

CURRICULUM VITAE of

Md Rahedul Islam Ph.D.

MAILING ADDRESS

Pabna University of Science and Technology
Department of Geography and Environment
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CURRENT POSITION:

Associate Professor

ALMA MATER

Pabna University of Science and Technology, Bangladesh and University of Tokyo, Japan

UNIVERSITY EDUCATION

- 2020** D. Eng., Civil Engineering (Remote Sensing of Environment and Disaster), University of Tokyo, Japan.
- 2011** Masters (Thesis), Geography and Environmental Studies (Land use and Land cover Changes), University of Rajshahi, Bangladesh (CGPA 3.94 Out of 4.00).
- 2009** Bachelor (Honors), Geography and Environmental Studies, University of Rajshahi, Bangladesh (CGPA 4.00 Out of 4.00).

Father and paternal home: Vill: Shanpukuria, Municipality: Durgapur, Thana: Durgapur, Dist: Rajshahi, Bangladesh.

Maternal home: Vill: Bariopara, Union: Puthia, Thana: Puthia, Dist: Rajshahi.

Joint Convener (2016-): মহান মুক্তিযুদ্ধের চেতনা ও মূল্যবোধে বিশ্বাসী প্রগতিশীল শিক্ষক সমাজ, পাবনা বিজ্ঞান ও প্রযুক্তি বিশ্ববিদ্যালয়, পাবনা।

PROFESSIONAL CAREER

Academic

- 2022 December -** **Dean**, Faculty of Life and Earth Science, Pabna University of Science and Technology, Pabna-6600.
- 2022 April-** **Associate Research Fellow**, Dept. of Civil Engineering, Institute of Industrial Science, University of Tokyo, Japan
- 2021 Dec –** **Chairman**, Dept. of Geography and Environment, Pabna University of Science and Technology, Pabna-6600.
- 2021 Oct-** **Associate Professor**, Dept. of Geography and Environment, Pabna University of Science and Technology, Pabna-6600.
- 2015 Sep – 2021 Oct** **Assistant Professor**, Dept. of Geography and Environment, Pabna University of Science and Technology, Pabna-6600.

- 2013 Nov –2015 Sep** **Assistant Professor**, Dept. of Geography, Environment and Urban Planning, Pabna University of Science and Technology, Pabna-6600.
- 2011 Oct – 2020 Nov** **Lecturer**, Dept. of Geography, Environment and Urban Planning, Pabna University of Science and Technology, Pabna-6600.

PROFESSIONAL CAREER

Administrative and Extra Academic Activities

- 2022 June -** **Administrator, Transport Pool**, Pabna University of Science and Technology, Pabna-6600.
- 2020 Jan-** **Chief Advisor**, PUST Higher Study Association, Pabna University of Science and Technology, Pabna-6600.
- 2019 Sep-2020 Sep.** **Vice President**, International Student Association of Civil Engineers, Tokyo University, Japan
- 2014April–2016 Ap.** **Secretary**, Teacher’s-Officer’s Club, Pabna University of Science and Technology, Pabna-6600.
- 2012 Mar- 2014 March** **Vice President**, PUST Rover Scouts, Pabna University of Science and Technology, Pabna-6600.
- 2012 April-2014 April** **Sports Secretary**, Teacher’s-Officer’s Club, Pabna University of Science and Technology, Pabna-6600.
- 2011 Oct- 2014 March** **Assistant Proctor**, Pabna University of Science and Technology, Pabna-6600.

Duties and responsibilities

- In Geography and Environment department conducting class activities on GIS and remote sensing application in agriculture and environment, physical bases of environment (geomorphology), cartography, photogrammetry and aerial photo interpretation, climatology and GIS regularly.
- Generally, supervise research in the field of remote sensing and GIS application in land use change and environmental management (particularly in the environmentally stressed drought, agriculture and flood prone regions and dry lands in western part) and in urban geography in both undergraduate, graduate, M.Phil. level.
- Academic head (Dean) of the life and earth science leads the academic activities; likes curriculum development, ordinance preparing, course offering and research activities accelerating among the departments.
- Administrative head (Administrator) of Transportation pool - Pabna University of Science and Technology, Pabna-6600 to look after university’s transportation system, planning, all internal and external communications and staff management.
- Chairman of the Department of Geography and Environment at the at Pabna University of Science and Technology to look after its overall academic, planning, all internal and external communications and staff management.

Field work supervision in Bangladesh

- As part of the department’s academic responsibility, every year supervised team of students to conduct land use and socio-economic surveys at different parts of Bangladesh.

