

SONIA BINTE MURSHED

Associate Professor
Institute of Water and Flood Management
Bangladesh University of Engineering and Technology
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EDUCATION

Ph.D. (2019), Civil and Environmental Engineering, Utah State University, USA.
Dissertation title: Hydro-Climatic Changes and Corresponding Impacts on Agricultural Water Demand in The Ganges Delta of Bangladesh
Advisor: Dr. Jagath J. Kaluarachchi

M.Sc. (2008), Water Resources Development, Bangladesh University of Engineering and Technology
Thesis title: Management of Conflicts between Irrigation and Fisheries in Siapagla FCD (Flood Control and Drainage) Project
Advisor: Dr. Shah Alam Khan

B.Sc. (2004), Civil Engineering, Bangladesh University of Engineering and Technology
Thesis title: The Effect of Sand Bed Depth on Filter Media of Slow Sand Filter
Advisor: Dr. Farooque Ahmed

ACADEMIC APPOINTMENTS AND PROFESSIONAL EXPERIENCE

Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering and Technology (BUET)

Associate Professor (December 6, 2020- to date)
Assistant Professor (October 10, 2012 to December 5, 2020)
Lecturer (June 30, 2009 to October 09, 2012)

HARB Trade International Limited

Executive Engineer (December 2005 - December 2006)

Nagar Design & Developments Ltd.

Co-ordination Engineer (January 2005 - August 2005)

EXPERTISE

I have a broad background in hydrology, with specific training and expertise in interdisciplinary field research methodology and water resources development. My research is focused on a variety of interdisciplinary issues, including climate change impacts on water resources, hydro-morphological changes due to human interventions, disaster management (anticipatory actions and adaptive

management), mainstreaming gender in water resources management, and allocation of freshwater resources among competing users. Recently, I have been investigating some of these issues from transboundary perspectives.

I have participated in several research consortiums from Bangladesh in large international collaborative projects. Some key activities in these projects include hydro-morphological changes due to different climatic and anthropogenic stresses, livelihood-specific vulnerabilities, Delta-level interventions to deal with coastal system tipping points, analyzing climate change adaptation gaps and migration, adaptation to flood hazard, vulnerability, and risk, anticipatory actions relating to riverine and flash flood, and impact-based forecasting.

TEACHING EXPERIENCE

Courses

WFM 6202: Remote Sensing and GIS in Water Management (April 2020 – April 2023)

WFM 6303: Integrated Water Resources Management (Oct 2019 – Oct 2023)

CMRM 6204: Application of Remote Sensing in Climate Change (Apr 2023)

HE 6202: Humanitarian Response to Disasters (Apr 2023)

WFM 5202: Socio-economic Analysis (April 2021-April 2022)

DP 6003: Remote Sensing and GIS for Disaster Mitigation (Oct 2023)

Trainings and Workshops

- Delivered lecture on "Social and Institutional Conflicts: Role of Stakeholder Analysis in IWRM", in the Training on "Concept and Practices of Integrated Water Resources Management (IWRM)"
Organized by: Center for Environmental and Geographic Information Services (CEGIS)
Date: October 24, 2019; Nov 11, 2020; Oct 31, 2021; Aug 02, 2022; Dec 14, 2023
- Delivered lecture on "IWRM and Transboundary Water Aspects in Bangladesh" in the Training on "Integrated Water Resources Management (IWRM) for Women Professionals"
Organized by: Global Water Partnership (GWP), South Asia
Date: August 13, 2022
- Delivered lecture on "Conflict Management" in the course titled "Interdisciplinary Field Research Methodology"
Date: Oct, 2021; Oct 2022; Oct, 2023
- Delivered lecture on "Gender and Water" at Chittagong University of Engineering and Technology
Date: July 25, 2012
- Conducted Training on Climate Modelling and Downscaling Techniques
Organized by IWF, BUET
Date: 18 – 22 February, 2012

AWARDS

Travel and Data Purchase Grant for Ph.D. work provided by the International Water Management Institute, Sri Lanka under the research project "The Gangetic Aquifer Management for Ecosystem Services," 2014-2015

Best Paper Award for Young Professionals: International Conference on Water Resources Policy in South Asia, December 17-20, 2008, Colombo, Sri Lanka

SAWA (South Asian Water) Fellowship: Awarded by Crossing Boundaries (CB) Project, funded by Dutch Government., IWFM, BUET for Oct 2006- Apr 2008.

