Research Interest:

My research interest recently inclined to foster academic quality leadership among the university teachers' community and beyond, considering the knowledge economy and application of 4iR with particular attention to the global south where a robust demographic dividend thrives. In terms of academic interest, I have taken an active drive-in disaster risk reduction, environmental hazard prevention and mitigation, the extension of humanitarian support to reduce the vulnerability of the at-risk community, promotion of climate resilient environment as well as generating & integrating the scientific knowledge and citizen sciences for policy updating and formation to ensure the sustainable development. A good number of relevant publications (given later) to my account are the reflection of my works mentioned.

Some Recently Completed and Ongoing Research Projects:

Project title	Duration
Climate-induced Shock Responsive Disaster Resilience Mapping for Adaptive Social Protection Programming of the at-Risk Population in the Sylhet Division of Bangladesh	January 2023- till date
Feasibility Study towards Capacity Building for Landslide Risk Reduction and Response in the Hilly Terrain of Bangladesh (Department of Disaster Management, Ministry of Disaster Management and Relief, Bangladesh)	March 2022- September 2022
Innovating Non-monetary Interventions for Climate-smart Agriculture: An ADOPT Model for Technology Diffusion (Curtain University and ADPC)	March 2022- July 2022
Resilient Futures for the Rohingya Refugees; Funded by the Royal Society (Grant Scheme: Challenge-led Grants)	March 2019 – till date
Impact Analysis of installation of Saline Water Treatment Plant (2-ton truck-mounted) in the South-West Region of the Country (Funded by the Ministry of Disaster Management and Relief)	January 2021- November 2021
Community clinics in Bangladesh: A situation analysis to address performance and challenges during the Covid-19 pandemic as the neighborhood health care centre (Funded by WaterAid)	April 2020- October, 2020
A Study to Mitigate the Unemployment Problems of the Poorest (Hardcore poor) by Creating Opportunities (Funded by Ministry of Disaster Management and Relief, Bangladesh)	July 2019-June 2020
Landslide Hazard Assessment for Rohingya Camps of Cox's Bazar- Teknaf area, Bangladesh (UNHCR/ADPC)	November 2017 –March 2018
Assessing Vulnerability and Resilience in Extreme Climatic Disasters: Evidence from Flood Victims in Bangladesh (University Colleague London and University of Dhaka)	September 2016– November 2017
Assessing Vulnerability and Resilience in Extreme Climatic Disasters: Evidence from Flood Victims in Bangladesh (University Colleague London and University of Dhaka	September 2016 –November 2017
Urban Disaster Preparedness and Response: A Synthesis Review of Public Policies, Strategies, and Disaster Management Plans, GoB	May 2017 – October 2017
Trends of Disaster-related Public Fund Allocation in Bangladesh (An analysis of ADP's during the 6th Five Year Plan period (FY 2011 – FY 2015) for National Alliance for Risk Reduction and Response Initiatives	June 2016 – June 2017

Supervision of Ph.D., Master, and other Research Works

PhD Students (Completed)

1. Mohammad Ahsan Uddin

   Statistical Modeling of Rainfall and Drought in North West Bangladesh

2. AKM Aminul Haque

   Development of Open Space Management System to Response Scenario Earthquake in Dhaka Metropolitan Area

3. Md. Jobaer Alam

   Exploring the Possibilities of Mariculture for Promoting the Blue Economy of St. Martin's Island, Bangladesh

PhD Students (Ongoing)

1. Md. Tauhidul Islam

   Epidemiological Mapping with the Changes of Ecology.

2. Aparna Barman

   Multi-scale Climatic Vulnerability and Resilience Assessment in the South-western Coastal Region of Bangladesh.

3. Kamrun Nahar Khan Mukty

   Landfill Site Suitability Analysis on the Aspect of Water Contamination by Using GIS and Remote Sensing in Dhaka City, Bangladesh.

4. Fansab Mustahid

   Fault characterization using Geophysical information in the Northern part of Bangladesh.

5. Golam Kibria

   Developing Cyclone Disaster Demand Matrix for Bangladesh.

