Anna University (India) and Nepal Engineering College (Nepal). The project was sponsored by IDRC, Canada. Duration: four years (December 2012 to December 2016)
- Worked as a Co-Investigator in the 'risk framework component' of the project on "Water security for the poor (REACH)." The lead organization was Oxford University and other partners were IWFM (BUET), ICDDRB, Institute of Disaster Management and

- Vulnerability Studies (Dhaka University) and UNICEF. The project was sponsored by DFID.
- Worked as a Co-Investigator in the 'adaptation and governance components' of the project on "DEltas, vulnerability and Climate Change: Migration and Adaptation (DECCMA)." The lead organization was University of Southampton (UK) and the other partners were IWFM (BUET), Jadavpur University (India) and University of Ghana (Ghana). The project was sponsored jointly by IDRC and DFID. Duration: February 2014 to October 2018.
- Worked as a **Co-Investigator** in the 'modeling with HEC-RAS' component of the project on 'Developing flash flood early warning system (FFEWAS) for the haor region of Bangladesh." The project was sponsored by IFAD. Duration: July 2015-June 2019.
- Worked as a Co-Investigator in the 'modeling with AquaCrop' component of the project on 'Landscape salinity and water management for improving agricultural productivity." The project was sponsored by FAO/IAEA. Duration: August 2015-August 2016.
- Worked as a Co-Investigator in the 'agriculture component' of the project on "Assessing health, livelihoods, ecosystem services and poverty alleviation in populous deltas (ESPA-Deltas". The project was sponsored by DFID, NERC and ESRC. Duration: four years (April 2012 to March 2016).
- Worked as a **Co-Investigator** in "Vulnerability and adaptive capacity of urban communities in a multi-hazard coastal area of Bangladesh." The project was sponsored by CAFOD (UK), Duration: nine months (July 2013 to March 2014).
- Worked as a Co-Investigator in "Water security in peri-urban South Asia: Adapting to climate change and urbanization", in collaboration with SaciWATERs (India) and Nepal Engineering College (Nepal). The project was sponsored by International Development Research Centre (IDRC), Canada, Duration: three years (12 July 2010 to 11 July 2013).
- Worked as the Principal Investigator in "Development of an institutional framework for management of rivers surrounding Dhaka city", in collaboration with Capital Development Authority (RAJUK), Department of Environment (DoE), Environment Court, and Bangladesh Inland Water Transport Authority (BIWTA) (2011-2013).
- Worked as the Principal Investigator in "Risk-based evaluation of Brahmaputra water development in meeting future water demand", in collaboration with Water Resources Planning Organization (WARPO), and Center for Environment and Geographic Information Services (CEGIS) (2006-2008).
- Rubber Dam, Submersible Embankment, 1998 Flood, ANN, Experimental Study, Beel Kuralia, RiskPlan, BINA Study, Rainfall Study

### **On-Going Consultancy Projects**

 Working as the Team Leader for 'FLOOD INUNDATION STUDY FOR DHAKA MASS RAPID TRANSIT DEVELOPMENT PROJECT (LINE 5: NORTHERN ROUTE), Client: Nippon Koei Co. Ltd., Japan, Duration: 10 September, 2020-31 January, 2022.

### **Teaching**

Course Code	Course Title	Semester/Trimester	University	No. of Students
CMRM 6206	Vulnerability Assessment	April 2023	IWFM, BUET	12
WFM 6201	Hazards and Risk Analysis	April 2023	IWFM, BUET	25
WFM 6204	Hydrologic Statistics	October 2022	IWFM, BUET	18
WFM 6201	Hazards and Risk Analysis	April 2022	IWFM, BUET	26

WFM 6303 Integrated Water Resources Management October 2021 IWFM, BUET 37  WFM 6201 Hazards and Risk Analysis April 2021 IWFM, BUET 30  WFM 6303 Integrated Water Resources Management Analysis April 2019 IWFM, BUET 43  WFM 6303 Integrated Water Resources Management April 2019 IWFM, BUET 59  WFM 6201 Hazards and Risk Analysis April 2019 IWFM, BUET 31  WFM 6201 Hazards and Risk Analysis October 2018 IWFM, BUET 29  WFM 6303 Integrated Water Resources Management April 2018 IWFM, BUET 22  WFM 6303 Integrated Water Resources Management April 2018 IWFM, BUET 22  WFM 6304 Integrated Water Resources Management October 2017 IWFM, BUET 31  WFM 6201 Hazards and Risk Analysis October 2017 IWFM, BUET 31  WFM 6201 Hazards and Risk Analysis April 2017 IWFM, BUET 22
WFM 6201 Hazards and Risk Analysis April 2021 IWFM, BUET 30 WFM 6303 Integrated Water Resources Management April 2019 IWFM, BUET 43 WFM 6303 Integrated Water Resources Management April 2019 IWFM, BUET 59 WFM 6201 Hazards and Risk Analysis April 2019 IWFM, BUET 31 WFM 6201 Hazards and Risk Analysis October 2018 IWFM, BUET 29 WFM 6303 Integrated Water Resources Management April 2018 IWFM, BUET 22 WFM 6303 Integrated Water Resources Management October 2017 IWFM, BUET 31 WFM 6301 Hazards and Risk Analysis October 2017 IWFM, BUET 31
WFM 6303 Management October 2019 IWFM, BUET 43  WFM 6303 Integrated Water Resources Management April 2019 IWFM, BUET 59  WFM 6201 Hazards and Risk Analysis April 2019 IWFM, BUET 31  WFM 6201 Hazards and Risk Analysis October 2018 IWFM, BUET 29  WFM 6303 Integrated Water Resources Management April 2018 IWFM, BUET 22  WFM 6303 Integrated Water Resources Management October 2017 IWFM, BUET 43  WFM 6201 Hazards and Risk Analysis October 2017 IWFM, BUET 31
WFM 6201 Hazards and Risk Analysis April 2019 IWFM, BUET 31 WFM 6201 Hazards and Risk Analysis October 2018 IWFM, BUET 29 WFM 6303 Integrated Water Resources Management April 2018 IWFM, BUET 22 WFM 6303 Integrated Water Resources Management October 2017 IWFM, BUET 43 WFM 6201 Hazards and Risk Analysis October 2017 IWFM, BUET 31
WFM 6201 Hazards and Risk Analysis October 2018 IWFM, BUET 29 WFM 6303 Integrated Water Resources Management April 2018 IWFM, BUET 22 WFM 6303 Integrated Water Resources Management October 2017 IWFM, BUET 43 WFM 6201 Hazards and Risk Analysis October 2017 IWFM, BUET 31
WFM 6303 Integrated Water Resources Management April 2018 IWFM, BUET 22  WFM 6303 Integrated Water Resources Management October 2017 IWFM, BUET 43  WFM 6201 Hazards and Risk Analysis October 2017 IWFM, BUET 31
WFM 6303 Management April 2018 IWFM, BUET 22  WFM 6303 Integrated Water Resources Management October 2017 IWFM, BUET 43  WFM 6201 Hazards and Risk Analysis October 2017 IWFM, BUET 31
WFM 6303 Management October 2017 IWFM, BUET 43 WFM 6201 Hazards and Risk Analysis October 2017 IWFM, BUET 31
WFM 6201   Hazards and Risk Analysis   April 2017   IWFM, BUET   22
WFM 6303 Integrated Water Resources Management October 2016 IWFM, BUET 43
WFM 6201 Hazards and Risk Analysis April 2016 IWFM, BUET 17
WFM 6301 Agricultural Water April 2016 IWFM, BUET 10
WFM 6303 Integrated Water Resources Management April 2016 IWFM, BUET 32
DMG 515 Organizational & Policy Context of Disaster Risk Management Summer 2016 University  4
WFM 6201 Hazards and Risk Analysis October 2015 IWFM, BUET 10
WFM 6301 Agricultural Water April 2015 IWFM, BUET 7
WFM 6303 Integrated Water Resources Management April 2015 IWFM, BUET 43
WFM 6201 Hazards and Risk Analysis October 2014 IWFM, BUET 26
DMG 516 Research and Analytical Fall 2014 BRAC University 14
WFM 6201 Hazards and Risk Analysis April 2014 IWFM, BUET 10
WFM 6303 Integrated Water Resources Management October 2013 IWFM, BUET 20
WFM 6301 Agricultural Water October 2013 IWFM, BUET 10
WFM 5201 Data Management and Statistical Analysis October 2013 IWFM, BUET 8
WFM 5101 Watershed Hydrology April 2013 IWFM, BUET 15
WFM 5101 Watershed Hydrology April 2013 IWFM, BUET 15  WFM 5201 Data Management and Statistical Analysis October 2012 IWFM, BUET 8
WFM 5101 Watershed Hydrology April 2013 IWFM, BUET 15  WFM 5201 Data Management and October 2012 IWFM BUET 8
WFM 5101 Watershed Hydrology April 2013 IWFM, BUET 15  WFM 5201 Data Management and Statistical Analysis Agricultural Water Management Management WFM 5101 Watershed Hydrology April 2012 IWFM, BUET 10
WFM 5101 Watershed Hydrology April 2013 IWFM, BUET 15  WFM 5201 Data Management and Statistical Analysis Agricultural Water Management Management 10
WFM 5101 Watershed Hydrology April 2013 IWFM, BUET 15  WFM 5201 Data Management and Statistical Analysis October 2012 IWFM, BUET 8  WFM 6301 Agricultural Water Management Manag
WFM 5101 Watershed Hydrology April 2013 IWFM, BUET 15  WFM 5201 Data Management and Statistical Analysis October 2012 IWFM, BUET 8  WFM 6301 Agricultural Water Management Management Management Management Management October 2012 IWFM, BUET 10  WFM 5101 Watershed Hydrology April 2012 IWFM, BUET 26  Organizational and Policy Context of Disaster Risk Management Management Management Data Management October 2011 IWFM BUET 3

	Management			
DMG 503	Organizational and Policy Context of Disaster Management	Spring 2010	BRAC University	14
WFM 5101	Watershed Hydrology	October 2010	IWFM, BUET	24
WFM 5201	Data Management and Statistical Analysis	October 2010	IWFM, BUET	14
WFM 6301	Agricultural Water Management	April 2010	IWFM, BUET	12
WFM 5101	Watershed Hydrology	October 2009	IWFM, BUET	26
WFM 5201	Data Management and Statistical Analysis	October 2009	IWFM, BUET	11
WFM 5101	Watershed Hydrology	April 2009	IWFM, BUET	19
WFM 5201	Data Management and Statistical Analysis	April 2009	IWFM, BUET	07
WFM 6301	Agricultural Water Management	April 2009	IWFM, BUET	21
WFM 5101	Watershed Hydrology	October 2008	IWFM, BUET	30
WFM 5201	Data Management and Statistical Analysis	April 2008	IWFM, BUET	09
WFM 6301	Agricultural Water Management	April 2008	IWFM, BUET	21
WFM 5201	Data Management and Statistical Analysis	April 2007	IWFM, BUET	04
WFM 6301	Agricultural Water Management	April 2007	IWFM, BUET	21
CE 206	Fluid Mechanics	Fall 2006	Stamford Univ.	39
WFM 6204	Hydrologic Statistics	October 2006	IWFM, BUET	08
WFM 5101	Watershed Hydrology	October 2006	IWFM, BUET	37
WFM 6301	Agricultural Water Management	April 2006	IWFM, BUET	06
WFM 5101	Watershed Hydrology	October 2005	IWFM, BUET	11

# **List of Publications**

### a. Journals

- 1. Sakib, M.S., Alam, S., Shampa, Murshed, S.B., Kirtunia, R., **Mondal, M.S.** and Chowdhury, A.I.A. (2023). Impact of Urbanization on Pluvial Flooding: Insights from a Fast Growing Megacity, Dhaka, Water, 15(21): 3834, https://doi.org/10.3390/w15213834
- 2. Hafiz, N., Biswas, S., **Mondal, M.S.**, Islam, M.A. and Khan, M.S.A. (2023). Variations of Water and Deposited Sediment Qualities in the Tidal River Basins of Bangladesh and Their Implications for TRM Success, Sustainability, 15(18): 13855, https://doi.org/10.3390/su151813855
- 3. Iqbal, A., **Mondal, M.S.**, Veerbeek, W., Khan, M.S.A. and Hakvoort, H. (2023). Effectiveness of UAV-based DTM and Satellite-based DEMs for Local-Level Flood Modeling in Jamuna Floodplain, Journal of Flood Risk Management, 16(4): e12937, https://doi.org/10.1111/jfr3.12937