Technical Scholarship: Awarded by BUET for 1998-2004.

RESEARCH INTERESTS

Integrated Water Resources Management, Transboundary Water Management, Disaster Management (Anticipatory Actions and Adaptive Management), Mainstreaming Gender in Water Resources Management

RESEARCH PROJECTS

Institutional Research Projects

1. Principal Investigator, **Sediment Discontinuity in Ganges River and its Impact on Flooding Patterns**
Fund: Bangladesh University of Engineering and Technology, Dhaka, Bangladesh
Duration: January 2022 – June 2024
2. Co-investigator, **Center for Climate and Health gObal Research on Disasters (CORD)**
Fund: National Institutes of Health (NIH), United States Department of Health and Human Services
Duration: October 2023 – Sepetember 2026
3. Co-investigator, **Community-led EAs on rapid-onset FF events in North-Eastern Bangladesh**
Fund: Global Disaster Preparedness Center (GDPC)
Duration: October 2023 – May 2024
4. Co-investigator, **Improving Water Management in Micro-Watersheds of Southwest Bangladesh through Physical Intervention and Community Participation**
Fund: Solidaridad Network Asia, Bangladesh
Duration: October 2023 – May 2024
5. Co-investigator, **Enhancing Climate Resilience of Coastal Areas of Bangladesh with Nature-Based Solutions**
Fund: Global Center on Adaptation (GCA)
Duration: October 2022 – September 2024
6. Co-investigator, **Academic Alliance on Anticipatory Action – 4As**, (a 2- year research project, led by Tufts University, USA; Bangladesh Partner - IWFM, BUET; Other global partners are: Makerere University, Uganda; National University of Lesotho; Cayetano Heredia University, Peru; University of the Philippines; University of Namibia; and Eduardo Mondlane University, Mozambique).
Fund: USAID
Duration: 2021 – 2023

7. Co-Investigator, **Assessing Health Impacts of Urban Flooding under Changing Climate: A Case Study in Dhaka City**,
Fund: REO Small Grants Program, US Embassy, Bangladesh,
Duration: 2021-2023
8. Co-Investigator and Project Coordinator, **Evaluation of Adaptation Trials in GBM Delta and its Up-Scaling to Climate Financing**
Fund: IDRC, Canada
Duration: July 2020 - December 2021
9. Co-investigator, **UKRI GCRF Living Deltas Hub** (Work Package 4: Delta-level interventions to respond to and mitigate against foreseeable coastal system tipping points and Work Package 2: Delta SES characterization and risk assessment) in collaboration with Newcastle University (UK) as the lead and 39 other partner organizations spread across 13 countries,
Fund: UKRI Global Challenges Research Fund
Duration: November 2020 – May 2024
10. Project Coordinator, **Evaluation of adaptation trials for coastal livelihoods in GBM delta**
Fund: ICLEI, CDKN, UK
Duration: Julne 2020 - December 2020
11. Co-Investigator, **CORE Bangladesh: COMMUNITY RESilience through Rapid Prototyping of Flood Proofing Technologies**
Fund: The Dutch Research Council (NWO)
Duration: July 2016 - June 2021, joined the project on October 2019
12. Co-Investigator, **Research on Water-related Disaster Mitigation and Environment Symbiosis Technology in Rural Bangladesh**
Fund: Japan Society for the Promotion of Science (JSPS)
Duration: October 2019 - March 2023
13. Co-Investigator, **Increasing the Resilience of Agricultural and Aquaculture Systems in the Coastal Areas of the Ganges Delta** [Component G4: Assessment of Impact of Anticipated External Drivers on Water Resources of Coastal Zone]
Fund: CGIAR-CPWF
Duration: June 2011- June 2014, joined the project on November 2012
14. Principal Investigator, **Review of Warning System for Climatic Disasters in Bangladesh**
Fund: Ministry of Environment and Forestry, Dhaka, Bangladesh
Duration: June, 2011-August, 2013
15. Co-Investigator, **High-resolution Regional Climate Change Information for Bangladesh to inform Impacts Assessments, Vulnerability indicators and Adaptation Policies**
Fund: Met Office, UK
Duration: July 2011-December 2012
16. Co-Investigator, **Impact of Climate Change on Rainfall Intensity in Bangladesh**
Fund: Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

