









**Objective:** To carryout research, teaching & capacity development

### Profile on Social Media

-  Nepal C Dey - Google Scholar
-  Research profile (researchgate.net)
-  LinkedIn
-  Nepal Dey (0000-0003-1628-6341) (orcid.org)
-  <https://www.facebook.com/nepal.dey>
-  YouTube

### 1.0 Contact information

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[Google Scholar](#), [LinkedIn](#) [Facebook](#) [ORCID](#) [Google.com](#)

**2.0 Nationality:** Bangladeshi

### 3.0 Educational qualifications

Ph.D in Bioenvironment Science from Tottori University, Japan in 2006 (passed with distinction)

M. Sc. Engineering (Water Resources) from Bangladesh University of Engineering & Technology, Dhaka in 2000 (1<sup>st</sup> Class)

B. Sc. Engineering (Irrigation and Water Management), Bangladesh Agricultural University, Mymensingh in 1996 (1<sup>st</sup> Class and 4<sup>th</sup> position in merit).

**3.1 Major courses Learned/trained:** Agricultural Meteorology and Hydrology, Remote Sensing and GIS, Irrigation & Water Management, Groundwater & Wells, Environmental & Social Impact Assessment, ER Mapper, SPSS.

#### 3.1.1 Teaching and Research Interest

- Implementation Research and Impact evaluation
- Climate Change Impacts Assessment,
- Environmental and Social Impact Assessment
- Agri-food System, Nutrition and Climate Change
- Tools and Techniques in Natural Resource Management/Disaster Risk Reduction
- Agricultural Meteorology and Hydrology
- Masters/PhD Student Supervision

#### 3.1.2 Relevant academic and research expertise (Present)

- **Disaster Risk Management Specialist** for the study on “Enhancing Institutional Capacity for EP&R, under Climate Change and DRM Cluster, The World Bank, Bangladesh (from Oct 2023 to the Present).
- **Facilitator;** Conduct training on “Environmental, health and safety & legal issues in managing Micro-enterprise” to operation and management employee of PKSF’s Partner Organizations (from October 2023 to the Present).
- **Environmental and Social Expert;** End-term Evaluation, Project Completion and Feasibility study of Agro-Meteorological Information Systems Dev. Project (AMISDP); 2017-24, Kranti Associates, DAE, and the WB.
- **Team Lead and Chief Investigator;** Evaluation of Comprehensive Poverty Reduction Program (CPRP-V) at Bandarban and Rangamati, 2024, CCDB Bangladesh (from May to the Present)
- **Review Editor,** Frontiers of Environmental Science (from 2022 to the present) (Impact Factor=5.411 )
- **Review Editor,** Frontiers Toxicology, Pollution and the Environment (from 2022 to the present) (IF= 7.563)
- **Topic Editor,** Frontiers Nutrition for Sustainable Dev. Goals: Clean Water and Sanitation (from 2022 to date)
- **Academic Editor,** Academia Biology (from 2022 to the present).
- **Reviewer,** Applied Water Science; Water Resources Management; American Journal of Environmental Protection; Development Engineering; BMC Public Health; Lancet Global health.
- **Member (External);** Doctoral Committee, Institute of Water and Flood Management, Bangladesh University of Engineering and Technology (BUET) (from June 2021 to the present).
- **Member,** High Level Expert Panel, Global Forum on Food Security and Nutrition (FSN) (from 2023 to date).
- **Member;** [Scientific Committee, 9<sup>th</sup> International Conference on Water and Flood Management](#) (ICWFM 2023), held on 14-16 October 2023, BUET, Palasi, Dhaka 1000, Bangladesh
- **Member;** Annual Research Review on Agricultural Water Management of National Agricultural Research System (NARS) Institutes, Bangladesh (from 2015 the present).
- **Expert Member;** R&D Thematic Group on Water Supply and Sanitation for the Policy Support Unit of Local Government Engineering Department of Govt. of Bangladesh; (from 2012 to the present).