- 4. Chyon, M.S.A., Biswas, S., **Mondal, M.S.**, Roy, B. and Rahman, A. (2023). Integrated assessment of flood risk in Arial Khan floodplain of Bangladesh under changing climate and socioeconomic conditions, Journal of Flood Risk Management, 16(2): 1-21, https://doi.org/10.1111/jfr3.12876
- 5. Nahin, K.T.K., Islam, S.B., Ahmed, S., **Mondal, M.S.**, Murshed, S.B. and Nowreen, S. (2023). Voluntary immobility despite hazard: a case of Jamuna floodplain in Bangladesh, GeoJournal, 88(3): 3497-3514, https://doi.org/10.1007/s10708-022-10820-3
- 6. Kashem, S., Tahsin, N., Subah, Z., Murshed, S.B., Nowreen, S. and **Mondal, M.S.** (2023). Assessing the right to water of the urban poor in Dhaka city, GeoJournal, 88(3): 3183-3204, https://doi.org/ 10.1007/s10708-022-10804-3
- 7. Ferdoush, J., Biswas, S. and **Mondal, M.S.** (2022). Assessment of meander-bend migration of a major distributary of the Ganges river within Bangladesh, River, 1(2): 240-255, https://doi.org/10.1002/rvr2.21
- 8. **Mondal, M.S.** (2022). Local scour at complex bridge piers in Bangladesh rivers: Reflections from a large study, Water, 14(15): 2405. doi: 10.3390/w14152405
- 9. Kryston, A., Müller, M.F., Penny, G., Bolster, D., Tank, J.L. and **Mondal, M.S.** (2022). Addressing climate uncertainty and incomplete information in transboundary river treaties: A scenario-neutral dimensionality reduction approach, Journal of Hydrology, doi: 10.1016/j.jhydrol.2022.128004
- 10. Gain, A.K., Rahman, M.M., Sadik, M.S., Adnan, M.S.G., Ahmad, S., Ahsan, S.M.M., Ashik-Ur-Rahman, M., Balke, T., Datta, D.K., Dewan, C., Huq, N., Khan, M.S.A., Large, A., Mallick, B., Mohibbullah, M., Mondal, M.S., Narayan, S., Rabbani, G., Rahman, R., Renaud, F.G., Rogers, K.G. and van Loon-Steensma, J.M. (2022). Overcoming challenges for implementing nature-based solutions in deltaic environments: insights from the Ganges-Brahmaputra delta in Bangladesh, Environmental Research Letters, 17: 064052. doi: 10.1088/1748-9326/ac740a
- 11. Kashem, S. and **Mondal, M.S.** (2022). Development of a Water-Pricing Model for Domestic Water Uses in Dhaka City Using an IWRM Framework, Water, 14(9): 1328. doi: 10.3390/w14091328
- 12. Jaren, L.S., Leya, R.S. and **Mondal, M.S.** (2022). Investigation of Gender-Differentiated Impacts of Water Poverty on Different Livelihood Groups in Peri-Urban Areas around Dhaka, Bangladesh, Water, 14(7): 1167. doi: 10.3390/w14071167
- 13. Moshfika, M., Biswas, S. and **Mondal, M.S.** (2022). Assessing Groundwater Level Declination in Dhaka City and Identifying Adaptation Options for Sustainable Water Supply, Sustainability, 14(3): 1518. doi: 10.3390/su14031518
- 14. Jaren, L.S. and **Mondal, M.S.** (2021). Assessing Water Poverty of Livelihood Groups in Peri-Urban Areas around Dhaka under a Changing Environment, Water, 13(19): 2674. doi: 10.3390/w13192674
- 15. Mehzabin, S. and **Mondal, M.S.** (2021). Assessing impact of climate variability in southwest coastal Bangladesh using livelihood vulnerability index, Climate, 9(7): 107. doi: 10.3390/cli9070107
- 16. Zaman, S. and **Mondal, M.S.** (2020). Risk-based determination of polder height against storm surge hazard in the south-west coastal area of Bangladesh, Progress in Disaster Science, 8: 100131. doi:10.1016/j.pdisas.2020.100131
- 17. Penny, G., **Mondal, M.S.**, Biswas, S., Bolster, D., Tank, J.L. and Muller, M.F. (2020). Using Natural Experiments and Counterfactuals for Causal Assessment: River Salinity and the Ganges Water Agreement, Water Resources Research, 56(4), AGU. doi:10.1029/2019WR026166

- 18. Nowreen, S., Haque, P., **Mondal, M.S.** and Zaman, R.U. (2020). Hydrological assessment for the availability of water for off-stream uses of Karatoa-Atrai River in Bangladesh, Water Policy, 22(1): 70-84, IWA Publishing. doi:10.2166/wp.2020.034
- 19. **Mondal, M.S.**, Nowreen, S. and Sakib, M.N. (2020). Scale-dependent reliability of projected rainfalls over Bangladesh with the PRECIS model, Climate, 8(2): 20. doi:10.3390/cli8020020
- 20. Rahman, M.M., Penny, G., **Mondal, M.S.**, Zaman, M.H., Kryston, A., Salehin, M., Nahar Q., Islam, M.S., Bolster, D., Tank, J.L. and Muller, M.F. (2019). Salinization in large river deltas: Drivers, impacts and socio-hydrological feedbacks, Water Security, 6: 100024, Elsevier. doi:10.1016/j.wasec.2019.100024
- 21. Haque, S., Saha, D. and **Mondal, M.S.** (2019). Improving practice of flood shelter implementation in alluvial river floodplain with hydro-morphological analysis, International Journal of Disaster Response and Emergency Management, 2(2): 35-50, IGI Global. doi:10.4018/IJDREM.2019070103
- 22. **Mondal, M.S.**, Islam, A.S., Haque, A., Islam, M.R., Biswas, S., Mohammed, K. (2018). Assessing high-end climate change impacts on floods in major rivers of Bangladesh using multi-model simulations, Global Science and Technology Journal, Australia, 6(2): 1-14.
- 23. Gain, A.K., **Mondal, M.S.** and Rahman, R. (2017). From flood control to water management: A journey of Bangladesh towards integrated water resources management, Water, 9(1): 55. MDPI, Switzerland. doi:10.3390/w9010055
- 24. Martinez, P.P., Reiner, R.C., Benjamin, A.C., Xavier, R., **Mondal, M.S.**, Roy, M., Yunus, M., Faruque, A.S.G., Huq, S., King, A.A. and Pascua, M. (2017). Cholera forecast for Dhaka, Bangladesh, with the 2015-2016 El Niño: Lessons learned, PLoS ONE, 12(3): e0172355. doi:10.1371/journal.pone.0172355
- 25. Saha, D., Hossain, M.S.S.H., **Mondal, M.S.** and Rahman, R. (2016). Agricultural adaptation practices in coastal Bangladesh: Response to climate change impacts, Journal of Modern Science and Technology, 4 (1): 63 74.
- 26. **Mondal, M.S.**, Saleh, A.F.M., Akanda, M.A.R., Biswas, S.K., Moslehuddin, A.Z.M., Zaman, S., Lazar, A.N. and Clarke, D. (2015). Simulating yield response of rice to salinity stress using the AquaCrop model, Environmental Science: Processes & Impacts, 17(6): 1118-1126, Royal Society of Chemistry, UK. doi:10.1039/C5EM00095E
- 27. **Mondal, M.S.**, Rahman, M.A., Mukherjee, N., Huq, H. and Rahman, R. (2015). Hydroclimatic hazards for crops and cropping system in the chars of the Jamuna River and potential adaptation options, Natural Hazards, 76(3): 1431-1455, Springer. https://doi.org/10.1007/s11069-014-1424-9
- 28. **Mondal, M.S.** (2015). Groundwater resources in the hard to reach areas of Bangladesh: constraints for drinking water supply and strategies for sustainable use, European Water, 50: 43-57. E. W. Publications, Greece.
- 29. Kibria, M.G., Saha, D., Kabir, T., Naher, T., Maliha, S. and **Mondal, M.S.** (2015). Achieving food security in storm-surge prone coastal polders of south-west Bangladesh, South Asia Water Studies (SAWAS) Journal, 5(1): 26-43, India.
- Lazar, A.N., Clarke, D., Adams, H., Akanda, A.R., Szabo, S., Nicholls, R.J., Matthews, Z., Begum, D., Saleh, A.F.M., Abedin, M.A., Payo, A., Streatfield, P.K., Hutton, C., Mondal, M.S. and Moslehuddin, A.Z.M. (2015). Agricultural livelihoods in coastal Bangladesh under climate and environmental change a model framework, Environmental Science: Processes & Impacts, 17(6): 1018-1031, Royal Society of Chemistry, UK. doi:10.1039/C4EM00600C

- 31. **Mondal, M.S.** and Chowdhury, J.U. (2013). Generation of 10-day flow of the Brahmaputra River using a time series model, Hydrology Research, 44(6): 1071-1083, IWA Publishing, UK. https://doi.org/10.2166/nh.2012.242
- 32. **Mondal, M.S.**, Jalal, M.R., Khan, M.S.A., Kumar, U., Rahman, R. and Huq, H. (2013). Hydro-meteorological trends in southwest coastal Bangladesh: perspectives of climate change and human interventions, American Journal of Climate Change, 2(1): 62-70, Scientific Research, USA. doi:10.4236/ajcc.2013.21007
- 33. Rahman, M. and **Mondal, M.S.** (2013). Impact of the Bangshi river water quality on irrigated soil and rice in Bangladesh, Asian Journal of Water, Environment and Pollution, 10(1): 129-139.
- 34. Jahid, S.A., Dewan, A.K.M.H.K. and **Mondal, M.S.** (2013). Flood risk analysis by using geographic information system at Sarankhola Upazila, Bagerhat, European Academic Research, 1(9): 2905-2918.
- 35. Sikder, M.S., Ghosh, P.K. and **Mondal, M.S.** (2013). Developing strategies for wetland resources management A policy implication for a south-western coastal wetland in Bangladesh, Bangladesh Journal of Public Administration, XXII (II): 45-61.
- 36. **Mondal, M.S.** and Chowdhury, J.U. (2012). Synthetic stream-flow generation with Deseasonalized ARMA model, Journal of Hydrology and Meteorology, 8(1): 32-46, Society for Hydrology and Meteorology, Nepal. doi:10.3126/jhm.v8i1.15570
- 37. Ghosh, P.K. and **Mondal, M.S.** (2012). Economic valuation of the use attributes of Chanda Beel wetland in Bangladesh, Bangladesh Journal of Environmental Science, 22: 90-95, Bangladesh Agricultural University.
- 38. Ghosh, P.K., Karim, M.R., Akter, F. and **Mondal, M.S.** (2012). Assessing the impacts of water interventions on brackish water ecosystem and associated livelihoods using fish indicator, Bangladesh Journal of Environmental Science, 22: 21-26, Bangladesh Agricultural University.
- 39. Ghosh, P.K. and **Mondal**, **M.S.** (2012). Economic valuation of the non-use attributes of a south-western coastal wetland in Bangladesh, Journal of Environmental Planning and Management, 56(9): 1403-1418, Routledge. doi:10.1080/09640568.2012.724667
- Mondal, M.S., Chowdhury, J.U. and Ferdous, M.R. (2010). Risk-based evaluation for meeting future water demand of the Brahmaputra floodplain within Bangladesh, Water Resources Management, 24(5): 835-852, Springer. https://doi.org/10.1007/s11269-009-9475-5
- 41. Saleh, A.F.M. and **Mondal, M.S.** (2009). Impact of submersible embankment projects on boro production in haor areas, *Bangladesh Journal of Water Resource Research*, 21: 55-77, Bangladesh University of Engineering and Technology.
- 42. **Mondal, M.S.**, Kouchi, Y. and Okubo, K. (2009). Sedimentation and thermal stratification during floods: A case study on Hail haor of north-east Bangladesh, *Journal of Hydrology and Meteorology*, 6(1): 15-25, Society for Hydrology and Meteorology, Nepal. doi:10.3126/jhm.v6i1.5480
- Mondal, M.S. and Wasimi, S.A. (2007). Evaluation of risk-related performance in water management for the Ganges Delta of Bangladesh, Journal of Water Resources Planning and Management, 133(2): 179-187, American Society of Civil Engineers (ASCE). doi:10.1061/(ASCE)0733-9496(2007)133:2(179)
- 44. **Mondal, M.S.** and Wasimi, S.A. (2006). Generating and forecasting monthly flows of the Ganges river with PAR model, Journal of Hydrology, 323(1-4): 41-56, Elsevier Science. doi:10.1016/j.jhydrol.2005.08.015

- 45. **Mondal, M.S.** and Wasimi, S.A. (2005). Periodic transfer function-noise model for forecasting, Journal of Hydrologic Engineering, 10(5): 353-362, American Society of Civil Engineers (ASCE). doi:10.1061/(ASCE)1084-0699(2005)10:5(353)
- 46. **Mondal, M.S.** and Wasimi, S.A. (2005). Estimation of dry season water demand for the Ganges delta within Bangladesh up to the year 2050, *Bangladesh Journal of Water Resource Research*, 20: 1-20, Bangladesh University of Engineering and Technology.
- 47. **Mondal, M.S.** and Wasimi, S.A. (2005). Monthly flow forecasting of the Ganges river with PAR model, *Bangladesh Journal of Water Resource Research*, 20: 21-41, Bangladesh University of Engineering and Technology.
- 48. **Mondal, M.S.** and Wasimi, S.A. (2005). Disaggregation model for synthetic stream-flow generation, *Journal of Civil Engineering*, 33(1): 43-54, Institution of Engineers, Bangladesh.
- 49. **Mondal, M.S.** and Saleh, A.F.M. (2003). Evaluation of some deep and shallow tubewell irrigated schemes in Bangladesh using performance indicators, Agricultural Water Management, 58(3): 193-207, Elsevier Science. doi:10.1016/S0378-3774(02)00087-2
- 50. Saleh, A.F.M. and **Mondal, M.S.** (2001). Performance evaluation of rubber dam projects of Bangladesh in irrigation development, Irrigation and Drainage, 50(3): 237-248, International Commission on Irrigation and Drainage (ICID), John Wiley and Sons Ltd., UK. doi:10.1002/ird.18
- 51. Saleh, A.F.M. and **Mondal, M.S.** (1999). Performance of the flood control and drainage projects during the 1998 flood in Bangladesh: A case study, *Journal of Indian Water Resources Society*, 19(4): 1-8, India.