Duration: November 2010-December 2012

Institutional Capacity Building Projects

1. Principal-Investigator, The Asian Coastal Resilience Network (ACoRN) Project
Fund: UNESCO-IGCP
Duration: April 2021-December 2023
2. Co-Investigator, **Engineering and flood risk through a gender lens: Expanding capabilities in remote sensing and raising awareness of gender-based vulnerabilities for improved flood risk management in Bangladesh**
Fund: Nuffic under Orange Knowledge Programme (OKP) 2020 in collaboration with Climate Adaptation Services (CAS), Netherlands
Duration: August 2021-June 2022
3. Principal-Investigator, **How to MOOC? Developing online learning on Adaptive Delta Management in support of the Bangladesh Delta Plan**
Fund: Nuffic under Orange Knowledge Programme (OKP) 2020 in collaboration with Climate Adaptation Services (CAS), Netherlands
Duration: September 2020-September 2021
4. Research Mentor, **IDRC-South Asian Water (SAWA) Leadership Project**
Fund: IDRC, Canada
Duration: October 2019 - October 2021

PUBLICATION:

Journal:

- Sakib, M.S.; Alam, S.; Shampa; **Murshed, S.B.**; Kirtunia, R.; Mondal, M.S.; Chowdhury, A.I.A. (2023) Impact of Urbanization on Pluvial Flooding: Insights from a Fast Growing Megacity, Dhaka. *Water*, 15, 3834. <https://doi.org/10.3390/w15213834>
- Cremin, E., O'Connor, J., Sumana, B., Bui, L.H.T., Abhra, C., Hua, H.H., Huynh, D.V., Le, H., **Murshed, S.B.**, Mashfiqus, S., A., Vãn, Sebesvari, Z., Large, A. and Renaud, F. (2023), Aligning the Global Delta Risk Index with SDG and SFDRR Global frameworks to assess risk to socio-ecological systems in river deltas. *Sustainability Science*, Springer Nature, 18, 1871–1891. <https://doi.org/10.1007/s11625-023-01295-3>
- Afsari, N, **Murshed, S.B.**, Uddin, S.M.N and Hasan, M. (2022), Opportunities and Barriers Against Successive Implementation of Rainwater Harvesting Options to Ensure Water Security in Southwestern Coastal Region of Bangladesh. *Frontiers in Water*: 811918.doi: 10.3389/frwa.2022.811918
- Nahin, K.T.K., Islam, S.B., Ahmed, S., Mondal, M.S., **Murshed, S.B.** and Nowreen, S. (2022), Voluntary immobility despite hazard: a case of Jamuna floodplain in Bangladesh, *GeoJournal*, <https://doi.org/10.1007/s10708-022-10820-3>