6. Mohammad Abdul Hadi

   Spatiotemporal and Economic Analysis of the Major Urban Areas in Bangladesh.

7. Nasim Ferdous

   Risk Sensitive Landuse Planning for Rajshahi City Corporation Area of Bangladesh.

MS Thesis Students

Name	Department Name	Thesis Title	Session
M. Abdullah Al Masud Khan	Geology	Remote Sensing and GIS-based Urban Area Delineation on Geological Units of Chittagong City area, Bangladesh.	2001-2002
Md. Baharul Alam Biswas	Geology	Soil Liquefaction Potential of Chittagong City Corporation area using simplified Seed and Idriss (1983) Method triggered by earthquake.	2003-2004
Kamrun Nahar	Geology	Ground amplification assessment using Microtremor and its relation to geomorphology- A case study of Sylhet city corporation area, Bangladesh.	2005-2006
Md Shakhawat Hossain	Geology	Correlation of geophysical and geotechnical investigations for seismic hazard assessment in Dhaka city, Bangladesh.	2005-2006
Dewan Md. Enamul Haque	Geology	Integration of Geological Information with Physical Planning to Develop Seismic-hazard Risk Sensitive Land Use Plan for Mymensingh Pourashava, Bangladesh.	2009-10
Anika Samm-A	Department of Disaster Science and Climate Resilience	Earthquake and Rainfall Induced landslide Hazard Assessment of Kutupalong Rohingya Camp using Meteorological and Geological Information	2019-20
Tasnim Jabin Jui	Department of Disaster Science and Climate Resilience	Assessment of Community's Willingness to Pay (WTP) for Improved Public Healthcare Facilities in the Coastal Hazard-prone Areas of Bangladesh	2019-20
Abul Kashem Faruki Fahim	Department of Disaster Science and	A Comparative Assessment of the Spatiotemporal Variations and Sustainability of Groundwater of	2019-20

	Climate Resilience	Bangladesh using Reliability-Resiliency-Vulnerability Approach	
Md. Shahoriar Sarker	Department of Disaster Science and Climate Resilience	Land Subsidence Monitoring using InSAR Technique in the Southwestern Region of Bangladesh	2020-21
Md. Mahfuzar Rahman	Department of Disaster Science and Climate Resilience	Flood Inundation Mapping of Sylhet City and Surrounding Floodplain Area using 1D-2D Coupled Hydraulic Modelling: A Case Study of Recent Flood Event 2022	2020-21
Romana Ibrahim	Department of Disaster Science and Climate Resilience	Prediction of groundwater salinity in the southwestern coastal region of Bangladesh using machine learning technique s	2020-21
Naharin Zannat	Department of Disaster Science and Climate Resilience	Rainfall induced landslide Hazard assessment in Chittagong Metropolitan Area	2020-21
Sheikh Walee Al Kabeer	Department of Disaster Science and Climate Resilience	Identifying areas most critically affected by increase in land-surface temperature and micro-climate change in Dhaka and their root causes and impacts.	2016-2017
Md. Imran Hossain Alve	Department of Disaster Science and Climate Resilience	Time-series Analysis of Soil Salinity in Khulna District Using Spectral Salinity Indices	2016-2017
Mirza Shihab Uddin	Department of Disaster Science and Climate Resilience	Post Cyclone Housing Reconstruction Pattern in Rangabali Upazilla, Patuakhali	2016-2017