#### b. Books and Book Chapters

- 52. Biswas, S. and **Mondal, M.S.** (2022). Assessing the Consequences of Large-Scale Stabilization of the Padma River on its Flow Hydraulics Using a Combined ID-2D Hydrodynamic Model, In <u>Water Management: A View from Multidisciplinary Perspectives</u>, Islam G.M.T., Shampa, Chowdhury A.I.A. (eds), pp. 279-296, Springer, Cham. doi:10.1007/978-3-030-95722-3 14
- 53. Iqbal, A., **Mondal, M.S.**, Khan, M.S.A., Hakvoort, H. and Veerbeek, W. (2022). Flood Propagation Processes in the Jamuna River Floodplain in Sirajganj, In <u>Water Management: A View from Multidisciplinary Perspectives</u>, Islam G.M.T., Shampa, Chowdhury A.I.A. (eds), pp. 45-67, Springer, Cham. doi: 10.1007/978-3-030-95722-3\_3
- 54. Rahman, M.A., **Mondal, M.S.**, Huq, H., Mukherjee, N. and Rahman, M.R. (2021). Crop production patterns and marketing in char areas: Adapting to hazards and vulnerability, In: <u>Living on the Edge: Char Dwellers in Bangladesh</u>, M. Zaman and M. Alam (eds.), pp. 291-305, Springer. doi:10.1007/978-3-030-73592-0\_17
- 55. **Mondal, M.S.** (2019). Challenges for quality water in the urban centers of coastal Bangladesh, In: <u>People at Risk: Disaster and Despair</u>, H. Khatun, A. Baqee and H. Kabir (eds.), pp. 157-183, Disaster Research Training and Management Center, University of Dhaka.
- 56. Mondal, M.S., Islam, M.T., Saha, D., Hossain, M.S.S., Das, P.K. and Rahman, R. (2019), Agricultural adaptation practices to climate change impacts in coastal Bangladesh, In: Confronting Climate Change in Bangladesh: Policy Strategies for Adaptation and Resilience, S. Huq, J. Chow, A. Fenton, C. Stott, J. Taub, H. Wright (eds.), pp. 7-21, Springer. doi:10.1007/978-3-030-05237-9\_2

- 57. Khan, M.S.A., **Mondal, M.S.**, Jalal, M.R., and Kumar, U. (2019). Vulnerability and Adaptive Capacity: A Tale of Two Cities, A H Development Publishing House, Dhaka.
- 58. Salehin, M., Chowdhury, M.M.A., Clarke, D., Mondal, S., Nowreen, S., Jahiruddin, M. and Haque, A. (2018). Mechanisms and drivers of soil salinity in coastal Bangladesh, pp. 333-348, In: <a href="Ecosystem Services for Well-Being in Deltas: Integrated Assessment for Policy Analysis">Ecosystem Services for Well-Being in Deltas: Integrated Assessment for Policy Analysis</a>, R.J. Nicholls, C.W. Hutton, W.N. Adger, S.E. Hanson, M.M. Rahman and M. Salehin (eds.), <a href="Palgrave Macmillan">Palgrave Macmillan</a>. doi:10.1007/978-3-319-71093-8\_30</a>
- 59. Khan, M.S.A., Mondal, M.S., Rahman, R., Huq, H. and Datta, D.K., Kumar, U. and Jalal, M.R. (2015). Urban burden on peri-urban areas: Shared use of a river in a coastal city vulnerable to climate change, In: <u>Water Security in Peri-urban South Asia</u>: <u>Adapting to Climate Change and Urbanization</u>, V. Narain and A. Prakash (eds.), Chapter 1, pp. 33-74, Oxford University Press. doi:10.1093/acprof:oso/9780199464166.003.0002
- 60. Rahman, R. and **Mondal, M.S.** (2015). Role of water resource management in ensuring food security, In: <u>Food Security and Risk Reduction in Bangladesh</u>, U. Habiba, M.A. Abedin, A.W.R. Hassan and R. Shaw (eds.), Chapter 12, pp. 213-234, <u>Springer.</u> doi:10.1007/978-4-431-55411-0\_12
- 61. Rahman, M.A., Mallick, F.H., **Mondal, M.S.** and Rahman, M.R. (2014). Flood shelters in Bangladesh: some issues from the user's perspective, In: <u>Hazards, Risks, and Disasters in Society</u>, A.E. Collins, S. Jones, B. Manyena and J. Jayawickrama (eds.), Chapter 9, pp. 145-159, <u>Elsevier</u>. doi:10.1016/B978-0-12-396451-9.00009-3
- 62. Mondal, M.S., Salehin, M. and Huq, H. (2014). Evaluation of Institutional Arrangements for Governance of Rivers Surrounding Dhaka City, In: <u>Water in a Globalizing World: State, Markets and Civil Society in South Asia</u>, V. Narain, C.G. Goodrich, J. Chourey and A. Prakash (eds.), 273-291, Routledge. doi:10.4324/9781315734187-17
- 63. Khan, M.S.A., **Mondal, M.S.**, Kumar, U., Rahman, R., Huq, H. and Dutta, D.K. (2013). Climate change, salinity intrusion and water insecurity in peri-urban Khulna, Bangladesh, In: *Water Security in Peri-urban South Asia: Adapting to Climate Change & Urbanisation*, Prakash, A. and Singh, S. (eds.), Chapter 2, pp. 11-30, SaciWATERs, India and IDRC, Canada.
- 64. Hassan, N., Mondal, M.S. and Sayeed, M.A.B. (2012). Agro-water Management Practices of Coastal Bangladesh: Assessment of Environmental Parameters, LAMBERT Academic Publishing.
- 65. Nasrin, F. and **Mondal, M.S.** (2012). Climatic Variables and Irrigation Water Demand: Trends in Climatic Variables and Their Combined Effects on Irrigation Water Demand in the Dry Season, LAMBERT Academic Publishing.
- 66. Ghosh, P.K. and **Mondal, M.S.** (2012). Impact of Interventions on Brackish Water Ecosystem and Livelihoods: A Case Study of a Coastal River in Bangladesh, LAMBERT Academic Publishing.
- 67. **Mondal, M.S.** and Wasimi, S.A. (2006). Risk-based evaluation of Ganges water development in meeting future water demand, In: <a href="Environmental Sustainability Concerns">Environmental Sustainability Concerns</a>, M.M. Rahman, M.J.B. Alam, M.A. Ali, A.B.M. Badruzzaman and I. Smout, (eds.), Environmental Engineering Division, Centre for Environmental and Resource Management (CERM) and International Training Network (ITN), BUET, Dhaka, pp. 23-42.
- 68. **Mondal, M.S.** and Wasimi, S.A. (2004). Impact of climate change on dry season water demand in the Ganges delta of Bangladesh, In: <u>Contemporary Environmental Challenges</u>, M.M. Rahman, M.J.B. Alam, M.A. Ali, M. Ali and K. Vairavamoorthy, (eds.), Centre for Environmental and Resource Management (CERM) and International Training Network (ITN), BUET, Dhaka, pp. 63-84.

69. Saleh, A.F.M., Ahmed, S.M.U., Rahman, R., Salehin, M., **Mondal, M.S.** and Miah, M.M. (2002). Performance evaluation of FCD/FCDI Projects during the 1998 flood, In: <u>Engineering Concerns of Flood</u>, M. A. Ali, S. M. Seraj, and S. Ahmed, (eds.), BUET, pp. 253-266.

# c. Conference/Symposium Proceedings

- 70. Kirtunia, R., Murshed, S.B., **Mondal, M.S.**, Alam, S., Chowdhury, A.I.A., Shampa and Sakib, M.S. (2023). Waterlogging in Dhaka City: Causes, impacts and adaptation strategies for two select hotspots, 9th International Conference on Water and Flood Management, October 14-16, Dhaka, Book of Abstracts, p. 235-236.
- 71. Jaren, L.S., Hossain, M., Sarker, M.H., Leya, R.S., and **Mondal, M.S.** (2023). Rivers beyond borders: Uncovering opportunities and evaluating the efficacy of transboundary agreements in the GBM basin, 9th International Conference on Water and Flood Management, October 14-16, Dhaka, Book of Abstracts, p. 264-265.
- 72. Mohir, M.M.I., **Mondal, M.S.** and Sakib, M.S. (2023). Monitoring and simulation of bank and bed erosion of a newly excavated coastal river, 9th International Conference on Water and Flood Management, October 14-16, Dhaka, Book of Abstracts, p. 300-301.
- 73. Sakib, M.S., **Mondal, M.S.**, Munim, M.A. and Hussain, M.A. (2023). Tidal water level prediction on the coast of Bangladesh considering seasonal variability of tidal constituents, 9th International Conference on Water and Flood Management, October 14-16, Dhaka, Book of Abstracts, p. 332-333.
- 74. Munim, M.A., **Mondal, M.S.**, Sakib, M.S. and Hussain, M.A. (2023). Does harmonic analysis matter for estimation of standard high and low water levels? Reflections from coastal Bangladesh, 9th International Conference on Water and Flood Management, October 14-16, Dhaka, Book of Abstracts, p. 334-335.
- 75. Islam, S.B., Kabir, A., **Mondal, M.S.**, and Rahman, M.M. (2023). Assessment of the operational challenges and ways out of individual iron removal treatment unit: A study on Dhaka WASA 3-vessel IRP piloting project, 9th International Conference on Water and Flood Management, October 14-16, Dhaka, Book of Abstracts, p. 460-461.
- 76. Kabir, A., Islam, S.B., **Mondal, M.S.**, and Rahman, M.M. (2023). Analyzing sewage treatment services performance through protocol-based indicators: A case study on Dasherkandi and Pagla sewage treatment plants, 9th International Conference on Water and Flood Management, October 14-16, Dhaka, Book of Abstracts, p. 469-470.
- 77. Mohir, M.M.I., **Mondal, M.S.** and Sultana, R. (2023). Development of suspended sediment rating curve for the Feni River, Proceedings of International Conference on Planning, Architecture and Civil Engineering, 12-14 October, RUET, Rajshahi, pp. 1160-1164.
- 78. Kirtunia, R., Datta, M., Akther, A., Tori, F.T., Alam, S. and **Mondal, M.S.** (2023). Potential of rainwater harvesting in reducing surface runoff from a residential area in Dhaka city, 7th International Conference on Engineering Research, Innovation and Education, January 12-14, Sylhet, Bangladesh.
- 79. Islam, S.B., Rahman, S.M.T. and **Mondal, M.S.** (2023). District metered area for sustainable water supply in Dhaka city: Implementation challenges and wayouts, 11<sup>th</sup> International Perspective on Water Resources and the Environment, January 4-6, Dhaka, Book of Abstracts, pp. 29.
- 80. Alam, S., Sakib, M.S., Shampa, Murshed, S.B., Kirtunia, R., **Mondal, M.S.**, and Chowdhury, A.I.A. (2023). Assessment of urban flooding in Goranchatbari subcatchment in Dhaka city under changing climate, 11<sup>th</sup> International Perspective on Water Resources and the Environment, January 4-6, Dhaka, Book of Abstracts, pp. 46.
- 81. Islam, S.B. and **Mondal, M.S.** (2023). Assessment of household-level tipping points due to flood-induced damages, 11<sup>th</sup> International Perspective on Water Resources and the Environment, January 4-6, Dhaka, Book of Abstracts, pp. 54.

- 82. Kirtunia, R., Chowdhury, A.I.A., Mahmud, Z.H., **Mondal, M.S.** and Islam, M.R. (2023). Assessing surface water contamination of Goranchatbari sub-catchment in Dhaka city, 11<sup>th</sup> International Perspective on Water Resources and the Environment, January 4-6, Dhaka, Book of Abstracts, pp. 78.
- 83. Iqbal, A., **Mondal, M.S.**, Khan, M.S., Veerbeek, W. and Hakvoort, H. (2023). Flood forecasting in local area with 2D hydrodynamic model utilizing FFWC's river forecast, 11<sup>th</sup> International Perspective on Water Resources and the Environment, January 4-6, Dhaka, Book of Abstracts, pp. 111.
- 84. Shad, M.N., Afsaru, N., Liana, F.K., Zaman, A., Hasan, A. and **Mondal, M.S.** (2021). "Investigating the Potential for Establishing Blue Networks in Dhaka City by Integrating Water with Landscape Facilities", 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp.103.
- 85. Sakib, M.S., **Mondal, M.S.**, and Hussain, M.A. (2021). "Seasonal Variation of Major Tidal Constituents and Sub-Tidal Effect in the Coast of Bangladesh", 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp.154.
- 86. Sheonty, S.R. and **Mondal, M.S.** (2021). "A comparative Study Between Short- and Long-Reach Flow Simulations with One-Dimensional Hydrodynamic Model in Floodplain Environment", 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp.188.
- 87. Penny, G., Kryston, A., **Mondal, M.S.**, Bolster, D., Tank, J.L, Islam, M.R. and Muller, M.F. (2021). "Future Salinity and Streamflow Tradeoffs: Pareto Optimization of the Ganges Water Treaty", 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp.192.
- 88. Kashem, S., Islam, S.B. and **Mondal, M.S.** (2021). "Assessment of Gender Inequalities in Accessing Water: A Case Study on Tajgaon Slum of Dhaka City", 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp. 216.
- 89. Islam, S.B., Nahin, K.K., Huma, H. and **Mondal, M.S.** (2021). "Water Rights, Equity and Management: A Case Study on Water Hazard Vulnerable Slums in Dhaka City, Bangladesh". 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp. 220.
- 90. Kashem, S. and **Mondal, M.S.** (2021). "Explaining Water Pricing as a Determinant of Water Security: A Comparative Analysis Between Formal and Informal Settlements in Dhaka City", 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp. 250.
- 91. Tahsin, N., Subah, Z., Kashem, S., Nowreen, S., Murshed, S.B. and **Mondal, M.S.** (2021). "Water Security in Selected Slums of Dhaka City", 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp. 252.
- 92. Ferdoush, J. and **Mondal, M.S.** (2021). "Assessing Water Demand Management as a Strategy for Sustainable Water Supply in Dhaka City", 8th International Conference on Water and Flood Management (ICWFM-2021), Dhaka, Bangladesh, 29-31 March, pp. 275.
- 93. Sheonty, S.R. and **Mondal, M.S.** (2021). Hydrodynamic modeling of Atrai river flow using 1D HEC-RAS model, Proceedings of the 5th International Conference on Advances in Civil Engineering, March 4-6, CUET, Chattogram, Bangladesh, pages WRE-230 to WRE-236.
- 94. **Mondal, M.S.**, Islam, M.R., Islam, G.M.T., Bala, S.K., Hussain, M.A. and Haque, M.A. (2021). Construction of bridge on an intervened coastal river: Reflections from a hydromorphological study on Feni river in southeast Bangladesh, Proceedings of the 5th International Conference on Advances in Civil Engineering, March 4-6, CUET, Chattogram, Bangladesh, pages WRE-213 to WRE-221.
- 95. Tahsin, N., Subah, Z., Kashem, S., **Mondal, M.S.**, Nowreen, S. and Murshed, S.B. (2021). Understanding water insecurity dynamics in slums of Dhaka, Book of Abstracts