- Kashem, S., Tahsin, N., Subah, Z., **Murshed, S.B.**, Nowreen, S. and Mondal, MS (2022), Assessing the right to water of the urban poor in Dhaka city, *GeoJournal*, <https://doi.org/10.1007/s10708-022-10804-3>
- Coughlan de Perez, E., Harrison, L., Berse, K., Easton-Calabria, E., Marunye, J., Marake, M., **Murshed, S.B.**, Shampa, Zausomue, E.-H. (2022), Adapting to climate change through anticipatory action: The potential use of weather-based early warnings, *Weather and Climate Extremes*, doi: <https://doi.org/10.1016/j.wace.2022.100508>.
- E. Coughlan de Perez, K.B. Berse, L. Angelico C. Depante, E. Easton-Calabria, E. Pierre R. Evidente, T. Ezike, D. Heinrich, C. Jack, A. Mahar Francisco A. Lagmay, S. Lendelvo, J. Marunye, D.G. Maxwell, **S. Binte Murshed**, C. Garimoi Orach, M. Pinto, L.B. Poole, K. Rathod, Shampa, C. Van Sant, (2022), Learning from the past in moving to the future: Invest in communication and response to weather early warnings to reduce death and damage, *Climate Risk Management*, doi: <https://doi.org/10.1016/j.crm.2022.100461>
- Murshed, S. B.**, Rahman, M. R. and Kaluarachchi, J. J. (2019) "Changes in Hydrology of the Ganges Delta of Bangladesh and Corresponding Impacts on Water Resources," *Journal of the American Water Resources Association*, JAWRA featured Collection: Climate Change Solutions.
- Murshed, S. B.** and Kaluarachchi, J. J. (2018) "Scarcity of Fresh Water Resources in the Ganges Delta of Bangladesh," *Water Security*, volumes 4-5, pp 8-18, Science Direct. <https://doi.org/10.1016/j.wasec.2018.11.002>
- Nowreen S, **Murshed S.B.**, Islam A.S, Bhaskaran B, Hasan MA (2014), "Changes of Rainfall Extremes around the Haor Basin Areas of Bangladesh using Multi-member Ensemble RCM," *Theoretical and Applied Climatology* 119 (1-2), Springer, Pages 363-377; doi:10.1007/s00704-014-1101-7.
- Nowreen,S., **Murshed, S.B.**, Islam, A.S., Hasan, M.A. and Sarker, T.K. (2012), "An indicator of Climate Change in the South West Region of Bangladesh", *The International Journal of Climate Change: Impacts and Responses* Volume 4, Issue 3, Pages 47-60, 2012, (ISSN: 1835-7156).
- Murshed, S.B.**, and Khan, M.S. (2009), "Water Use Conflict between Agriculture and Fisheries in a Selected Water Resources Development Project in Bangladesh". *SAWAS* 1 (2):159-183, 2009, Volume 1, Issue 2

Proceedings (selected):

- Afsari, N., **Murshed, S.B.**, Uddin, S.M.N. and Hasan, M.M. (2022), Socio-Technical Performance Evaluation of Rainwater Harvesting Options as an Alternative Water Source in Southwestern Coastal Region of Bangladesh, *Proceedings of the 6th International Conference on Civil Engineering for Sustainable Development (ICCESD 2022)*, 10~12 February 2022, KUET, Khulna, Bangladesh (ISBN-978-984-35-1972-6)
- Tahsin N. and **Murshed, S.B.** (2021) Water Security in Slums of Dhaka, 8th International Conference on Water and Flood Management (ICWFM 2021), 29-31 March, Dhaka, Bangladesh. in 8th International Conference on Water and Flood Management (ICWFM 2021), Bangladesh.

Ahmed, S., **Murshed, S.B.** (2021) Driving Factors of the Migration System due to Riverbank Erosion along the Brahmaputra River, Proceedings of 8th ICWFM 2021, 29-31 March, Dhaka, Bangladesh.

Tahsin N. and **Murshed, S.B.** (2021) Forecasting Climatic Stress on Water Security for Different Emission Scenarios in Dhaka, Bangladesh, MedGU21 Annual Meeting 2021, Turkey.