SCHOLARSHIPS AWARDED

- 2021 Associate Research Fellowship, IIS, Tokyo, Japan
- 2017 Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan

2010 University of Rajshahi Nawab Abdul Latif Hall Gold Medal for Excellent Result in Honors Level.

SPECIAL TRAININGS OBTAINED

- Google earth engine application, Google Mini Summit, 2019, 2020; Google incorporation, Roppongi, Tokyo, Japan
- Total Station Survey and its Application: 3 days long Program, 2009. Organized by- Dept. of GES, Rajshahi University, Bangladesh.
- Remote Sensing and GIS Techniques and Application, 2012. Organized by- Dept. of GES, Rajshahi University, Bangladesh.
- Effective Teaching and Learning Method in Earth Sciences, 2013 Organized by- Dept. of GES, RU and Institute of Geography, University of Freiburg, Germany.
- GIS and Remote Sensing in Environment, Resource and Development, 2013. Organized by- Dept. of GES, Rajshahi University, Bangladesh.

APPLICATION SOFTWARE KNOWLEDGE

PC based IDRISI, ArcGIS, QGIS, GEE, ENVI, EXTEND (simulation modeling software) etc.

PROGRAMMING KNOWLEDGE

JavaScript, R+, Python (working level)

RESEARCH AREAS AND RESEARCH INTERESTS

Global change, remote sensing and GIS application in land use and land cover changes, agriculture, GHS's monitoring, climate changes, disasters and spatial data base modeling.

LANGUAGE PROFICIENCY

English and Bangla (fluent in all bands), Hindi (working level), Japanese (basic level)

RESEARCH ACTIVITY

- **(2021)** Monitoring GHG methane emission from rice paddy field of Bangladesh, Sponsor, IIS, UTokyo and JAXA, Japan.
- **(2022)** Space Application for Environment (SAFE)_Rice_CH4 (Asia Pacific Regional Space Forum (APRSafe) funded Project.
- **(2021)** Malfunctional Practices in Infrastructural Development in Bangladesh, Funded by UTokyo.
- **(2020)** Assessing socio-economic and environmental benefit of AWD Irrigated Rice Paddy in Bangladesh, Funded by Ministry of Education, Science, Sports and Culture (MEXT), Japan
- (2017) Wetland Biodiversity Declination and Strategic Actions, Funded by NGO.
- **(2016)** Community Based Adaptation to Climate Change in Charland Area of Bangladesh. Sponsor, University Grant Commission (UGC) and Pabna University of Science and Technology.
- **(2014):** Land use and land cover changes and agricultural land loss in Rajshahi District, Bangladesh, Sponsor, University Grant Commission (UGC) and Pabna University of Science and Technology.
- **(2012):** Climate change and community-based adaptation in char areas. Sponsor, University Grant Commission (UGC), Bangladesh.

RESEARCH SUPERVISION (completed)

Masters level

- Land use changes and impacts on food security
- Changing flow of Padma River from 1950 to 2022
- Malpractices of infrastructure development in local municipalities

- Pattern of land transformation: perspective – loss of agricultural lands in Bangladesh.

RESEARCH WORKS

Papers published

- Sharifuzzaman, M., & Islam, M. R. (2024). Impacts of Salinity Intrusion on Agriculture in the Coastal Region of Bangladesh. *Journal of Coastal Conservation*, Springer Nature.
- Lubna, F. A., & Islam, M. R. (2024). Assessing the impacts of government subsidies on people's livelihood in Kushtia district. *Bangladesh Rural Development Studies*, 27(1), 59-68.
- Khatun, M., Sultana, S., & Islam, M. R. (2024) Changing road communication system of Rajshahi City Corporation from 1990 to Present, UDD, Bangladesh
- Islam MR & W, Takeuchi (2022) Physio-climatic and Socio-economic Suitability of Alternate Wetting and Drying Irrigated Rice Paddy in Bangladesh. *Remote Sensing Applications II: A Climate Change Perspective in Agriculture*, Springer, Frontiers in Regional Science Association, Japan.
- Islam MR (2022) Mapping rice paddy cropping patterns with MODDIS and ALOS-2 ScanSAR over Bangladesh from 2001 to 2019. *Rajshahi University Journal of Environmental Science*, Volume 10.
- Islam MR (2021) Irrigated rice area mapping over Bangladesh with remotely sensed data from 2001 to 2018. *Agrotechnology* 10: 213.
- Islam, MR (2021) Crop Calendar Mapping of Bangladesh Rice Paddy Field with ALOS-2 ScanSAR Data. *Advances in Remote Sensing*, 10, 115-129. doi: 10.4236/ars.2021.103008.
- Islam MR (2021), Barriers and Opportunities of Alternate Wetting and Drying (AWD) Irrigation System in Bangladesh: A Comparative Study among Major Rice Growing Countries (2021), *JRR*, Vol 9(8) DOI: 10.4172/2375-4338.1000225
- Islam MR and Takeuchi W (2019) PHYSIO-CLIMATIC CLASSIFICATION OF BANGLADESH'S RICE PADDY FIELD FOR ALTERNATE WETTING AND DRYING (AWD), <https://a-a-r-s.org/proceeding/ACRS2019/TuC2-3.pdf>
- Islam, M.R. and Hassan Z. (2011) Land use changing Pattern and Challenges for Agricultural Land: A Study on Rajshahi District., *Journal of Life and Earth Science*, Rajshahi University, p. 67-74.
- Islam, M. R. and Hassan Z. (2013) Losses of Agricultural Land due to Infrastructural Development: A Study on Rajshahi District. *International Journal of Scientific and Engineering Research*, Volume 4, Issue 11, November 2013, page 991-997, ISSN 2229-5518.
- Islam, M. R. (2013) Causes and Consequences of Agricultural Land losses of Rajshahi District, Bangladesh, *IOSR Journal Of Environmental Science, Toxicology And Food Technology (IOSR-JESTFT)*, e-ISSN: 2319-2402,p- ISSN: 2319-2399. Volume 5, Issue 6 (Sep. - Oct. 2013), PP 58-65, www.Iosrjournals.Org
- Islam, M.R. (2013) LOSSES OF AGRICULTURAL LAND AND IMPACTS ON ENVIRONMENT: A STUDY ON RAJSHAHI DISTRICT OF BANGLADESH, *Int. J. Sustain. Agril. Tech.* 9(9): 01-07, September 2013, An online Journal of "G-Science Implementation and Publication",