- of Water Security and Climate Change (WSCC) Conference, March 1-4, Hanoi, Vietnam, page 57.
- 96. Kryston, A., Penny, G., **Mondal, M.S.**, Islam, M.R., Tank, J.L., Bolster, D. and Muller, M. (2020). Informing the Ganges Water Treaty: Analysis of simulated transboundary streamflow and downstream salinity in Bangladesh, In AGU Fall Meeting, December 1-17, 2020, American Geophysical Union.
- 97. **Mondal, M.S.**, Bala, S.K., Islam, G.M.T., Haque, M.A., Islam, M.R. & Biswas, S. (2020). Hydro-morphology of Bangladesh rivers: Reflections from a large study, Proceedings of IABSE-JSCE Joint Conference on Advances in Bridge Engineering-IV, August 26-27, 2020, Dhaka, Bangladesh, A.S. Amin, Y. Okui, A.R. Bhuiyan, M. Rahman (eds.), pages 426-432.
- 98. Islam, M.R, **Mondal, M.S.** and Biswas, S. (2020). Historical Flood Inundation Studies at Several Important Locations of Dhaka City under Dhaka Mass Rapid Transit Development Project Line 1, Proceedings of the 5<sup>th</sup> International Conference on Civil Engineering for Sustainable Development (ICCESD 2020), February 7-9.
- 99. Biswas, S., **Mondal, M.S.** and Islam, M.R. (2020). Simulating flood risk due to climate change in the Padma river system using the 2D HEC-RAS model, Proceedings of the 5th International Conference on Civil Engineering for Sustainable Development (ICCESD 2020), February 7-9.
- 100. Islam, M.R. and Mondal, M.S. (2019). Field-based evaluation of local scour in complex piers of a bridge on the Kaliganga river. <u>7th International Conference on Water and Flood Management</u>, organized by Institute of Water and Flood Management, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh, 2-4 March, pp. 99-100.
- 101. **Mondal, M.S.** and Sakib, M.N. (2017). "Scale-dependent reliability of the PRECIS model for rainfall projection in coastal region of Bangladesh", Proceedings of the 6th International Conference on Water and Flood Management, organized by the Institute of Water and Flood Management and held during 4-6 March, Dhaka, pp. 561-571.
- 102. Jubayer, A. and **Mondal, M.S.** (2017). "Evaluation of drinking water technologies used in a south-western coastal area of Bangladesh", Proceedings of the 6th International Conference on Water and Flood Management, organized by the Institute of Water and Flood Management and held during 4-6 March, 2017, Dhaka, pp. 407-418.
- 103. Tehsin, S. and **Mondal, M.S.** (2017). "Assessing agricultural water security for different agro-ecosytems in a coastal area of Bangladesh", Proceedings of the 6th International Conference on Water and Flood Management, organized by the Institute of Water and Flood Management and held during 4-6 March, 2017, Dhaka, pp. 353-359.
- 104. Nowreen, S., **Mondal, M.S.** and Haque, P. (2017). "Flow characteristics and environmental flow requirements for the Dharla river, Bangladesh", Proceedings of the 6<sup>th</sup> International Conference on Water and Flood Management, organized by the Institute of Water and Flood Management and held during 4-6 March, 2017, Dhaka, pp. 105-114.
- 105. Mondal, M.S. and Sakib, M.N. (2016). "Scale-dependent reliability of the PRECIS model in rainfall projection for coastal areas in Bangladesh", <u>Proceedings of 3rd International Conference on Advances in Civil Engineering</u>, 21-23 December, CUET, Chittagong, pp. 797-802.
- 106. Saha, D. and Mondal, M.S. (2016). "Assessing the impact of climate change on sunflower yield using the AquaCrop model", Proceedings of the 3rd International Conference on Civil Engineering for Sustainable Development (ICCESD 2016), 12-14 February, Khulna University of Engineering and Technology (KUET), Khulna, Bangladesh, pp. 457-468.
- 107. Saha, D. and **Mondal, M.S.** (2016). "Assessing the impacts of climate change on dry season crop yields using the AquaCrop model", <u>International Conference on Sustainable Development (ICSD 2016)</u>, 4-5 February, University of Liberal Arts (ULAB), Dhaka, Bangladesh. [Accepted, presented and in press]

- 108. Saha, D, Hossain, M.S.S., **Mondal, M.S.** and Rahman, R. (2016). "Agricultural adaptation practices in coastal Bangladesh: Response to climate change impacts", Proceeding of 11th Global Engineering, Science and Technology Conference-2016, 18-19 December, 2015, BIAM Foundation, Dhaka, Bangladesh.
- 109. Habib, M. A., Saha, D. and **Mondal, M.S.** (2016). "An assessment on the perception alteration of the local people on the conventional land use pattern to achieve livelihood sustainability", <u>International Conference on Sustainable Development (ICSD 2016)</u>, 4-5 February, University of Liberal Arts (ULAB), Dhaka, Bangladesh. [Accepted, presented and in press]
- 110. Kibria, M.G., Saha, D. and **Mondal, M.S.** (2016). "Canal re-excavation: A viable option for agricultural productivity enhancement in a coastal region of Bangladesh", <a href="International Conference on Sustainable Development (ICSD 2016)">International Conference on Sustainable Development (ICSD 2016)</a>, 4-5 February, University of Liberal Arts (ULAB), Dhaka, Bangladesh. [Accepted, presented and in press]
- 111. Akanda, A.R., Biswas, S.K., Sarker, K.K., Mondal, M.S., Saleh, A.F.M., Rahman, M.M. and Mosleuddin, A.Z.M. (2015). Response of wheat, mustard and water melon to irrigation in saline soils, Proceedings of the conference on <u>Revitalizing the Ganges Coastal Zone: Turning Science into Policy and Practices</u>, E. Humpheys, T.P. Tuong, M.C. Buisson, I. Pukinskis and M. Phillips (eds.), pp. 492-503, CGIAR Challenge Program on Water and Food, Colombo.
- 112. Zaman, S., Mondal, M.S., Saleh, A.F.M., Akanda, M.A.R., Biswas, S.K., Habib, M.A., Moslehuddin, A.Z.M. and Abedin, M.A. (2015). Assessing the potential impacts of climate change on mustard yield using FAO AquaCrop model, Proceedings of the International Conference on Climate Change in relation to Water and Environment, organized by the Dhaka University of Engineering and Technology (DUET) and held during 9-11April, 2015, Gazipur, pp. 111-118.
- 113. Zaman, S., **Mondal, M.S.**, Saleh, A.F.M., Akanda, M.A.R., Biswas, S.K., Moslehuddin, A.Z.M. and Abedin, M.A. (2015). Simulating wheat yield under different irrigation treatments using AquaCrop model, Proceedings of the <u>Fifth International Conference on Water and Flood Management</u>, organized by the Institute of Water and Flood Management and held during 6-8March, 2015, Dhaka, pp. 229-238.
- 114. Saha, D. and **Mondal, M.S.** (2015). Simulation of boro rice yield in south-west coastal Bangladesh using the AquaCrop model, Proceedings of the <u>Fifth International Conference on Water and Flood Management</u>, organized by the Institute of Water and Flood Management and held during 6-8March, 2015, Dhaka, pp. 201-208.
- 115. Uddin, M.Z. and **Mondal, M.S.** (2015). Impact of urbanization on hydrological processes: a case study in the eastern part of Dhaka City, Proceedings of the <u>Fifth International Conference on Water and Flood Management</u>, organized by the Institute of Water and Flood Management and held during 6-8March, 2015, Dhaka, pp. 191-198.
- 116. Kumar, U., Jalal, M.R., Khan, M.S.A., Rahman, R., **Mondal, M.S.** and Huq, H. (2013). Use of a shared river by urban and peri-urban residents: water use conflicts and adaptation measures, Proceedings of the <u>Fourth International Conference on Water and Flood Management</u>, organized by the Institute of Water and Flood Management and held during 4-5 October, 2013, Dhaka, pp. 297-304.
- 117. Madhu, M.K. and **Mondal, M.S.** (2013). Trends in climatic variables and their combined effects on irrigation water requirement and yield of wheat, Proceedings of the Fourth International Conference on Water and Flood Management, organized by the Institute of Water and Flood Management and held during 4-5 October, 2013, Dhaka, pp. 537-544.
- 118. Jalal, M.R., **Mondal, M.S.**, Khan, M.S.A., Kumar, U., Rahman, R. and Huq, H. (2013). Salinity progression at Khulna: Anthropogenic or climate change induced, Proceedings of the Fourth International Conference on Water and Flood Management,

- organized by the Institute of Water and Flood Management and held during 4-5 October, 2013, Dhaka, pp. 621-630.
- 119. Nasrin, F. and **Mondal, M.S.** (2011). "Long-term changes in climatic variables in Bangladesh and their combined effects on irrigation water requirement in the dry season", Proceedings of the Third International Conference on <u>Water and Flood Management</u>, Organized by Institute of Water and Flood Management, held during 8-10 January, Dhaka, pp. 899-906.
- 120. Zaman, S. and Mondal, M.S. (2011). "Dimming in sunshine duration of Bangladesh and its impact on rice evapotranspiration and production ", Proceedings of the Third International Conference on <u>Water and Flood Management</u>, Organized by Institute of Water and Flood Management, held during 8-10 January, Dhaka, pp. 857-864.
- 121. **Mondal, M.S.**, Chowdhury, J.U. and Khatun, F. (2011). "Estimation of future water demands and potential resources for the Brahmaputra Barrage Command Area within Bangladesh", Proceedings of the Third International Conference on *Water and Flood Management*, Organized by Institute of Water and Flood Management, held during 8-10 January, Dhaka, pp. 415-426.
- 122. **Mondal, M.S.** (2011). "Review of regional water demand and resources in the Ganges-Brahmaputra-Meghna basins", Proceedings of the Third International Conference on <u>Water and Flood Management</u>, Organized by Institute of Water and Flood Management, held during 8-10 January, Dhaka, pp. 359-370.
- 123. Ghosh, P.K. and Mondal, M.S. (2011). "Economic valuation of the non-market benefits of a wetland of South-West Bangladesh towards sustainable wetland resource management", Proceedings of the Third International Conference on <u>Water and Flood Management</u>, Organized by Institute of Water and Flood Management, held during 8-10 January, Dhaka, pp. 117-123.
- 124.Ghosh, P.K., Islam, M.A., Mondal, M.S. and Hossain, R.B. (2010). "An assessment of the changes in the brackish water ecosystem of a tidal river in the coastal area of Bangladesh due to human intervention using fish indicator and its impact on the livelihood of the brackish water dependent community", Proceedings of the International Conference on <u>Application of Computer and Information Sciences to Nature Research</u>, Organized by State University of New York at Fredonia, held during 5-7 May, USA, pp. 79-83.
- 125.Saleh, A.J.M. and **Mondal, M.S.** (2009). "Irrigation intervention as a tool of socio-economic advancement: A case study of the Kawraid River Rubber Dam Project, Gazipur, Bangladesh", Proceedings of the second International Conference on <u>Water and Flood Management</u>, Organized by Institute of Water and Flood Management, held during 15-17 March, Dhaka, pp. 641-650.
- 126.Rahman, M. and **Mondal, M.S.** (2009). "Effect of irrigation with river water containing heavy metals on soil and rice yield in Dhamrai Upazilla, Dhaka", Proceedings of the second International Conference on <u>Water and Flood Management</u>, Organized by Institute of Water and Flood Management, held during 15-17 March, Dhaka, pp. 623-632.
- 127. **Mondal, M.S.**, Nasrin, F., Zaman, S. and Hossain, M.M.A.H. (2009). "Long-term changes in bright sunshine duration in Bangladesh and its effects on crop evapotranspiration", Proceedings of the second International Conference on *Water and Flood Management*, Organized by Institute of Water and Flood Management, held during 15-17 March, Dhaka, pp. 185-194.
- 128. **Mondal, M.S.**, Chowdhury, J.U. and Ferdous, M.R. (2008). "Risk-based evaluation of proposed Brahmaputra water development in meeting future water demand", Presented

- at the International Conference on <u>Water Resources Policy in South Asia</u>, Organized by South Asia Consortium for Interdisciplinary Water Resources Studies, held during 17-20 December, Colombo, Sri Lanka, (Abstract has been published).
- 129.**Mondal, M.S.** and Wasimi, S.A. (2007). "Choice of model type in stochastic river hydrology." Pre-Conference Paper Volume of the <u>International Conference on Water and Flood Management</u>, Organized by the Institute of Water and Flood Management, BUET, 12-14 March, Dhaka, pp. 633-640.
- 130. Wasimi, S.A. and **Mondal, M.S.** (2007). "Data mining for decision making in water resources." Pre-Conference Paper Volume of the <u>International Conference on Water and Flood Management</u>, Organized by the Institute of Water and Flood Management, BUET, 12-14 March, Dhaka, pp. 583-590.
- 131. Mondal, M.S. and Wasimi, S.A. (2003). "Forecasting of seasonal flow of the Ganges river in Bangladesh with SARIMA model", Proceedings of the <u>Second Annual Paper Meet and International Conference on Civil Engineering</u>, S. M. Seraj, M. A. Ali, and B. Ahmed, eds., jointly organized by the Institution of Engineers, Bangladesh (IEB) and Bangladesh University of Engineering and Technology (BUET), 17-18 July, BUET, Dhaka, pp. 1-12.
- 132. **Mondal, M.S.** and Wasimi, S.A. (2002). "Long-range prediction of flows in the Ganges for water resources and agricultural management in Bangladesh", <u>Central Queensland University Postgraduate Symposium</u>, 25 October, Rockhampton, Australia (full paper was published online: http://postgrad.cqu.edu.au/2002%20Submissionshtm.htm; last accessed on 02 December, 2006).
- 133. **Mondal, M.S.** and Chowdhury, J.U. (2001). "Joint flood risk in the Brahmaputra and the Ganges", <u>45th Convention of the Institution of Engineers</u>, <u>Bangladesh</u>, 17-19 February, Khulna.