Murshed, S.B., Nowreen, S., Islam, A.S., Hasan, M.A. and Sarker, T.K., "Change Of Extreme Precipitation Indices For the Eight Hydrological Regions Of Bangladesh", Proceedings of the International Conference on Climate Change Impact and Adaptation (I3CIA-2013), Nov 14-16, 2013, DUET, Gazipur, Bangladesh

Nowreen,S., **Murshed, S.B.**, Islam, A.S., Bhaskaran, B., "Change of Future Climate Extremes for the Haor Basin Area of Bangladesh." Proceedings of the 4th International Conference on Water and Flood Management (ICWFM 2013), 4-5 October 2013, BUET, Dhaka, Bangladesh Volume 2, pp. 545 -556, BUET, (ISBN: 978-984-33-2298-2).

Murshed, S.B., Islam, A.S. and Khan, M.S. (2011) "Impact of Climate Change on Rainfall Intensity in Bangladesh." Proceedings of the 3rd International Conference on Water and Flood Management (ICWFM 2011), 8-10 January 2011, Dhaka, Bangladesh, Volume 2, pp.881-890 (ISBN: 978-984-33-2298-2).

Islam, A.S., Bhaskaran, B., Arifin, S., **Murshed, S.B.**, Mukharjee, N. and Hossain, B.M.T. (2011) "Domain Size Experiment using PRECIS Regional Climate Model for Bangladesh." Proceedings of the 3rd International Conference on Water and Flood Management (ICWFM 2011), 8-10 January 2011, Dhaka, Bangladesh, Vol.-2, pp. 891-898 (ISBN: 978-984-33-2298-2).

Presentations (selected):

Murshed, S.B., as one of the panellists in the session "Cash: Sometimes but not always" a session jointly led with USAID on AA modalities beyond cash. Global Dialogue Platform on Anticipatory Humanitarian Action, 10 – 12 October 2023 in Berlin, Germany.

Murshed, S.B., Kim, H. and Kaluarachchi, J.K. (2023), "Uncertainty in Projected Agricultural Water Demand in the Ganges Delta of Bangladesh", Asia Oceania Geosciences Society (AOGS) 20th Annual Meeting, July 30 - August 4, 2023, Singapore. (Poster)

Murshed, S.B., and Kaluarachchi, J.K. (2023), "Transboundary Water Management in the Ganges-Brahmaputra-Meghna Basins between Bangladesh, Bhutan, China, India and Nepal", Asia Oceania Geosciences Society (AOGS) 20th Annual Meeting, July 30 - August 4, 2023, Singapore. (Oral)

Murshed, S.B., as one of the panellists in the conference "Rivers as a Lifeline for South Asia", 15 - 16 March. 2023, Kathmandu, Nepal.

Murshed, S. B. and Kaluarachchi, J. J. (2019) "Climate impacts on Drought in the Ganges Delta in Bangladesh", 2019 UCOWR Annual Conference, June 11 -13, 2019, Snowbird, Salt Lake City, Utah, USA. (Oral)