#### 3.1.3. Awards and Honors

- Japanese government “MONBUKAGAKUSHO Scholarship” for Doctoral study (2003-06) in the Tottori University, Japan.
- Awarded for phenomenal and worthy Invited Lecture on “Improving climate change adaptation through crop simulation model by at 5th Symposium on the Development and Application of Agricultural System Models, held on November 11-14, 2018, Nanjing, **China**.

- Awarded for phenomenal and worthy Invited Speech on Impact of WASH interventions of Health at UHC Policy & Solution Conference held on 9-11 April 2015, Radisson Blu Water Garden, Dhaka.
- Awarded Certificate in recognition for outstanding excellence in Scientific Community at the 2nd Int'l. Convention on Geoscience and Remote Sensing held on 6-8 Nov 2017 in Las Vegas, USA.

### 3.1.4 Employment and job experiences

- Disaster Risk Management Specialist, SAR-Climate Change and DRM Cluster, The World Bank, Bangladesh (from Oct 2023 to the Present)
- Adjunct Professor, Climate Change and Environment Cluster, BRAC James P Grant School of Public Health, BRAC University (Jan 2019 to June 2021).
- Senior Research Fellow & Coordinator/ Research Fellow, Environment Research Unit, BRAC Research and Evaluation Division (Sept 2009 to Dec 2018).
- Associate Professor, Department of Environmental Science and Disaster Management, Noakhali Science & Technology University (Feb 2012 to May 2012).
- Environment & Sustainable Development Specialist, UNDP, General Economic Division, Planning Commission, GoB of Bangladesh, Dhaka 1207 (April 2008-Oct 2008)
- Project Director and Irrigation Engineer, Department of Agricultural Extension, Ministry of Agriculture, Khamarbari, Dhaka (March 1997-Sept 2003).
- Research Associate, Hayakawa Lab, Department of Biological and Environmental Science, Yamaguchi University, Japan (Oct 2003-Sept 2006).
- Teaching Assistant, Department of Water Resources Engineering, Bangladesh University of Engineering and Technology, Dhaka (Aug 1998-Sept 1999).

### 3.1.5 Professional and Advisory Services

#### Session Chair

- Seminar on "Drinking from the deep end: Impact of Deep Tube-well Water Supply on Child Mortality" presented by Faiyaz Talukdar of Georgetown University, USA on 8 September 2015, Dhaka in 2015.
- Paper on "Urban sustainability in the context of rapidly urbanizing cities in Asia". Presented by Lai-Choo Malone Lee, Director, Centre for Sustainable Asian Cities, Singapore at Oxford Round Table on Environment, Climate Change and Global Warming, held on 22-25 July 2015 at Harries Manchester College, the University of **Oxford, UK**.
- **Co-Chair**; 2nd Int'l Convention of Geoscience and Remote Sensing, held on 8-9 Nov 2017 Las Vegas, Nevada, **USA** in 2017.
- **Co-Chair**; International Symposium on Environment, Disaster and Health, held on 18-21 December 2019, University of Dhaka, Bangladesh.
- **Facilitator**; Session on Impact of climate change on agriculture and food security in the workshop on "Impact of climate change on Rural livelihood", held on 2- 4 December, 2019 at CCDB HOPE Foundation, Baroipara Savar Dhaka.
- **Keynote Speaker**; Seminar on "Research Career in Bangladesh & Global Perspective", held on 23 March 2019 in Jagannath University, organized by Youth Centre for Research and Action, Dhaka.
- **Keynote Speaker** Improving climate change adaptation through crop simulation model by at 5th Symposium on the Development and Application of Agricultural System Models, held on November 11-14, 2018, Nanjing, **China**.
- **Discussant**; Seminar on "Climate Change in Bangladesh: Impacts on Agriculture, held on 22 February 2024 at Institution of Engineers, Bangladesh" where Dr. Dey emphasized the impact of climate change and extremes on agriculture, livelihood, food and nutrition security, and health. He also discussed relevant national policies, case studies, research evidence, and best practices for adaptation and mitigation measures.
- **Contribution** to Global Food Security and Nutrition (FSN) Forum through writing two papers, "Agrofood System for Climate Action" for the FAO Science and Innovation Forum 2023, and "Realization of the Human Right to Adequate Food" for the 20th anniversary of the Right to Food Guidelines, upon request from the Global Forum on Food and Nutrition Security (FSN 2023).