#### d. Research Reports

- 134. **Mondal, M.S.**, D. Saha, M.S.S. Hossain, M.T. Islam, P.K. Das, M.A. Hossain, Z. Akhter, R. Rahman, T. Siddiqui, and S.N. Suckall (2015). Report on Adaptation Inventory in GBM-Bangladesh Delta, Unpublished DECCMA Report, Dhaka: BUET.
- 135.Allan, A., Hissen, N.F., Ghosh, A., Samling, C.L., Tagoe, C.A., Nelson, W., Mensah, A., Salehin, M., **Mondal, M.S.** and Spray, C. (2015). Stakeholder mapping for adaptation in deltas, DECCMA working paper, Available online at: www.deccma.com
- 136.Wolf, J., Bricheno, L., Rahman, M.M., Salehin, M., Haque, A., Islam, A.K.M.S., Islam, T., **Mondal, M.S.**, et al. (2015). Quantitative bio-physical modeling, Work Package 5: Final Report, ESPA Deltas Project, Available online at: <a href="https://www.espadeltas.net">www.espadeltas.net</a>
- 137.Khan, M.S.A., **Mondal, M.S.**, Jalal, M.R. and Kumar, U. (2014). "Vulnerability and adaptive capacity of urban communities in a multi-hazard coastal area of Bangladesh", Sponsored by CAFOD, UK, Duration: nine months (July 2013 to March 2014)
- 138.Khan, M.S.A., **Mondal, M.S.**, Sada, R. and Gummadilli, S. (2013), "Climatic trends and variability in South Asia: A case of four peri-urban locations", SaciWATERs, India and IDRC, Canada.
- 139.Hoque, M.M., Khan, M.S.A., Islam, T., Salehin, M., **Mondal, M.S.**, Islam, A.S., Islam, M., Paul, S., Baky, M.A.A. and Bhuiyan, M.S.R. (2013). "Development of flood hazard and risk maps with effect of climate change scenario", IWFM, BUET, Final Report, Sponsored by Climate Change Trust Fund (CCTF), Ministry of Environment and Forest, Dhaka.

- 140.**Mondal, M.S.**, Salehin, M., Huq, H., Azim, F., Monem, M. and Jahid, S.K. (2013). "Development of an institutional framework for management of rivers surrounding Dhaka city", IWFM, BUET, Final Report R01/2013.
- 141.Islam, A.K.M.S., Siddiquee, M.S.A., Islam, M.N. and **Mondal, M.S.** (2008). "Improving flood forecasting of Bangladesh using artificial neural network (ANN) and remotely sensed rainfall data", IWFM, BUET, Final Report.
- 142.**Mondal, M.S.**, Chowdhury, J.U. and Ferdous, M.R. (2008). "Risk-based evaluation of Brahmaputra water development in meeting future water demand, Technical Report 02: Risk-based evaluation of performance of proposed Brahmaputra barrage", IWFM, BUET, Final Report R02/2008, June.
- 143. **Mondal, M.S.**, Chowdhury, J.U. and Khatun, M.F. (2007). "Risk-based evaluation of Brahmaputra water development in meeting future water demand, Technical Report 01: Generation of synthetic flow of the Brahmaputra river using time series models", IWFM, BUET, Final Report R05/2007, June.
- 144. Saleh, A.F.M. and **Mondal, M.S.** (2007). "Impact of submergible embankment projects on Boro production in the Haor areas", IWFM, BUET, Final Report R01/2007, March.
- 145.Islam, M.Z., A.R. Datta and **Mondal, M.S.** (2001). "A study on drainage congestion of Beel Kuralia and its mitigation approach", IFCDR, BUET, July.
- 146.Islam, M.Z. and **Mondal, M.S.** (2001). "An experimental study on the grain size distribution of the sediment materials deposited over the flood plain due to embankment failure", IFCDR, BUET, July.
- 147.Saleh, A.F.M. and **Mondal, M.S.** (2000). "Performance evaluation of rubber dam projects in irrigation development", IFCDR, BUET, Final Report R 02/2000, April.
- 148. Saleh, A.F.M., Ahmed, S.M.U., Miah, M.M., Rahman, R., Salehin, M. and **Mondal, M.S.** (1998). "Performance evaluation of FCD/FCDI projects during 1998 flood", IFCDR, BUET, December.

#### e. Policy Briefs

- 149.Khan, M.S.A., **Mondal, M.S.**, Jalal, M.R., Kumar, U., Sloman, R., Kulsum, U. and Nyunt, P. (2014). Urban risk: Hazards and vulnerability in Khulna and Bagerhat cities, Bangladesh, http://www.preventionweb.net/files/submissions/39005\_summaryofurbanriskresearchba
  - http://www.preventionweb.net/files/submissions/39005\_summaryofurbanriskresearchbangladeshfinal.pdf
- 150.Khan, M.S.A., **Mondal, M.S.**, Jalal, M.R., Kumar, U., Sloman, R., Kulsum, U., Crowley, K. and Nyunt, P. (2014). Urban participatory risk assessment tools: A review from Bangladesh,
  - http://www.preventionweb.net/files/39013\_39005summaryreviewofparticipatoryri.pdf

### f. Advisory/Consultancy Services

151. Worked as the Team Leader-cum-Hydrodynamic Modeler in the project: Morphological Study of Meghna River Related to River Crossing Tower No. 161 and 162 of Brahmanbaria-Narsingdi 132kV Double Circuit Transmission Line under GMD, Narsingdi, Client: Power Grid Company of Bangladesh Ltd (PGCB), Duration: 15 July – 30 September, 2021.

- 152. Worked as the Team Leader in the project: Hydrological and Morphological Study for Construction of Bera Bridge over Hurasagar River at 23rd km of Madhpur-Santhia-Bera Zilla Highway under Pabna Road Division, Client: Roads and Highways Department, Pabna Road Circle, Pabna, Duration: 27 June 7 September, 2021.
- 153. Worked as the Team Leader/ Hydraulic Modeler-cum-Morphologist in the project: Feasibility Study in Terms of Hydrology, Morphology and Water Management Issues of Proposed 3 (Three) Rubber Dams on the Narasunda River in Upazila: Kishoreganj-Sadar, District: Kishoreganj, Client: Mymensingh Region Rural Infrastructure Development Project, LGED, Duration: 22 December, 2020 20 May, 2021.
- 154. Worked as a Hydrologist-cum-Modeler in the project: Environmental Impact Assessment of Proposed 6 km Long Embankment cum Road under 2x600 MW Matarbari Coal Based Thermal Power Plant Construction Project at Matarbari, Moheshkhali, Cox's Bazar, Client: Coal based Power Generation Company Bangladesh Limited (CPGCBL), Duration: 14 September 20 December, 2015.
- 155. Worked as a Climate Change/Disaster Risk Specialist in the project: City Region Development Project (CRDP), Client: Local Government Engineering Department (LGED), Duration: May-November 2015.
- 156. Worked as a Team Leader in the project: Groundwater Resources Development in Bangladesh: Contribution to water supply and constraints to sustainability, Final Report, July 2015, Federal Department of Foreign Affairs (FDFA), The Embassy of Switzerland, Swiss Agency for Development and Cooperation (SDC), Dhaka.
- 157. Worked as a Stochastic Hydrologist in the project: Support services on mathematical modeling for Bangladesh side of the India-Bangladesh Joint Study Team for joint study on proposed Tipaimukh hydro-electric (multipurpose) project of India, Joint Rivers Commission, Bangladesh.
- 158. Worked as a Risk Management Expert in the project: Study to assess impact of disaster on market systems at char areas, Swisscontact-Bangladesh.
- 159. Worked as a Co-Investigator in "Water security in peri-urban South Asia: Adapting to climate change and urbanization", in collaboration with SaciWATERs, India and Nepal Engineering College. Sponsored by International Development Research Centre, Canada. Duration: three years (12 July 2010 to 11 July 2013).
- 160.Involved in the project: Action research on the relationship between changing weather patterns, food security, social inequalities and human mobility" with CARE Bangladesh conducted during September 2011-August 2013.
- 161. Worked as a Team Leader in the project: Methodological framework for technical assessment of small scale flood mitigation and water development measures, Final Report, September 2012, ActionAid Bangladesh.
- 162. Worked as a team member in the project: Water Availability Analysis for BSRM Steel Mill in Mirsarai Area, Draft Final Report, August 2012, BSRM Logistics Limited.
- 163. Worked as a Team Leader in the project: Spatial and temporal distribution of temperature, rainfall, sunshine and humidity in context of crop agriculture, Final Report, February 2012, Comprehensive Disaster Management Program, Ministry of Food and Disaster Management.
- 164. Worked as a hydrologist in the following RHD road projects:
  - a. Hydrological & morphological study using mathematical model and EIA for the Baniachong-Nabiganj Road (Habiganj Road Division)

b. Hydrological & morphological study using mathematical model and EIA for proposed Derai-Sulla-Azmeriganj road at Sunamganj District

165. Worked as a hydrologist *inter alia* in the following <u>RHD</u> bridge projects:

- a. Hydrological & morphological study of a PC girder bridge on Shariatpur-Gonganagar-Kazirhat road under Shariatpur Road Division.
- b. Hydrological & morphological study for the proposed Barunatoli bridge over the Nabaganga River under Magura Road Division.
- c. Hydrological & morphological study for the proposed bridge across the Katakhal River on Companigani-Chhatak road under Sylhet Road Division.
- d. Hydrological & morphological study of the proposed PC girder bridge at 30<sup>th</sup> km of Pagla-Jagannathpur-Raniganj-Auskandi road over Kushiyara River under Sunamganj Road Division.
- e. Hydrological & morphological study and EIA of the Little Feni River Bridge under Noakhali Road Division.

166. Worked as a hydrologist/team leader *inter alia* in the following <u>LGED</u> bridge projects:

- a. Hydro-morphological Study of the Three Long Bridges under the 'Second Rural Transport Improvement Project (RTIP-II)' of Local Government Engineering Department (LGED), Client: Resource Planning and Management Consultants (Pvt.) Ltd. (RPMC), Duration: 24 November, 2015-7 January, 2016.
- b. Hydrological & morphological study and EIA of the Bhairab bridge over the Shitalpati river, Kishoreganj.
- c. Hydrological & morphological study and EIA of 36 road bridges over different rivers in Bangladesh.
- d. Feasibility of 1000m Teesta bridge at Sundargani Upazila.
- e. Feasibility of 700m Teesta bridge at Kaliganj Upazila.
- f. Hydrological & morphological study and EIA of four bridges in the Khulna region.
- g. Hydrological & morphological study and EIA of two road bridges in Patuakhali and Tangail.
- h. Hydrological & morphological study and EIA of two road bridges in Serajganj.
- i. Hydrological & morphological study and EIA of 18 road bridges over different rivers in Bangladesh.
- 167. Worked as a team member in the project: A comparative analysis of different types of flood shelters in Bangladesh, Final Report, August 2010, Client: Plan International Bangladesh.
- 168. Worked as a Hydro-Meteorologist in the project: Hydrological study for the Chittagong site of Asian University for Women, Draft Report, March 2009, Client: Buro Happold Limited, UK and Asian University for Women, Chittagong.
- 169. Worked as a Team Leader in the project: Characterizing long-term changes of Bangladesh climate in context of agriculture and irrigation, Final Report, March 2008, Client: Climate Change Cell, Department of Environment.

- 170. Worked as a team member in the project: Regional Implications of water resources management interventions in South Asia, Final Report, December 2007, Client: ActionAid Bangladesh.
- 171. Worked as a team member in the project: Updating of the existing groundwater and land subsidence model project, Sponsored by Dhaka WASA, Institute of Flood Control and Drainage Research and Department of Water Resources Engineering, Bangladesh University of Engineering and Technology, Final Report (December 2000), Draft Final Report (July 2000), Interim Report (March 2000) and Inception Report (September 1999).
- 172. Worked as a team member in the project: Impact of surface water irrigation on groundwater table, OGDA Note # 4, IFCDR, BUET, Sponsored by Water Resources Planning Organization (WARPO), National Water Management Plan Project, Options for Ganges Dependent Area, Ministry of Water Resources, Government of the People's Republic of Bangladesh, July 2001.
- 173. Worked as a team member in the project: Studies of low flows of the Ganges, Gorai and Jamuna rivers, OGDA Note # 3, IFCDR, BUET, Sponsored by Water Resources Planning Organization (WARPO), National Water Management Plan Project, Options for Ganges Dependent Area, Ministry of Water Resources, Government of the People's Republic of Bangladesh, April 2001.
- 174. Worked as a team member in the project: Hydrological studies of the Ganges, Brahmaputra and rivers of Ganges Dependent Area (GDA), Task-2, IFCDR, BUET, Sponsored by Water Resources Planning Organization (WARPO), National Water Management Plan Project, Options for Ganges Dependent Area, Ministry of Water Resources, Government of the People's Republic of Bangladesh, February 2001.

### g. Thesis Titles

- 175. **Ph.D.** Risk-based evaluation of performance in water management for the Ganges delta within Bangladesh, Central Queensland University, Australia, 28 November 2005.
- 176. *M.Sc. Engg.* Performance evaluation of some selected deep and shallow tubewells in irrigation development, Department of Water Resources Engineering, BUET, 23 March 2000.
- 177. **B.Sc. Engg.** Study of stage-discharge relation at a station, Department of Water Resources Engineering, BUET, July 1997.