- Murshed, S. B.**, Kim, H. and Kaluarachchi, J. J. (2019) "Evapotranspiration under Climate Change in the Ganges Delta of Bangladesh", 2019 Spring Runoff Conference: Water Challenges in the West, March 26, 2019, Utah State University, Logan, Utah, USA. (Poster)
- Murshed, S. B.** and Kaluarachchi, J. J. (2018) "Climate Impacts on Agricultural Water Demand in the Ganges Delta of Bangladesh", 2018 AGU Fall Meeting, December 10 -14, 2018, Washington DC, USA. (Poster)
- Murshed, S. B.** and Kaluarachchi, J. J. (2018) "Linkage of Hydro-Climatological Variables to Flood and Drought in the Ganges Delta of Bangladesh," The Student Research Symposium April 12, 2018, Utah State University, Logan, USA. (Poster)
- Murshed, S. B.** and Kaluarachchi, J. J. (2018) "Groundwater Sustainability in the Ganges Delta of Bangladesh," 2018 Spring Runoff Conference: Monitoring and Managing Water for All, March 27, 2018, Utah State University, Logan, Utah, USA. (Poster)
- Murshed, S. B.** and Kaluarachchi, J. J. (2017) "Scarcity of freshwater resources in the Ganges Delta of Bangladesh", 2017 AGU Fall Meeting, December 11 -15, 2017, New Orleans, Louisiana, USA. (Poster)
- Murshed, S. B.** and Kaluarachchi, J. J. (2017) "Vulnerability of Fresh Water Resources in the Ganges Delta of Bangladesh", 2017 AWRA Summer Specialty Conference, Climate Change Solutions: Collaborative Science, Policy and Planning for Sustainable Water Management, June 25-28, 2017, Sheraton Tysons Hotel, Tysons, VA, USA. (Oral)
- Murshed, S. B.** and Kaluarachchi, J. J. (2017) "Instream Water Availability in the Sundarbans Mangrove Ecosystem of Bangladesh", Spring Runoff Conference: Data-driven water management for an uncertain future, March 28-29, 2017, Utah State University, Logan, Utah, USA. (Poster)
- Murshed, S.B.**, Khan, M.S.A. and Islam, A.S. (2012) "Adaptation Strategies of Urban Drainage System in Dhaka City" International Conference on Climate Adaptation, May 29-31, 2012, University of Arizona, Arizona, USA. (Oral)
- Murshed, S.B., and Khan, M.S.A. (2008), "Water Use Conflict between Agriculture and Fisheries in a Selected Water Resources Development Project in Bangladesh" International Conference on Water Resources Policy in South Asia, December 17-20, Colombo, Sri Lanka. (Achieved best paper award for young professionals). (Oral)

Book:

A.I.A. Chowdhury, **Murshed, S.B.**, and M.R.Rahman (2022), "Food Security in a Floodplain Country-Case of Bangladesh", W.Leal Filho et al. (eds.), Sustainable Agriculture and Food Security, World Sustainability Series, Springer Nature, https://doi.org/10.1007/978-3-030-98617-9_31

Ahmed, S. and **Murshed, S.B.** (2022), "Driving Factors of Destination Choices due to River Bank Erosion along the Brahmaputra River", G. M. Tarekul Islam et al. (eds.), Water Management: A View from Multidisciplinary Perspectives, Springer Nature, https://doi.org/10.1007/978-3-030-95722-3_8

Murshed, S.B., and Khan, M.S.A. (2008), "Water Use Conflict between Agriculture and Fisheries in Bangladesh", LAP LAMBERT Academic Publishing, Germany, 2013, pages 148 (ISBN-13:978-3-659-43821-9).

GRADUATE STUDENT SUPERVISION:

Current

Rifat Jahan, PhD, Livelihood Resilience under Anthropogenic and Climate Stresses in Lower Teesta Basin

Md. Shykat Hossain, M.Sc. (WRD), Transboundary Perspectives to Ensure Salinity-based Environmental Flow for the Gorai River System

Mithun Dutta, M.Sc. (WRD), Application of Multidimensional Livelihood Vulnerability Index to Understand Climate Change Effects in a River Island Near the Coast of Bangladesh

Md. Rownak Islam, M.Sc. (WRD), Monitoring Water Budget Components on Ganges-Brahmaputra Meghna River Basins Using Earth Observation Data And Machine Learning Models

Sabiha Mahbuba Siza, M.Sc. (WRD), Assessment of Urban Resiliency to Climate Change: A Case Study of Sirajganj Municipality

Asif Uddin Bin Noor, M.Sc. (WRD), Development of Thresholds for Anticipatory Action for Drought in the Northwest Region of Bangladesh

Mukta Saha, PG. Dip. (WRD), Potable Water Supply in Dhaka City: Key Challenges of Transition From Groundwater to Surface Water

Sowmik Das Sowmya, M.Sc. (WRD), Socio-economic Feasibility of Desalination Techniques