### 3.1.6 Membership

- **Member;** Environmental & Water Resources Institute, USA since 2005 to 2006.
- **Member;** Bangladesh Association for the Advancement of Science, since 1997 to 1998.
- **Member;** Krishibid Institution of Bangladesh, since 1996 to the present
- **Member;** Institution of Engineers, Bangladesh, M/15449, since 1996 to the Present.
- **Member;** Bangladesh Association for the Advancement of Science BAASVII M-87 from 1996 to the present.
- **Member;** Japanese Society of Irrigation, Drainage & Reclamation Engineering, since 2005 to 2006.
- **Life Member;** Japanese Universities Alumni Association in Bangladesh JUAAB LM93, from 1996 to the present.

### 3.1.7 Research Grant Awards and Experiences

I have led over 50 research projects and Principal Investigator or Co-Investigator and actively involved in national and international collaborations like Ministry of Science and Technology, Bangladesh, Food Planning and Monitoring Unit (FMPU)/Ministry of Food, Bangladesh, FAO, USAID, EU, the World Bank, International Water Management Institute (IWMI), IUCN, UN Foundation, UN Women, BRAC, Netherlands Government, AusAID and DFID, Yale and Stanford University, CCDB, EIMS, etc. A list of selected studies is given below:

#### On-going study:

- **Position:** Disaster Risk Management Specialist  
**Name of the study:** Enhancing Institutional Capacity on Emergency Preparedness and Response; 2023-24.  
**Client:** The World Bank and Government of Bangladesh
- **Position:** Environmental and Social Expert  
**Name of the study:** End-term Evaluation, Project Completion and Feasibility study for the future interventions/phase, 2023-24 Agro-Meteorological Information Systems Dev. Project (AMISDP); 2023-24.  
**Client:** Kranti Associates, DAE, and the World Bank.
- **Position:** Team Lead and Chief Investigator  
**Name of the study:** Evaluation of Comprehensive Poverty Reduction Program (CPRP-V) at Bandarban, 2024.  
**Client:** CCDB Bangladesh

#### Completed studies

- **Position:** Environmental Safeguard Consultant  
**Name of the study:** Environmental Safeguard Efforts and Compliance Bangladesh under Rural Water, Sanitation and Hygiene Project (2021-25), of PKSF co-financed by the Government of Bangladesh; 2024  
**Client:** PKSF, The World Bank and AIIB.
- **Position:** Team Lead and Chief Investigator  
**Name of the study:** Evaluation of Comprehensive Poverty Reduction Program (CPRP-V), 2024.  
**Client:** CCDB Bangladesh
- **Position:** Principal Investigator  
**Name of the study:** Sustainability of groundwater use for irrigation in the NW Bangladesh"; 2011-12.  
**Client:** FAO, USAID and EC and Food Planning and Monitoring Unit (FPMU) of **GOB**.
- **Position:** Drought Vulnerability Expert  
**Name of the study:** Develop drought prediction model and weekly outlook, 2022-23; Development of hydrological services products (Bangladesh Water Development Board, BWDB C15),  
**Client:** EIMS, BWBD and the World Bank.
- **Position:** Team Lead  
**Name of the study:** Project evaluation of creating youth employment and Child protection project, 2023 under Comprehensive Poverty Reduction Programme (CPRP) of CCDB.  
**Client:** CCDB Bangladesh
- **Position:** Principal Investigator  
**Name of the study:** Consumer awareness of nutrition, food safety and hygiene (2020-2021)  
**Client:** FAO, USAID and EC and the Food Planning and Monitoring Unit (FPMU) of **GOB**.
- **Position:** Team lead and Consultant  
**Name of the study:** Livelihood and market assessment at Bandarban, 2022 under Comprehensive Poverty Reduction Programme (CPRP) of CCDB.  
**Client:** CCDB Bangladesh
- **Position:** Co-Principal Investigator  
**Name of the study:** Process evaluation of the project on vulnerability reduction of women affected by climate change in coastal area of Bangladesh; 2015  
**Client:** UN Women in 2015 through BRAC Disaster Management and Climate Change Program.
- **Position:** Principal Investigator  
**Name of the study:** Effectiveness of WASH services for Rohingya and host communities in the Cox's Bazar; 2020.  
**Client:** The Embassy of the Kingdom of the Netherlands (EKN) through BRAC WASH Program.