Conference Proceedings

1. Torsa A. T., Sumi M. M. and **Islam MR** (2023) Assessing the Physical and Mental Health Complications of Post-Covid-19 Patients in Bangladesh, The 2nd International Symposium on One Health, One World session International public health research in Asia, <https://doi.org/10.3390/OHOW2023-16594>
2. Islam MR & W Takeuchi (2022) Alternate Wetting and Drying Irrigated Rice Paddy Suitability Assessment in Bangladesh. The 28th Asia Pacific Regional Space Forum (APRSafe) Space Application for Environment (SAFE) Conference, Hanoi, Vietnam.
3. Islam MR & W Takeuchi (2019) Irrigated-Rainfed Rice Area Mapping with Climatic Parameters over Bangladesh. *International Symposium on Remote Sensing (ISRS)*. <https://isrs.csr.ncu.edu.tw/>, Taipei, Taiwan. 2019/04/17-20
4. Islam Md Rahedul and Wataru Takeuchi, 2019. Irrigated-Rainfed Rice Area Mapping with Climatic Parameters over Bangladesh. 第27回 生研フォーラム「宇宙からの地球環境・災害のモニタリングとリスク評価」: 東京大学生産技術研究所 (東京都目黒区), 2019/3/6.
5. Islam Md Rahedul and Wataru Takeuchi, 2018. Irrigated Area Mapping to Assess AWD Potential over Bangladesh with MODIS time series from 2001-2016. *Asian Conference on Remote Sensing (ACRS)*. <https://acrs2018.mrsa.gov.my/>. Kuala Lumpur, Malaysia. 2018/10/15-19.
6. Islam Md Rahedul and Wataru Takeuchi, 2019. Physio-climatic Classification of Bangladesh's Rice Paddy Field for Alternate Wetting and Drying (AWD), The 40th Asian Conference on Remote Sensing (ACRS),

<http://www.acrs2019.org/>, Daejeong, Republic of Korea. 2019/10/14.

7. Islam Md Rahedul and Wataru Takeuchi, 2018. Crop Calendar Mapping for AWD Assessment over Bangladesh with MODIS time series from 2001-2016. International Symposium on Remote Sensing (ISRS). <http://isrs.or.kr/>, Pyeongchang, South Korea. 2018/05/09.
8. Islam Md Rahedul and Wataru Takeuchi, 2019. AWD Irrigation Techniques in Rice Paddy Irrigation: A Great Opportunity for Bangladesh. 第26回 生研フォーラム「宇宙からの地球環境・災害のモニタリングとリスク評価」：東京大学生産技術研究所 (東京都目黒区), 2018/3/6.
9. Islam, M. R., (2017), Climate change and community-based adaptation in Char Area: A tentative study on Char Ghospur Pabna., 3rd International seminar on Earth System Process and Interruption: Contemporary Issues, 19-20 April 2017, Gour Bangla University, Maldha, West Bengal, India.
10. Islam, M. R., (2011), Climate changes and agricultural disparities, National Conferences on Environmental Day, 2011, Organized by Faculty of Life and Earth Science, Begum Rokeya University, Rangpur.