Ashikur Rahman, M.Sc. (HE), Thesis proposal preparation in progress

Jubied Alam, M.Sc. (WRD), Thesis proposal preparation in progress

Sharaboni Dam, M.Sc. (DRR), Thesis proposal preparation in progress

Faria Akter, M.Sc. (DRR), Thesis proposal preparation in progress

Md. Tahseen Ahmed (DRR), Thesis proposal preparation in progress

Completed

Rashel Mahmud, M.Sc. (WRD), Integration of Forecast-based Actions and Social Protection Programs for Community Flood Risk Management, defended on 13.12.2023

Md. Nabil Shad, M.Sc. (WRD), Sedimentation Induced Risk on Food Security in the North-Eastern Haor Region of Bangladesh, defended on 21.11.2023

Zahrin Zannat, M.Sc. (WRD), Analysis of Technical Feasibility and Economic Viability of Flood Tolerant Housing Units, defended on 04.06.2023

Navila Afsari, (M.Sc. WRD), Behavioral Modeling Approach to Assess Sustainability of Rainwater Harvesting in Coastal Area of Bangladesh, 2022

Sahika Ahmed, (M.Sc. WRD), Determinants and Gender Considerations for Survival Strategies Due to Riverbank Erosion: A Case Study at Dewanganj, Jamalpur, 2022

Nazwa Tahsin, (M.Sc. WRD), Assessment of Vulnerability of Water Scarcity through Gender Lens in the Context of Informal Settlement, 2021

SELECTED PROFESSIONAL WORKSHOP/ SEMINAR / TRAINING:

Spatial and temporal climate change analysis using CORDEX regional climate models over South Asia for Bangladesh

Organized by ICIMOD

Date: December 13-15, 2021

Engineering and Flood Risk Through a Gender Lens

Organized by HKV, Q point, BUET and NUFFIC

Date: October 11, 2021 – February 9, 2022

South Asian Water (SAWA) leadership program online on **Climate Change lecture series on 'Interdisciplinary Field Research Methods' and 'Gender and Water'**

Organized by SaciWATERs-India

Date: September 29 - October 29, 2020

Online Training on **Academic Curriculum for Adaptive Delta Management**

Organized by BUET and IWM, Dhaka, Bangladesh

Date: 14, 21, and 28 October 2020

Hydro-social Deltas: Understanding flows of water and people, Dialoguing New Dhaka

Organized by: BCAS

Date: November 19, 2019

Venue: Hotel InterContinental Dhaka

Himalaya Water Conference 2019: Highland-Lowland Interactions, Dhaka

Organized by: Hanns Seidel Foundation (HSF) and Bangladesh Centre for Advanced Studies (BCAS)

Date: 16-18 November, 2019

Venue: Spectra Convention Centre, House # 19, Road # 7, Gulshan 1, Dhaka

Gender, water and empowerment among ready-made garment women workers of Bangladesh

Organized by: Coventry University of UK; BAU, DU, and BUET

Date: July 29, 2019

Venue: Dhaka University

Workshop on **Pangeo: Scalable Geoscience Tools in Python—Xarray, Dask, and Jupyter** at 2018 AGU Fall meeting

Date: December 12, 2018

Venue: Grand Hyatt, Washington DC, USA

Workshop on **Multitemporal Supervised Classification Using Google Earth Engine** at 2018 AGU Fall meeting

Date: December 10, 2018

Venue: Grand Hyatt, Washington DC, USA

Workshop on **Satellite: Using Python and modern tools for research and analysis of satellite data products** at 2018 AGU Fall meeting

Date: December 9, 2018

Venue: Grand Hyatt, Washington DC, USA

Workshop on **Informed Risk Management** (Using GoldSim to Support Integrated Water Resources Management) at 2017 AWRA Summer Specialty Conference

Date: June 25, 2017

Venue: Sheraton Tysons Hotel, VA, USA

XSEDE HPC Workshop on Big Data analytics hosted by the University of Utah, USA

Date: November 1, 2016

Knowledge Sharing Seminar on "**Water and Waste: Excreta Does Matter**" organized by Centre for Science and Environment and Bangladesh Institute of Planners