- **Position:** Co-Principal Investigator  
Name of the study: Value chain of agricultural products in disaster prone areas of Bangladesh, conducted; 2015  
**Client:** Oxfam through C3ER of BRAC University
- **Position:** Co-Principal Investigator  
Name of the study: Assessing effectiveness of recent humanitarian responses in different disaster prone areas of Bangladesh; 2017-18  
**Client:** AusAid & DFID (Strategic Partnership Agreement (SPA))
- **Position:** Environmental Specialist  
Name of the study: Environmental and social impact assessment of Dhaka-Chattagram-Cox's Bazar Rail Preparatory Facility Project (DCCBRPFP); 2018  
**Client:** ENRAC, BCL and The World Bank
- **Position:** Bioenvironmental Science Expert  
**Name of the study:** Developing a bankable project proposal on adaptation initiative for climate vulnerable offshore small Island and Charland in Bangladesh; 2016-17.  
**Client:** UNDP through C3ER of BRAC University
- **Position:** Principal Investigator  
**Name of the study:** Impact of flash flood'17: Perspective from the haor area of Bangladesh; 2017.  
**Client:** AusAid & DFID (Strategic Partnership Agreement (SPA)) through BRAC WASH Program.
- **Position:** Principal Investigator  
**Name of the study:** Case studies and best practice research on empowering women through clean cookstoves projects in Bangladesh; 2012.  
**Client:** UN Foundation, USA
- **Position:** Co-Principal Investigator  
**Name of the study:** Indoor air pollution and its health impact (2<sup>nd</sup> phase); 2010-11.  
**Client:** Yale and Stanford University, **USA**
- **Position:** Principal Investigator  
**Name of the study:** Shallow groundwater quality due to pesticides use in agriculture field; 2002-2003.  
**Client:** Ministry of Science and Information & Communication Technology, Bangladesh, **GOB**
- **Position:** Principal Investigator  
**Name of the study:** Sustainability of WASH implementation services for improving access to sanitation, water and hygiene practices: post-endline assessment; 2015.  
**Client:** FAO, USAID and EC of the United Nations and Food Planning and Monitoring Unit, **GOB**.
- **Position:** Principal Investigator  
**Name of the study:** Food security, water productivity and poverty: A comparative study between India and Bangladesh; 2014  
**Client:** IUCN
- **Position:** Consultant  
**Name of the study:** Impact of biogas plant in local environment and households' health improvement for Social Development Studies, General Economic Division in 2010  
**Client:** SDS, GED
- **Position:** Consultant  
**Name of the study:** Water balance study in the coastal area of Bangladesh, conducted in 2014  
**Client:** FAO of the UN
- **Position:** Consultant  
**Name of the study:** Groundwater uses and management in coastal zone of Bangladesh in 2014.  
**Client:** International Water Management Institute (IWMI)
- **Position:** Environmental and Sustainable Development Specialist  
**Name of the study:** MDG7 Needs Assessment and Costing (2009-2015); 2008.  
**Client:** UNDP and GED, **GOB**
- **Position:** Environmental and Sustainable Development Specialist  
**Name of the study:** [A situation Analysis report on environment \(MDG7\) Bangladesh](#); 2008.  
**Client:** UNDP and GED, **GOB**
- **Position:** Consultant  
**Name of the study:** **Situation of** Clean stoves and fuels in Bangladesh; 2022-23.  
**Client:** Beijing University of Chemical Technology, China; for Beijing University of Chemical Technology, China.