#### h. Presentation in Conferences/Seminars

- 178.Sakib, M.S., Murshed, S.B., **Mondal, M.S.**, Shampa, Chowdhury, A.I.A. (2022). Challenges of projecting rainfall for Dhaka city, <u>International Conference on Climate Change</u>, Department of Meteorology, University of Dhaka, 10-11 December.
- 179.Tahsin, N., **Mondal, M.S.** and Murshed, S.B. (2022). "Analysis of Long-Term Rainfall Patterns for Dhaka in Different Emission Scenarios", 1st Virtual MeteoXchange ECS Conference, University Partnership for Atmospheric Sciences, Germany, 17-18 March.
- 180. Sheonty, S.R. and **Mondal, M.S.** (2022). "A Comparative Study between Short- and Long-Reach Flow Simulations with One-Dimensional Hydrodynamic Model in Floodplain Environment", Paper ID 52, 3rd International Conference on Research & Innovation in

- <u>Civil Engineering</u>, 7-8 January, Department of Civil Engineering, Southern University Bangladesh, Chattogram.
- 181. Suckall, N., Nicholls, R.J., Vincent, K., Mensah, A., Hazra, S., Dey, S. and **Mondal, S.** (2015). "Understanding adaptation in African and Asian deltas". <u>American Geophysical Union Fall Meeting 2015</u>, San Francisco, 14-18 December.
- 182.Kibria, M.G., Saha, D. and **Mondal, M.S.** (2015). "Local adaptation practices in response to a super cyclone Aila in the coastal regions of Bangladesh", presented at the <u>Gobeshona Conference for Research on Climate Change in Bangladesh</u> held during 8-11 January at the Independent University, Bangladesh (IUB), Dhaka.
- 183.Habib, M.A., **Mondal, M.S.**, Saleh, A.F.M., Akanda, M.A.R., Biswas, S.K. and Moslehuddin, A.Z.M. (2015). "Assessment of impact of climate change on wheat yield using the AquaCrop model", presented at the <u>Regional Forum on Climate Change 2015 (RFCC 2015): Low Carbon and Climate Resilient Societies: Bridging Science, Practice, and Policy held during 1-3 July at the Asian Institute of Technology, Thailand.</u>
- 184. Salehin, M., **Mondal, M.S.**, Clarke, D., Lazar, A., Chowdhury, M.A. and Nowreen, S. (2014). "Spatial variation in soil salinity in relation to hydro-climatic factors in southwest coastal Bangladesh", presented at the International Conference on <u>Deltas in Times of Climate Change II: Opportunities for People, Science, Cities and Business</u>, held during 24-26 September, Rotterdam, Netherlands.
- 185.**Mondal, M.S**. (2013). "Climatic trend and variability in South Asia and their potential implications for peri-urban water security", presented at the <u>Adapting to Climate Change and Water Security in Asia</u>, held during 18-20 June at Kathmandu.
- 186.Kumar, U., Khan, M.S.A., Rahman, M.R., **Mondal, M.S.** and Huq, H. (2011). "Water security in peri-urban Khulna: Adapting to climate change and urbanization", Presented at the <u>Coastal Water Convention</u>, held during 29-30 January at Khulna.
- 187. **Mondal, M.S.**, Huq, H. and Salehin, M. (2010). "Evaluation of institutional arrangements for governance of rivers surrounding Dhaka city", Presented at the 5<sup>th</sup> South Asia Regional Research Workshop on <u>Globalization of Governance: Implications for Water Management in South Asia</u>, Organized by South Asia Consortium for Interdisciplinary Water Resources (SaciWATERs), India and Royal Society for Protection of Nature, Bhutan, held during 3-5 May at Taj-Tashi, Thimphu, Bhutan.
- 188. **Mondal, M.S.**, Nasrin, F., Zaman, S. and Hossain, M.M.A. (2008). "Long-term changes in sunshine in Bangladesh and its effects on rice irrigation and production", Presented at the conference on *Financing for Climate Change: Challenges and Way Forward ? 2008*, Organized by Unnayan Onneshan, held during 16-17 August at LGED Bhaban, Agargaon, Dhaka-1207.
- 189. **Mondal, M.S.** and Hossain, M.M.A. (2008). "Characterizing long-term changes of Bangladesh climate in context of irrigation and agriculture", Presented at the TAG (Technical Advisory Group) workshop on <u>Adaptation Research Activities to Climate Change</u>, Organized by the Climate Change Cell of Department of Environment, held on 26 June at PKSF Conference Room-I, Agargaon, Dhaka.
- 190.Salehin, M., **Mondal, M.S.** and Haque, A. (2008). "Regional implications of water management interventions in South Asia", Presented at the international seminar on <u>Food Security and Water Issues in South Asia</u>, Jointly Organized by Bangladesh Unnayan Parishad and ActionAid, Dhaka, held on 11 June at CIRDAP auditorium, Dhaka.
- 191.Mondal, M.S. (2008). "Risk indicators in future water demand and resource balance for the Brahmaputra Dependent Area", Presented at the <u>Annual Stakeholders Workshop</u> 2007 of <u>Indo-Gangetic Basin</u>, Jointly Organized by Bangladesh Agricultural Research

- Council (BARC) and Bangladesh Rice Research Institute (BRRI), held at BARC, Farmgate, Dhaka, during 27-28 February.
- 192.Saleh, A.F.M. and **Mondal, M.S.** (2006). "Impact of submergible embankment projects on Boro production in the *Haor* areas", IWFM, BUET, 29 August.
- 193.**Mondal, M.S.** (2005). "Risk-based evaluation in meeting future water demand of the Ganges Dependent Area", IWFM, BUET, 27 December.
- 194.**Mondal, M.S.** and Wasimi, S.A. (2003). "Impact of climate change on dry season water demand in the Ganges delta of Bangladesh." <u>Central Queensland University Postgraduate Symposium</u>, 31 October, Rockhampton, Australia
- 195.Islam, M.Z., A.R. Datta and **Mondal, M.S.** (2003). "A study on drainage congestion of Beel Kuralia and its mitigation approach", IFCDR, BUET, 19 January.
- 196.Islam, M.Z. and **Mondal, M.S**. (2002). "An experimental study on the grain size distribution of the sediment materials deposited over the flood plain due to embankment failure", IFCDR, BUET, 04 February.
- 197.Saleh, A.F.M. and **Mondal, M.S.** (2000). "Performance evaluation of rubber dam projects in irrigation development", IFCDR, BUET, 25 October.
- 198. **Mondal, M.S.** and Rahman, R. (1999). "Future of the Nagor river project after 1998 flood", *43rd Convention of the Institution of Engineers, Bangladesh*, 5-8 March, Dhaka.

# Supervision of Master's Thesis and PG. Diploma Project

- 1. Assessment of the Variability in Nutrient Content of Water and Deposited Sediment in Selected Tidal Basins of Bangladesh, M.Sc. (WRD) Thesis, defense held on 16 November 2022, (by Ms. Nureza Hafiz).
- 2. Studying the meander bend migration of the Arial Khan River, M.Sc. (WRD) Thesis, defense held on 20 March 2022, (by Ms. Jannatul Ferdous).
- 3. Sensitivity analysis for channel-routing option for prediction of flash floods in northeastern Bangladesh, M.Sc. Thesis, Department of Meteorology, Faculty of Earth and Environmental Sciences, University of Dhaka, defense held on 29 January 2022, (by Ms. Nachimun Nahar Mimmi).
- 4. Flood propagation assessment for developing a location-specific flood forecasting methodology in a floodplain, M.Sc. (WRD) Thesis, defense held on 27 November 2021, (by Mr. Ashik Iqbal).
- Development of a Water Pricing Model for Domestic Water Uses in Dhaka City Using IWRM Framework, M.Sc. (WRD) Thesis, defense held on 23 October 2021, (by Ms. Sumaia Kashem).
- Assessment of flood risk in Madaripur Sadar Upazila under climate change using an integrated approach, M.Sc. (WRD) Thesis, defense held on 10 October 2021, (by Mr. Md. Sadiul Alam).
- 7. A study between short- and long-reach flow simulations with 1D hydrodynamic model in a floodplain environment, M.Sc. (WRD) Thesis, defense held on 19 June 2021, (by Ms. Sabrina Rashid Sheonty).
- 8. Development of adaptation strategies to groundwater level declination in Dhaka city, M.Sc. (WRD) Thesis, defense held on 29 May 2021, (by Ms. Mehanaz Moshfika).

- Assessing the impacts of the Padma river stabilization and its embankment failure through a combined 1D and 2D hydrodynamic model simulation, M.Sc. (WRD) Thesis, defense held on 28 October 2020, (by Mr. Subir Biswas).
- 10. Water poverty for different livelihood groups in peri-urban areas in a changing environment, M.Sc. (WRD) Thesis, defense held on 4 January 2020, (by Ms. Lamiya Sharmeen Jaren)
- 11. Assessing agricultural water security in different agro-ecosystems of southwest Bangladesh using analytic hierarchy process, M. Sc. (WRD) Thesis, defense held on 11 September 2019, (by Ms. Sumayyah Tehsin).
- 12. Assessment of livelihood adaptation strategies to climate variability in a coastal area of southwest Bangladesh, M. Sc. (WRD) Thesis, defense held on 15 June 2019, (by Ms. Sabrina Mehzabin).
- 13. Field-based evaluation of local scour in complex piers of a bridge on the Dhaleswari river, M. Sc. (WRD) Thesis, defense held on 29 September 2018, (by Mr. Md. Rezaul Islam)
- 14. Risk-based determination of polder height against storm surge in the south-west region of Bangladesh, M. Sc. (WRD) Thesis, defense held on 8 January 2018, (by Ms. Shamrita Zaman)
- 15. Prospect of rabi crops in south-west coastal area under climate change scenarios, M. Sc. (WRD) Thesis, defense held on 28 March 2016, (by Ms. Debanjali Saha).
- Assessing environmental flow for the Kobadak River and developing a framework for its maintenance, M. Sc. (WRD) Thesis, defense held on 29 February 2016, (by Mr. Sk. Abu Jahid).
- 17. Evaluation of drinking water technologies used in south-western coastal Bangladesh: a case study, M. Sc. (WRD) Thesis, defense held on 25 November 2015, (by Mr. Abu Jubayer).
- 18. Green water defense as flood mitigation approach for Dhaka district, Master in Disaster Management Dissertation, Spring 2015, (by Ms. Deeba Farzana Moumita).
- 19. Impact of urbanization on hydrological processes: a case study in the eastern part of Dhaka City, PG. Dip. (WRD) Report, defense held on 28 April 2014, (by Mr. Md. Jamal Uddin).
- 20. Evaluation of institutional and technical aspects of Barisal Irrigation Project in relation to its performance, M. Sc. (WRD) Thesis, defense held on 14 February 2012, (by Ms. Mousumi Datta).
- 21. Trends in climatic variables and their combined effects on irrigation water requirement and yield of wheat, M. Sc. (WRD) Thesis, defense held on 4 January 2012, (by Mr. Malay Krishna Madhu).
- 22. Post cyclone rehabilitation of agriculture in the Sidr affected areas in southwest Bangladesh, Master in Disaster Management Dissertation, Fall 2011, (by Mr. Ratan Chandra Biswas).
- 23. Assessment of environmental parameters in relation to different agro-water management practices in south-west coastal region of Bangladesh, M. Sc. (WRD) Thesis, defense held on 27 February 2011, (by Ms. Nazia Hassan).
- 24. Evaluating the impact of a flood control and drainage project on poverty using participatory poverty assessment method, M. Sc. (WRD) Thesis, defense held on 9 February 2011, (by Ms. Rahima Binta Hossain).

- 25. Economic valuation of the use and non-use attributes of a coastal wetland for better management of its resources, M. Sc. (WRD) Thesis, defense held on 29 November 2010, (by Mr. Prosun Kumar Ghosh).
- 26. Assessment of the impacts of pesticide use in agricultural land on the ecological resources of the Arial Beel, M. Sc. (WRD) Thesis, defense held on 8 June 2009, (by Mr. Kazi Mohammad Iqbal Hossain).
- 27. Impact of Bangshi River water quality on rice yield, M. Sc. (WRD) Thesis, defense held on 31 March 2009, (by Mr. Masudur Rahman).
- 28. Solar dimming in Bangladesh and its potential impacts on rice evapotranspiration and production, M. Sc. (WRD) Thesis, defense held on 9 February 2009, (by Ms. Sinora Zaman).
- 29. Trends in climatic variables and their combined effect on crop evapotranspiration, M. Sc. (WRD) Thesis, defense held on 13 January 2009, (by Ms. Farzana Nasrin).
- 30. Impact of groundwater irrigation on dry season flow of the Tangan River, PG. Dip. (WRD) Report, defense held on 01 July 2008, (by Ms. Mousumi Datta).
- 31. Impacts of the Kawraid River Rubber Dam Project on agricultural performance and poverty, M.Sc. (WRD) Thesis, defense held on 03 May 2008, (by Mr. Abu Jafar Md. Saleh).

# **Advanced Training**

- Participated in the training course on 'Spatial and temporal climate change analysis using CORDEX regional climate models over South Asia for Bangladesh' from 13-15 December 2021 in Dhaka. The training was organized jointly by International Centre for Integrated Mountain Development (ICIMOD), Nepal, and Met Office, UK with support from World Climate Research Program (WCRP) and Coordinated Regional Climate Downscaling Experiment (CORDEX)/Swedish Meteorological and Hydrological Institute (SMHI).
- Participated in the virtual training courses on 'Inter-Disciplinary Field Research Methods' and 'Gender and Water' under the SAWA Leadership Program on Climate Change from 29th September 29 October 2020. The training was organized jointly by South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India, and University of Peradeniya, Kandi, Sri Lanka.
- Participated and facilitated the training course on Leadership and Research Methods for Interdisciplinary Water Research held during 26 August to 7 September 2019 in Chennai, India. The training was organized jointly by the Center for Water Resources, Anna University, Chennai and South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India. It was sponsored by the IDRC-SAWA Leadership Program on Climate Change and the Cap-Net, South Africa.
- Participated and facilitated the training course on Leadership and Research Methods for Interdisciplinary Water Research held during 24 August to 5 September 2018 in Kathmandu, Nepal. The training was organized jointly by Nepal Engineering College and South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India. It was sponsored by the IDRC-SAWA Leadership Program on Climate Change and the Cap-Net, South Africa.