Conference Attend

01. Irrigation Water level monitoring of rice cultivation for carbon credit in Bangladesh, 12-13 October, ADB, Bangladesh-DASHCOH Foundation, Rajshahi, Bangladesh
02. Japan Society of Agricultural Informatics (JASI) Symposium on SMART AWD Irrigation, 17-18 September, 2024, Bioresource Engineering Division, Faculty of Agriculture, Kyoto University, Kyoto, Japan
03. The BRIN-AIT Students Hybrid Seminar on Smart Agriculture, 28-03 June, 2024 AIT, Bangkok, Thailand
04. The 2nd International Symposium on One Health, One World session International public health research in Asia. 05-06 December 2023, Dhaka, Bangladesh.
05. Plastic Pollution and Green Energy for Sustainable Environment, ASE ROSATOM, Iswardi, Pabna, Bangladesh, 05/06/2023
06. The 39th Asia Pacific Regional Space Organization Forum (APSRAF), Hanoi, Vietnam 2022.
07. The 40th Asian Conference on Remote Sensing (ACRS) 2019, <http://www.acrs2019.org/>, Daejeong, Republic of Korea. 2019/10/14.
08. Seminar on Development and Environment 2017, Global Green Growth Institute (GGGI), Seoul, People Republic of Korea
09. IIS PhD Student Live, 2019. Institute of Industrial Science, University of Tokyo, Japan
10. International Symposium on Remote Sensing (ISRS) 2019, <https://isrs.csrnr.ncu.edu.tw/>, Taipei, Taiwan. 2019/04/17
11. The 27th IIS Forum: Earth Observation, Disaster Monitoring and Risk Management, 3th to 6th March 2019, Institute of Industrial Science, University of Tokyo, Japan
12. The 39th Asian Conference on Remote Sensing (ACRS) 2018, <https://acrs2018.mrsa.gov.my/>. Kuala Lumpur, Malaysia. 2018/10/15-19.
13. International Symposium on Remote Sensing (ISRS). 2018, <http://isrs.or.kr/>, Pyeongchang, South Korea. 2018/05/09.
14. The 26th IIS Forum: Earth Observation, Disaster Monitoring and Risk Management, 6th to 8th March 2018, Institute of Industrial Science, University of Tokyo, Japan
15. The 3rd International seminar on Earth System Process and Interruption: Contemporary Issues, 19-20 April 2017, Gour Bangla University, Malda, West Bengal, India.
16. International Conference on Resource and Development, 2014, Dept. of GES, RU and Institute of Geography, University of Freiburg, Germany
17. International Workshop on Effective Teaching and Learning Method, 2013, Dept. of GES, RU and Institute of Geography, University of Freiburg, Germany
18. National Conferences on Environmental Day, 2011, Organized by Faculty of Life and Earth Science, Pabna University of Science and Technology, Pabna

PROFESSIONAL MEMBERSHIP

1. Member, ISPRS, Switzerland 2019.
2. Member, Bangladesh National Geographic Association.
3. Member, Riverine People.

Professional Awards / Honors Received:

1. Research Presentation Award, IIS PhD_Student_Live_2020, IIS, University of Tokyo, 2020
2. Nawab Abdul Latif Hall Gold Medal for Excellent Result in BSc, Rajshahi University, 2012
3. Excellent Result AWARD in MSc, Dept. Geography and Environmental Studies, University of Rajshahi, 2011

4. University Grant Commission Research Grant (UGC Research) Grant-2012
5. University Grant Commission and University Joint Research Grant-2014

Newspaper's Article-

01. Not honorees but honors needed for the Teachers, (2016), Daily Samokal, Sub-editorial, Bangladesh.
02. Riverine people and Environment, (2015), Daily Samokal, Sub-editorial, Bangladesh.
03. Glorious Seven Years Journey of Pabna University of Science and Technology, (2015), Daily Samokal, Sub-editorial, Bangladesh.
04. Poem Writer, Various Journal and Magazine in Bangladesh.

ADDITIONAL SKILL AND HOBBY

Light vehicle driving, poem writing, traveling and reading.

REFERENCES

Professor Dr. Raquib Ahmed
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Environmental Studies
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Dr. Wataru Takeuchi
Professor, IIS
Dept. of Civil Engineering
The University of Tokyo
Tokyo, Japan
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PERSONAL STATEMENT:

I joined at the University of Pabna Science and Technology as a lecturer in October 2011. I was regularized as an Assistant Professor in 2013 and currently working as Associate Professor (2021). I have been trying my best to perform as a faculty member here in the areas of teaching, research and outreach etc.

CERTIFICATION:

I, the undersigned certify that, to the best of my knowledge and belief, this bio-data correctly describe myself, my qualification and experience. I understand that any willful misstatement described in the bio-data may lead to my disqualification.



Signature
(Md. Rahedul Islam)

Date: 29/06/2023