Muhammad Abu Sayed	Department of Disaster Science and Climate Resilience	Vulnerability Assessment of Dupi tila Aquifer for Araihazar Upazila, Narayanganj, Dhaka, Bangladesh	2016-2017
Nafis Sazeed	Department of Disaster Science and Climate Resilience	Development of Flash Flood Early Warning System using Space Based Information	2016-2017
Md. Fazle Rabby	Department of Disaster Science and Climate Resilience	Drought Risk Assessment Using Remote Sensing & GIS Techniques: A Case Study of Niamatpur Upazila of Naogaon District, Bangladesh	2016-2017
Tonoy Mahmud	Department of Disaster Science and Climate Resilience	Performance Analysis of Three-Dimensional Model Produced from InSAR and Subpixel Correlation	2016-2017
Nazma Ahmed	Department of Disaster Science and Climate Resilience	Analysis of open space suitability for establishing temporary emergency shelter in the aftermath of earthquake in West Mirpur of Dhaka city	2016-2017
Shamima Ferdousi Sifa	Department of Disaster Science and Climate Resilience	A quantitative landslide risk assessment approach for Kutupalong Rohingya Camp	2016-2017
Sara Hanan Chowdhury	Department of Disaster Science and Climate Resilience	Assessing-socio economic vulnerability associated migration decision of the coastal people	2016-2017
Georgina Arefin Edita	Department of Disaster Science and Climate Resilience	Flood hazard modelling using HEC-HMS and GPM data for lower Teesta region	2016-2017

Afroza Mallick	Department of Disaster Science and Climate Resilience	How Riverbank Erosion Affects People's Non-migration Decisions in the Coastal Island of Bangladesh: A Case Study of Ramdaspur Village of Rajapur Union in Bhola District	2016-2017
Maria Abdullah Tarin	Department of Disaster Science and Climate Resilience	Assessment of the Groundwater Quality in Assasuni, Debhata and Kaliganj Upazila of Satkhira District	2016-2017
Marufa Akter	Department of Disaster Science and Climate Resilience	Urban Flood Risk Index Mapping using multi-parametric AHP and Remote Sensing GIS. A case study on Ramna-Matijheel Area	2016-2017
Dulali Majumdar	Department of Disaster Science and Climate Resilience	Socio-economic Inequalities Assessment of Different Thana of Madaripur District	2016-2017
Farah Jarin Khan Preyanka	Department of Disaster Science and Climate Resilience	Suitability Assessment of existing cyclone shelter in Barguna district	2016-2017
Sabrina Sultana Lima	Department of Disaster Science and Climate Resilience	Quantification of River Bank Erosion and Bar Deposition and Change Detection of Land cover Pattern in Naria Upazila	2016-2017
Nafisa Nauri Islam	Department of Disaster Science and Climate Resilience	Cyclone shelters and refugee decisions in coastal Bangladesh	2016-2017
Md. Asif Rafsan	Department of Disaster Science and Climate Resilience	Assessing risk of riverbank erosion migrants and their migration path in Dulutkhan upazila, Bhola.	2016-2017

| Saiyeba Zaman | Department of Disaster Science and Climate Resilience | Crop type wise damage assessment due to flood inundation in Dinajpur District | 2016-2017 |

Research Project Students

Name	Department Name	Project Title	Session
Azka Touhida Daiby	Department of Disaster Science and Climate Resilience	Rainfall Macro Climate Analysis of Chattogram District using CMIP6 Models and Station Data for the period 1960-2018	2017-2018
E.M. Talid Khan	Department of Disaster Science and Climate Resilience	Damage and loss assessment of household for Sylhet flood 2022	2017-2018
Anika Tabassum	Department of Disaster Science and Climate Resilience	Impact of Urban Sprawling on Urban Heat Island: A Microclimate Change Study in Chittagong City	2016-2017
Mahfuja Khandaker	Department of Disaster Science and Climate Resilience	Earthquake-Induced Landslide Hazard Assessment in Chittagong Metropolitan Area	2016-2017
Habiba Azad	Department of Disaster Science and Climate Resilience	Development of storm surge prediction model for the Southern region of Bangladesh using artificial neural network (ANN)	2017-2018
Sabiha Anjum Dibby	Department of Disaster Science and Climate Resilience	Monitoring and Prediction of Riverbank Erosion of Dharla River Using Landsat Satellite Imageries and Kalman Filtering Algorithm in Kurigram District	2016-2017

| Asim Abrar | Department of Disaster Science and Climate Resilience | Fire Hazard Modeling using Fire Dynamic Simulator and Damage and Loss Assessment of Neighboring Households of the 2022 Sitakunda Fire Event | 2017-2018 |

(Dr. A S M Maksud Kamal)
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