- Participated in the regional training of the South Asian Water (SAWA) Fellows on Interdisciplinary Research Concepts and Methodologies held during 28 November to 3 December 2015 in Kandy, Sri Lanka. The training was organized jointly by the Postgraduate Institute of Agriculture (PGIA), University of Peradeniya, Kandy, Sri Lanka and South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India. It was sponsored by the IDRC-SAWA Fellowship Project and the Cap-Net, South Africa.
- Participated in the regional training on Interdisciplinary Research: Concepts and Methodologies held during 18-22 December 2014 in Dhaka, Bangladesh. The training was organized jointly by the Institute of Water and Flood Management and South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India. It was sponsored by IDRC-SAWA Fellowship Project.
- Participated in the Trainers' Workshop on Gender and Water held during 8-11 September 2014 in Dhaka, Bangladesh. The workshop was organized by the Gender and Water Program Bangladesh (GWAPB).
- Participated in a training of trainers course on The Use of Earth Observation Tools in Support of IWRM held during 3-7 December 2012 at ITC, The Netherlands. The program was organized jointly by Cap-Net, ITC, Caribbean WaterNet and Malaysian Water Partnership.
- Attended the Customized Training Program on Basic and Advanced Data Analysis
   Using SPSS held during 19-23 September 2011 at Sambodhi Research and
   Management Institute, New Delhi, India. The program was organized by the South Asia
   Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad,
   India under the Peri-Urban project.
- Participated in Delft3D Morphological Modeling Training Course held during 4-9 June 2011 at IWM, Dhaka. The course was conducted under the Bangla-Dutch research initiative on flood risk management and morphological assessment.
- Participated in Training of Trainers on Interdisciplinary Field Research Methodology
  held during 6-15 December 2010 at Cox's Bazar, Bangladesh. The workshop was
  organized jointly by the Institute of Water and Flood Management and South Asian
  Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad,
  India. It was sponsored by Crossing Boundaries Project.
- Participated in Training of Trainers in Integrated Water Resources Management (IWRM) (Regional Program) held during 16-25 September 2010 at Kandy, Sri Lanka. The workshop was organized jointly by the Postgraduate Institute of Agriculture (PGIA), University of Peradeniya, Sri Lanka and South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India. It was sponsored by Crossing Boundaries Project and Cap-Net.
- Participated in Regional Training of SAWA Fellows on Interdisciplinary Research in Water Resources Management held during 24 August-05 September 2010 in Dhaka and Khulna, Bangladesh. The training was organized jointly by the Institute of Water and Flood Management (IWFM) of BUET and SaciWATERs, India.
- Attended the workshop on Space Syntax: An Evidence Based Methodology towards
   Sustainable Urban Development held on 30 May 2010 at BUET. The workshop was
   organized by the Department of Architecture, BUET.
- Participated in Staff Training on Water and Rights held during 5-12 January 2010 in Kathmandu, Nepal. The training was organized jointly by South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India and Nepal Engineering College (NEC), Kathmandu, Nepal.

- Completed the ToT Course on *IWRM Practices: Global and Bangladesh Perspective* held during 26-31 December 2009 at CEGIS, Dhaka. The training was organized jointly by CEGIS and UTTARAN in cooperation with Bangladesh Water Partnership.
- Attended the South Asian Water (SAWA) Fellows Training on Participatory Field Research Methodologies held during 2-13 September 2009 in Kandy, Sri Lanka. The training was organized jointly by South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India and Postgraduate Institute of Agriculture (PGIA), University of Peradeniya, Sri Lanka.
- Participated in the training workshop on <u>Promoting Integrity and Accountability in</u> <u>Water</u> held during 1-3 June 2009 in Cape Town, South Africa. The training was jointly organized by the University of the Western Cape and African Centre for Water Research and funded by UNDP Water Governance Facility at SIWI, Cap-Net and Water-Net.
- Participated in the SAWA Fellows training including field practices held during 2-13 September 2008 in Nepal. The training was jointly organized by the SaciWATERs India, Nepal Engineering College and SAGUN, Nepal.
- Participated in the Staff Training on *Participatory Field Research Methodology* held during 6-13 May 2008 in Kathmandu, Nepal. The training was jointly organized by the SaciWATERs, Hyderabad and Nepal Engineering College in technical facilitation of SAGUN, Kathmandu.
- Attended the workshop for Reader in <u>Civil Society in Water Governance in South Asia</u> held during 10-12 October 2007 at Mulshi, Maharastra, India. The workshop was jointly organized by the SaciWATERs, Hyderabad and Tata Institute of Social Sciences (TISS), Mumbai.
- Participated in the South Asia Staff Training Program on <u>Water and Equity</u> held during 3-9 October 2007 at Pune, Maharastra, India. The course was jointly organized by the SaciWATERs, Hyderabad and Society for Promoting Participative Ecosystem Management (SOPPECOM), Pune.
- Completed the certificate course on *Field Research Methodology Training of Regional Crossing Boundaries Project* held during 12-20 August 2006 at the Rigs Inn Hotel, Dhaka. The course was organized by the Bangladesh Centre for Advanced Studies and the Institute of Water and Flood Management under the Regional Crossing Boundaries project sponsored by the Government of Netherlands. The SaciWATERs at Hyderabad, India, is coordinating the implementation of the project.
- Attended the executive course on *Essentials of Risk Management* held during 28
  February-1 March 2006 at Kolkata, India. The course was organized by Jadavpur
  University, Kolkata, under the RISKPLAN project sponsored by the European Union
  under the Asia-Link program.
- Attended the short course on Coastal Zone Management held during 21-24 January 2006 at DCE, BUET.
- Attended the international workshop on Risk Management in Municipal Infrastructure Projects held on 27 November 2005 at DCE, BUET.
- Attended the short course on **Remote Sensing and GIS in Water Management** held during 21-24 November 2005 at DCE, BUET.
- Completed the Training of Trainers course on Conflict Resolution and Negotiation Skills for Integrated Water Resources Management, Dhaka, organized jointly by Bangladesh Centre for Advanced Studies (BCAS) and Cap-Net/UNDP, 1-5 August 2005.
- Attended a training workshop on *Introduction to Endnote* held on 7 April 2005 at Central Queensland University, Australia.

- Attended a two-day workshop on *Thesis Writing* at Central Queensland University, Australia, 2004.
- Attended training workshops on Statistical Package for Social Sciences (SPSS) and Structural Equation Modelling (SEM) at Central Queensland University, Australia, 7-13 November 2003.
- Attended the *Basic Statistics* Course for Post-graduate students at Central Queensland University, Australia, 25-27 March 2003.
- Completed the *Visual C++ Programming Language* Course held during 9 Sep-14 Nov 2000 at BUET.
- Completed the Water Supply and Waste Management Course held during 28-31 July 1997 at BUET.

# **Invited Lectures/keynotes**

- Presented the keynote on 'Water is life, water is food. Leave no one behind' on World Food Day organized by the Ministry of Agriculture and held at BARC, Farmgate, Dhaka on 16 October 2023.
- 2. Delivered a presentation on 'Community-led management of micro-watershed in south-west coastal Bangladesh' organized by Solidaridad Network Asia and held at BARC, Farmgate, Dhaka on 6 October 2023.
- 3. Delivered a lecture on 'IWRM: from Concepts to Practice' in a training workshop titled 'SAFAL for IWRM' organized by Solidaridad Network Asia and held at BRAC Learning Center at Jashore on 11 April 2023.
- 4. Participated as a Panel Discussant in a National Seminar on 'Vulnerable River-Khals, Haor-Waterbodies and People's Livelihoods & Environmental Security' organized by Water Rights Forum in collaboration with Association for Land Reform and Development (ALRD) and held on 21 March 2023 at the CIRDAP Auditorium, Dhaka.
- Participated as a Panel Discussant in a Seminar on 'Protection of Rivers, Waterbodies & Agricultural Lands and Conservation of Forests & Hills' organized by Water Rights Forum in collaboration with Association for Land Reform and Development (ALRD) and held on 10 October 2017 at the National Press Club, Dhaka.
- 6. Participated as a Panel Discussant in a Public Hearing on 'Government Actions in Solving Water Logging Problems and People's Demand' organized by the Association for Land Reform and Development (ALRD) and Bangladesh Environmental Lawyers' Association (BELA) and held on 19 October 2016 in Dhaka.
- 7. Participated as a Panel Discussant on 'Water Problems and Marginal People's Rights' in National Convention on Water Rights-2016 organized by Water Rights Forum and held on 20 March in Dhaka.
- 8. Worked as a resource person in the Regional Training of South Asian Water (SAWA) Fellows on **Interdisciplinary Research Concepts and Methodologies** organized jointly by the Postgraduate Institute of Agriculture (PGIA), University of Peradeniya, Kandy, Sri Lanka and South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India. It was sponsored by IDRC-SAWA Fellowship Project and Cap-Net and held at Kandy, Sri Lanka during 28 November-3 December 2015 and delivered three lectures on <u>Water Resources Management in Bangladesh: An Overview</u>, Statistical Sampling in Social Research and Development and Administration

- of Questionnaire in Social Research. The training workshop was sponsored jointly by the IDRC-SAWA Fellowship Project and the Cap-Net, South Africa.
- 9. Worked as a resource person in the regional training on Interdisciplinary Research: Concepts and Methodologies organized jointly by the Institute of Water and Flood Management and South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India and held during 18-22 December 2014 in Dhaka, Bangladesh and delivered two lectures on <a href="Statistical Sampling in Social Research">Statistical Sampling in Social Research</a>. The training was sponsored by the IDRC-SAWA Fellowship Project.
- 10. Participated as a Panel Discussant in a Dialogue on 'The Free Flow of Rivers: Peoples' Perspective' organized by the ActionAid Bangladesh and held on 22 October 2014 in Dhaka.
- 11. Worked as a resource person in a training program on **Water Policy, Management and Rights** organized by the Water Rights Forum (WRF) and held at Association for Land Reform and Development (ALRD), Lalmatia during 19-20 April 2013 and delivered a lecture on Uses, Demand and Availability of Water in Bangladesh: An Overview.
- 12. Worked as a resource person in a training program on **Water Policy, Management and Rights** organized by the Water Rights Forum (WRF) and held at Association for Land Reform and Development (ALRD), Lalmatia during 7-8 March 2013 and delivered a lecture on Uses, Demand and Availability of Water in Bangladesh: An Overview.
- 13. Worked as a resource person in a training program on **Water Policy, Management and Rights** organized by the Water Rights Forum (WRF) and held at Association for Land Reform and Development (ALRD), Lalmatia during 12-16 January 2013 and delivered a lecture on Uses, Demand and Availability of Water in Bangladesh: An Overview.
- 14. Worked as a resource person in a workshop for orientation of journalists on **Water Policy, Management and Rights** organized jointly by Association for Land Reform and Development (ALRD) and Water Rights Forum (WRF) and held at ALRD, Lalmatia during 5-6 October 2012 and delivered a lecture on <u>Uses, Demand and Availability of Water in Bangladesh: An Overview</u>.
- 15. Worked as a resource person in a training program on Water Policy, Management and Rights organized jointly by Water Rights Forum (WRF) and Association for Land Reform and Development (ALRD) and held at ALRD, Lalmatia during 16-20 September 2012 and delivered a lecture on <u>Uses</u>, <u>Demand and Availability of Water in Bangladesh: An Overview</u>.
- 16. Worked as a resource person in a training program on **Water Policy, Management and Rights** organized jointly by Water Rights Forum and Association for Land Reform and Development (ALRD) and held at ALRD, Lalmatia during 8-12 June 2012 and delivered a lecture on Uses, Demand and Availability of Water in Bangladesh: An Overview.
- 17. Worked as a resource person in a training program on **Water Policy, Management and Rights** organized jointly by Water Rights Forum and Association for Land Reform and Development (ALRD) and held at ALRD, Lalmatia during 9-12 May 2012 and delivered a lecture on <u>Uses, Demand and Availability of Water in Bangladesh: An Overview</u>.
- 18. Participated as a <u>Designated Discussant</u> in the seminar on Bangladesh Water Act 2012 (Draft) and People's Water Right organized jointly by the Association for Land Reform and Development (ALRD) and Bangladesh Environmental Lawyers' Association (BELA) in cooperation with Water Rights Forum (WRF) and held at CIRDAP Auditorium, Topekhana Road, Dhaka on 19 March 2012.
- 19. Worked as a resource person in a training program on **Water Policy**, **Management and Rights** organized jointly by Water Rights Forum and Association for Land Reform and