Date: September 4, 2013

Venue: Planners' Tower, Dhaka

Bangladesh country level dialogue meeting on "**Transnational Policy Dialogue for Improved Water Governance of Brahmaputra River**" organized by Centre for Science and Environment and Bangladesh Institute of Planners

Date: August 21, 2013

Venue: IWFM, BUET, Dhaka

Training Program on "**Space Technology for Flood Hazard Mapping, Flood Forecast and Rapid Mapping in Bangladesh**" Jointly organized by Department of Disaster Management (DDM) and UN-SPIDER Beijing Office in collaboration with SPARRSO and Comprehensive Disaster Management Programme (CDMP II) Date: May 12-16, 2013

Venue: Computer Lab (Level 4), SPARRSO, Agargaon, Dhaka, Bangladesh

Training Workshop on "**Urban Drainage Modeling for Coastal Towns of Bangladesh Considering Climate Change**"

Date: April 19-21, 2013

Venue: IWFM, BUET

Final workshop on "**High-resolution Regional Climate Change Information for Bangladesh to inform Impacts Assessments, Vulnerability indicators and Adaptation Policies**"

Organized by IWFM, BUET and Met office, United Kingdom with financial support from the Department for International Development (DFID) of the UK

Date: January 27, 2013

Venue: IWFM, BUET

Adaptation to Changing Water Resources Availability in Northern India with respect to Himalayan Glacier Retreat and Changing Monsoon Pattern

HighNoon Spring School of Collaborative project of EU

Organized by Indian Institute of Technology (IITD), Delhi, India

Date: April 2-6, 2012

Venue: Premises of IITD

Triangulation Workshop for Selection and Prioritization of External Drivers of Change on Water Resources of the Coastal Zone

Organized by Institute of Water Modelling (IWM), Dhaka, Bangladesh and Partners of Project G4 (Assessment of the Impact of Anticipated External Drivers of Change on Water Resources of the Coastal Zone)

Date: March 20, 2012

Venue: BRAC Centre Inn, 75 Mohakhali, Dhaka-1212, Bangladesh

Stakeholder Workshop on "High-resolution Regional Climate Change Information for Bangladesh to inform Impacts Assessments, Vulnerability indicators and Adaptation Policies."

Organized by IWFM, BUET and Met office, United Kingdom with financial support from the Department for International Development (DFID) of the UK

Date: March 8, 2012

Venue: IWFM, BUET

Statistical Downscaling Model (SDSM) Workshop

Jointly organized by Loughborough University, BRAC University and British Council

Date: October 26-27, 2011

Venue: BRAC University, Dhaka, Bangladesh

Space-based Information for Disaster Preparedness and Risk Assessment

Jointly organized by CDMP II, DMRD, MoFDM and ICIMOD

Date: April 09-13, 2011

Venue: Bangladesh Computer Council, Agargaon, Dhaka

Flood Hazard Mapping and Socioeconomic Vulnerability

Organized by Institute of Water and Flood Management (IWFM) of Bangladesh University of Engineering and Technology, (BUET) and The International Centre for Integrated Mountain Development, ICIMOD in association with Southampton University, United Kingdom and Centre for Geoinformatics, Z_GIS, University of Salzburg, Austria.

Date: April 27 - May 1, 2010

Venue: BRAC-CDM, Gazipur Dhaka

Training Workshop on "Regional Climate Modeling using PRECIS."

Organized by Climate Change Study Cell (CCSC) of Bangladesh University of Engineering and Technology (BUET) and Met Office, United Kingdom with financial support from the Department for International Development (DFID) of the UK

Date: February 14 -18, 2010

Venue: IWFM, BUET

Regional Workshop on "Climate Change and Water Resources: IWRM as a Tool to Cope with Changing Condition of the Climate System"

Organized by CapNet South Asia in association with CapNet global

Date: January 10 -14, 2010

Venue: BRAC-CDM, Gazipur Dhaka