## Collaborators

### Research collaborators

David Levine, The University of California; Marie-Charlotte Buisson, Researcher and Impact Evaluation, IWMI, Delhi; Corinne Heart, Director, UN Foundation, Washington D.C; Ciro Fiorillo, Chief Technical Officer, FAO; Nur A.

Khondaker, AFOR, FAO Representation in Bangladesh; Bushra Nishat, Project Manager, IUCN; Mushfique Mobarak, Professor, Yale University, USA; Dr. Jay Graham, George Washington University; Dr. David Levine, Professor, California University in Berkeley, USA; Dr. S. K Bala, Professor, BUET; Dr. AKM Saiful Islam, Professor, BUET, Dr. Abdur Rashid, PSO, BARI; Dr. Bharat Sharma, Principal Researcher, IWMI, India; Geoge Ashit Singh, CCDB; Sachi Suzuki, The World Bank.

#### **Graduate and doctoral advisors**

Dr. Seiji Hayakawa, Professor, Yamaguchi University, Japan – Supervisor of Doctoral Research; Dr. AFM Saleh, Professor of BUET and Dr. Muhammed A. Bhuiyan, Lecturer and Director, RMIT University, Australia – Master's Thesis Supervisor.

**Major courses taught/trained:** Environmental Impact Assessment, Agricultural Meteorology, Irrigation and Water Resources Management, Groundwater and Wells, Soil Water Conservation, Statistical Methods in Hydrology.

### 3.1.8 Selected Publications

#### **Book Chapters**

1. **Dey, N.C.**, Bhuiyan, M., Parvez, M. Saha, R. Bhattacharya, P. “Exposure to Drinking Water Contaminants – Arsenic, Iron, Salinity and E.coli: Policy Recommendations for Improving Access to Safe and Affordable Drinking Water in Coastal Bangladesh”, Nasreen et al. (Editor). *Disaster, Environment, and Health*, 2022. Institute of Disaster and Vulnerability Studies, The University of Dhaka.
2. **Dey, N. C.**, Akter, T., Rabbi, S. E., & Kabir, B. “Water, sanitation, hygiene and disaster Management”. In M. Hossain, S. N. Kairy, & A. Bayes (Eds.), *Driving development : a story of BRAC’s evolution and effectiveness*, 2016: 161–178. Dhaka: University Press Limited.
3. **Dey, N. C.**, T, A., & M, H., “Environment: Water, sanitation and hygiene. In M. Hossain & A. Bayes (Eds.), *Leading issues in rural development: Bangladesh perspective*. 2015, Dhaka: AH Development Publishing House.
4. Roy, K., **Dey, N.C.** and M.I.M., Zulfiker, “About Bangladesh and country’s arsenic problem: At a glance, Roy K (editor), Proc. Int’l Symposium on Arsenic Calamity of Groundwater in Bangladesh: Contamination in Water, Soil and Plants, 2008, held on 11 August. Dhaka: Nihon University, Japan: 1-11.