- Development (ALRD) and held at ALRD, Mohammedpur during 28 February-03 March 2012 and delivered a lecture on <u>Uses, Demand and Availability of Water in Bangladesh:</u> An Overview.
- 20. Worked as a resource person in a training program on **Climate Change** organized under Water Security in Peri-Urban South Asia: Adapting to Climate Change and Urbanization and held at CSS, Khulna during 23-24 November 2011 and delivered a lecture on Hydro-meteorological Trends in the South-West Coastal Region.
- 21. Participated as a <u>Panel Discussant</u> in the event on <u>Disaster Response Exchange</u> and <u>Exercise</u> organized jointly by Bangladesh Armed Forces Division and US Army Pacific Command and held at Lakeshore Hotel, Gulshan-2, Dhaka during 25-29 September 2011.
- 22. Worked as a resource person in a training program on **Water Policy, Management and Rights** organized jointly by Water Rights Forum and Association for Land Reform and Development (ALRD) and held at ALRD, Mohammedpur during 27-29 June 2011 and delivered a lecture on <u>Overview of Water Uses</u>, <u>Demand and Availability in Bangladesh</u>.
- 23. Worked as a resource person in a training program on **Water Policy, Management and Rights** organized jointly by Water Rights Forum and Association for Land Reform and Development (ALRD) and held at ALRD, Mohammedpur during 10-13 May 2011 and delivered two lectures on <u>Overview of Water Uses</u>, <u>Demand and Availability in Bangladesh and Climate Change and its Impact on Water Resources Management.</u>
- 24. Worked as a resource person in a training program on Analysis, Design and Construction of Bridges organized jointly by Japan International Cooperation Agency (JICA) and Local Government Engineering Department (LGED) and held at LGED during 2 January 2010-17 February 2011 and delivered a lecture on Application of HECRAS in Hydraulic Modeling of Bridges.
- 25. Worked as a resource person in a training of trainers on Interdisciplinary Field Research Methodology organized jointly by South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATERs), Hyderabad, India and Institute of Water and Flood Management (IWFM) and held in Cox's Bazar during 6-15 December 2010 and delivered two lectures on Conventional Method (Questionnaire Survey) in Field Research and Pairwise and Matrix Ranking.
- 26. Worked as a resource person in a training of trainers on **IWRM Concept and Its Practices** organized jointly by Center for Environmental and Geographic Information Services (CEGIS) and Institute of Water and Flood Management (IWFM) in association with Bangladesh Unnayan Partnership (BUP) during 27 November-2 December 2010 and delivered a lecture on <u>Water Demand Management and Water Allocation Principles</u>.
- 27. Worked as a resource person in a training on Multidisciplinary Approach for Boundary Delineation, Planning and Management of Natural Resources for a Subunit/Catchment organized by Center for Environmental and Geographic Information Services (CEGIS) during 2-5 August 2010 and delivered a lecture on <a href="Demand and Natural Resources Assessment">Demand and Natural Resources Assessment</a>.
- 28. Worked as a resource person in a training of trainer workshop on **IWRM Concept and Principle: Capacity Strengthening of Water and Environmental Academicians of Public and Private Universities** organized by IWFM, BUET in association with Cap-Net Global (International Network for Capacity Building on Integrated Water Resource Management) and Bangladesh Center for Advanced Studies (BCAS) during 5-6 July 2010 and delivered a lecture on <u>Water Governance</u>.
- 29. Worked as a resource person in the short course on *Risk Management in Water Resources* and delivered a lecture on <u>Risk-based approach in water resources</u>

- <u>planning: A case study for Brahmaputra water development</u>. The course was held during 13-14 March and jointly organized by DCE and IWFM, BUET.
- 30. Worked as a resource person in the South Asian Water (SAWA) Fellows Training on Participatory Field Research Methodologies and delivered a lecture on Pairwise and Matrix Ranking. The training was held during 2-13 September 2009 at Kandy, Sri Lanka and was organized jointly by SaciWATERs, India and University of Peradeniya, Sri Lanka.
- 31. Worked as a resource person in the training on *Water and Equity* and delivered a lecture on <u>Bridging Social and Economic Views of Water</u>. The workshop was held during 29-30 July 2009 at Institute of Appropriate Technology, BUET, Dhaka and was organized by IWFM.
- 32. Worked as a resource person in the short course on *Gender and Water* and delivered a lecture on <u>Water Governance and Gender</u>. The workshop was held during 11-13 July 2009 at Institute of Appropriate Technology, BUET, Dhaka and was organized by IWFM.
- 33. Worked as a resource person in the training on *Water and Equity* and delivered a lecture on <u>Viewing Water from Social and Economic Perspectives</u>. The workshop was held during 3-4 August 2008 at Directorate of Continuing Education, BUET, Dhaka and was organized by IWFM.
- 34. Worked as a resource person in the training workshop on *Risk-Based Evaluation of Brahmaputra Water Development in Meeting Future Water Demand* and delivered two lectures on: (i) Time Series Modeling of Brahmaputra Flows and (ii) Risk-Based Evaluation of Performance of Proposed Barrage on the Brahmaputra. The workshop was held during 24-25 March 2008 at Water Resources Planning Organization (WARPO), Banani, Dhaka and was organized by WARPO.
- 35. Worked as a resource person in the workshop on **Sustainability of Global Water Cycle and Aquatic Environment** and delivered four lectures on: (i) Global Water Cycle and Local Flux Paths (ii) Surface Water Processes (iii) River Basin Diagnostics and (iv) Water Resources Management. The workshop was held during 3-10 December 2007 at Okayama University, Japan and was organized by the Graduate School of Environmental Science.
- 36. Worked as a resource person in the national workshop on *Integrated Water Resources Management (IWRM) with Training on Scientific Methodology and Development of Grant Applications* held during 27-28 September 2006 at Dhaka. The workshop was organized by Bangladesh Centre for Advanced Studies (BCAS) and sponsored by the International Foundation for Science (IFS), Stolkhom, Sweeden.
- 37. Worked as a *resource person* in the short course on **Remote Sensing and GIS in Water Management** held at DCE, BUET, during 2-6 September 2006.

# Examiner of Doctoral/Master's Thesis and PG. Diploma/M. Engg. Project

- Development of water allocation mechanism for water stressed and abundance area under changing environmental condition, PhD Thesis, Defense held on 16 September 2023, Department of Water Resources Engineering, Bangladesh University of Engineering and Technology, Dhaka (by Mr. Khan Faisal Ahmed).
- Improved statistical approach for climate projection over Bangladesh using downscaling
  of global climate model outputs, PhD Thesis, Defense held on 15 June 2023, Institute of
  Statistical Research and Education, University of Dhaka, Dhaka (by Mr. Md. Bazlur
  Rashid).

- 3. Impact of Climate Change on River Hydrology and Energy Economics in Budhigandaki River Basin, PhD Thesis, Viva-voce held on 8 May 2022, Central Department of Hydrology and Meteorology, Institute of Science and Technology, Tribhuvan University, Kathmandu, Nepal (by Mr. Suresh Marahatta).
- 4. Water security risk assessment in a fluvio-tidal setting through an integrated system dynamic model, PhD Thesis, Defense held on 28 November 2021 (by Mr. Mostafizur Rahman).
- 5. Development of an analytical model for real-time assessment of tidal barrage power generation, PhD Thesis, Defense held on 9 March 2020 (by Mr. Md. Rafiqul Islam Khan).
- 6. Detention-based stormwater drainage management using a dynamic programming approach in a selected area in Dhaka, M. Sc. (WRD) Thesis, defense held on 31 March 2014, (by Ms. Soheli Nasrin).
- 7. A comparative study on command areas of shallow and deep tube wells in irrigation development, M. Sc. (WRD) Thesis, defense held on 30 November 2013, (by Ms. Afroza Sharmin).
- 8. Salinity risk to agricultural landuse due to sea level rise: A case study in Dhalua Union of Barguna Sadar Upazila, PG. Dip. (WRD) Project, defense held in June 2013, (by Mr. Md. Abdullah Al Baky).
- 9. Conjunctive use of saline and non-saline coastal aquifers for agriculture, **Ph. D. Thesis**, defense held on 22 October 2012, (by Ms. Muktarun Islam).
- 10. Resource optimization for Dhaka city water supply system using WEAP model, M. Sc. (WRD) Thesis, defense held in October 2012, (by Mr. Mohammad Zaved Anwar Chowdhury).
- 11. Groundwater use potential for irrigated agriculture in the Teesta Barrage Project, M. Sc. (WRD) Thesis, defense held on 10 March 2012, (by Mr. Mukhlesuzzaman Talukder).
- 12. Effect of Teesta Barrage Project on aman rice production, PG. Dip. (WRD) Project, defense held on 26 November 2011, (by Mr. Md. Enamur Rahman).
- 13. Aquifer salinity and its impact on drinking water and agriculture in Kalia upazila of Narail district, PG. Dip. (WRD) Project, defense held on 21 May 2011, (by Ms. Munira Afroz).
- 14. Assessment of irrigation efficiency and techno-socio-economic opportunities for its improvement in minor irrigation, **Ph. D. Thesis**, defense held on 31 March 2011, (by Mr. Eftekharul Alam).
- 15. The Action Framework of Armed Forces in Incident Command/Unified Command System Context at District Level during Emergency Response in Bangladesh Perspective, Master in Disaster Management Thesis, BRAC University, Fall 2010, (by Mr. Md. Ashique Hasan Ullah).
- 16. Effect of water pricing in minor irrigation on the water use by the farmers, M. Sc. (WRD) Thesis, defense held on 14 August 2010, (by Ms. Umme Fatima Romana Afroj).
- 17. Impact of lined canals on shallow tubewell irrigation and their acceptability by the farmers, M.Sc. (WRD) Thesis, defense held on 6 February 2010, (by Mr. Md. Abu Sayed).
- 18. Assessment of soil salinity and its impact on agriculture after the cyclone SIDR, M. Sc. (WRD) Thesis, defense held on 22 July 2009, (by Mr. Sayed Mohammad Nazim Uddin).
- 19. Crop selection and water management of non-rice crops by farmers, M.Sc. (WRD) Thesis, defense held on 10 June 2009, (by Mr. Md. Jobiar Miah).

- 20. Study on spatial and temporal variation of evaporation and related climatic parameters, M. Engg. (WRE) Project, defense held on 31 March 2009, (by Mr. Tanvir Ahmed).
- 21. Differences in actual and recommended land and water use practices in a selected upazila, PG.Dip. (WRD) Project, defense held on 18 March 2009, (by Ms. Masuma Akter Happy).
- 22. Assessment of drought of 2006 and its management by the farmers in Rajshahi district, M.Sc. (WRD) Thesis, defense held on 30 April 2008, (by Ms. Irin Parvin).
- 23. Relationship between salinity and crop production in different hydrological regimes downstream of Muhuri Regulator, M.Sc. (WRD) Thesis, defense held on 29 September 2007, (by Mr. A.K.M. Alauddin Chowdhury).
- 24. Water pricing at different minor irrigation systems, M.Sc. (WRD) Thesis, defense held on 21 January 2007, (by Mr. Md. Ruhul Amin).
- 25. Development of strategy for delineating drought vulnerable areas from satellite imagery, M.Sc. (WRD) Thesis, defense held on 18 November 2006, (by Mr. Biplab Kumar Das).
- 26. Assessment of local views of water logging in a polder project and its solutions, PG. Dip. (WRD) Project, defense held on 30 August 2006, (by Mr. Makshud Hashem).

# **Member of National/Organizational Committees**

- Worked as the Convener of the Publication Sub-Committee of Bangladesh National Committee of the International Commission on Irrigation and Drainage (BANCID) during 2015.
- Worked as a member of the Publication Sub-Committee of Bangladesh National Committee of the International Commission on Irrigation and Drainage (BANCID) during 2011-2014.
- Worked as a member of the Technical Committee (TC) of the Project 'Preparation of Master Plan and Development of Database for Haors and Wetlands' by Bangladesh Haor and Wetland Development Board, Ministry of Water Resources in July 2010 as a BUET VC's nominee.
- Worked as a member of the Proposal Evaluation Committee (PEC) of Bangladesh Water Development Board (BWDB), Ministry of Water Resources since 25 August 2010.
- Worked as a member of the Tender Evaluation Committee (TEC) of Bangladesh Agricultural Development Corporation (BADC), Ministry of Agriculture since 19 August 2008 to 31 December 2012.
- Worked as a member of the Proposal Evaluation Committee (PEC) of Water Resources Planning Organization (WARPO), Ministry of Water Resources since 19 August 2008 to 31 December 2012.
- Workedas the *Member Secretary* of the Study Group of Bangladesh National Committee of the International Commission on Irrigation and Drainage (BANCID) (since July 2007)

# **Reviewer of Journals**

• Water Resources Management, Springer Verlag (two papers).

- Advances in Water Resources, Elsevier Science (one paper).
- Environmental Monitoring and Assessment, Springer (one paper).
- Hydrological Processes, Wiley Interscience (one paper).
- American Journal of Climate Change (two papers).
- Journal of Flood Engineering (one paper).
- The Philippine Agricultural Scientist (one paper).
- Journal of Civil Engineering, The Institution of Engineers, Bangladesh (three papers).
- The Dhaka University Journal of Earth and Environmental Sciences (one paper).

# **Other Involvement**

- Worked as the *Member-Secretary* of the Research and Academic Committee (RAC) of the Institute (Since 30 January 2008).
- Worked as the *Convener* of the Publication Committee of the third International Conference on Water and Flood Management (ICWFM) organized by the IWFM, BUET and held during 8-10 January 2010 at Dhaka.
- Worked as the *Course Coordinator* of a training of trainer workshop on IWRM Concept and Principle: Capacity Strengthening of Water and Environmental Academicians of Public and Private Universities organized by IWFM, BUET in association with Cap-Net Global (International Network for Capacity Building on Integrated Water Resource Management) and Bangladesh Center for Advanced Studies (BCAS) during 5-6 July 2010.
- Worked as the **Postgraduate Program Coordinator** of the Institute since 14 December 2009 to 12 December 2011.
- Worked as the BUET Institutional Information System (BIIS) Secretary of the Institute since ?? 2009 to 12 December 2011.
- Worked as the Course Coordinator of a training workshop on Water and Equity organized by IWFM, BUET during 29-30 July 2009.
- Worked as the *Member Secretary* of the Publication Committee and the Technical Visits Committee of the second International Conference on Water and Flood Management (ICWFM) organized by the IWFM, BUET and held during 15-17 March 2009 at Dhaka.
- Worked as the Course Coordinator of a training workshop on Water and Equity organized by IWFM, BUET during 3-4 August 2008.
- Worked as the *Mentor & Monitor* of the South Asian Water (SAWA) Fellows of the Institute since 15 February 2008 to 31 December 2011.
- Was in Charge of the Institute Library (Since 02 April 2007 to 14 December 2009).
- Worked as the *Member Secretary* of the Coordination and Development Committee of the Institute (From 23 May 2005 to 30 September 2007).
- Worked as the *Tabulator* of the Institute (From 26 June 2005 to 16 April 2007).

•	Worked as the <i>Member Secretary</i> of the Publication Committee and the Technical
·	Visits Committee of the International Conference on Water and Flood Management (ICWFM) organized by the IWFM, BUET and held during 12-14 March 2007 at Dhaka.