#### **Journal article**

5. **Dey, N.C.** and Parvez, M., “Household finished flooring as a guard against enteric illness in children, *The Lancet Global Health*, 2021, 9(3):E227-E228. DOI: [10.1016/S2214-109X\(21\)00005-X](https://doi.org/10.1016/S2214-109X(21)00005-X).
6. **Dey, N.C.**, Bala SK, Islam AKM, Saha, R., Parvez, M., Hossain, M. “Sustainability of groundwater use for irrigation for dry-season crops in the northwest Bangladesh”, *Groundwater for Sustainable Development*, 2017, 4, 66–77. <https://doi.org/10.1016/j.gsd.2017.02.001>.
7. **Dey, N.C.**, Parvez, M., Saha, R., Islam MR, Akter, T., Barua, M., Islam, A., “Water quality and willingness to pay for safe drinking water in the coastal area of Bangladesh”, *Expo Health*, 2018. <https://doi.org/10.1007/s12403-018-0272-3>
8. **Dey, N.C.**, Parvez, M., Dey, D., Saha, R., Ghose, L., Barua, M., Islam, A, Chowdhury, M., “Microbial contamination of drinking water from risky tubewells situated in different hydrological regions of Bangladesh”, *Intl. J. Hygiene and Environmental Health*, 2017, **220 (3)**, 621–636. <https://doi.org/10.1016/j.ijheh.2016.12.007>.
9. Parvez, M., Islam, R. and **Dey, N.C.**, “Household food insecurity after the early monsoon flash flood of 2017 among wetland (Haor) communities of northeastern Bangladesh: a cross-sectional study”, *Food and Energy Security*, 2021, 00, e326. <https://doi.org/10.1002/fes3.326>.
10. **Dey, N.C.**, Parvez, M., Islam, M.R. “A study on the impact of 2017 early monsoon flash flood: potential measures to safeguard livelihoods from extreme climate events in the haor area of Bangladesh, *Intl. J. Disaster Risk Reduction*, 2021, 59, 102247. <https://doi.org/10.1016/j.ijdrr.2021.102247>
11. Islam, A.F.T.M., Islam, A.K.M.S., Islam, G.M.T., Bala, S., Salehin, M., **Dey, N.C.**, Hossain, A., “Adaptation strategies to increase water productivity of wheat under changing climate”, *Agri. Water Management*, 2022, **264**:107499. <https://doi.org/10.1016/j.agwat.2022.107499>
12. Islam, A.F.T.M., Islam, A.K.M.S., Islam, G.M.T., Bala, S., Salehin, M., Choudhury, A.K., **Dey, N.C.**, Mahboob, G.M., “Simulation of water productivity of wheat in northwestern Bangladesh using multi-satellite data”, *Agri. Water Management*, 2023, **281**:108242. <https://doi.org/10.1016/j.agwat.2023.108242>

13. **Dey, N.C.**, Parvez, M., Islam, M.R., Mistry, S.K., Levine, D. "[Effectiveness of a community-based water, sanitation, and hygiene \(WASH\) intervention in reduction of diarrhoea among under-five children: Evidence from a repeated cross-sectional study \(2007–2015\) in rural Bangladesh](#)", *Intl. J. Hygiene and Environmental Health*, 2019, **222** (8): 1098-1108. <https://doi.org/10.1016/j.ijheh.2019.08.006>.
14. Saha, R., **Dey, N.C.**, Rahman, M, Bhattacharya, P and Rabbani, G.H. "[Geogenic arsenic and microbial contamination in drinking water sources: exposure risks to the coastal population in Bangladesh](#)", *Front. Environ. Sci.* 2019, **7**, 57. <https://doi.org/10.3389/fenvs.2019.00057>.
15. Salem, G.S.A., Kazama S, Shahid S and **Dey, N.C.**, "[Impacts of climate change on groundwater level and irrigation cost in a groundwater dependent irrigated region](#)", *Agricultural Water Management*, 2018, **208**, 33-42. Elsevier publisher. <https://doi.org/10.1016/j.agwat.2018.06.011>
16. Saha, R., **Dey, N.C.**, Rahman, S., Galagedara, L., Bhattacharya, P. "[Exploring suitable sites for installing safe drinking water wells in coastal Bangladesh](#)", *Groundwater for Sustainable Development*, 2018, **7**. <https://doi.org/10.1016/j.gsd.2018.03.002>
17. Salem, G.S.A., Kazma, S., Shahid S, **Dey, N.C.**, "[Groundwater-dependent irrigation costs and benefits for adaptation to global change](#)", *Miti. Adapt. Strategies for Global Change*, 2017, **23**, 953–979, <https://doi.org/10.1007/s11027-017-9767-7>.
18. Salem, G.S.A., Kazama S, Shahid S and **Dey, N.C.**, "[Impact of temperature changes on groundwater level and irrigation cost in a groundwater-dependent agricultural region in Northwest Bangladesh](#)", *Hydrology Research Letters*, 2017, **11**(1), 85-91. <https://doi.org/10.3178/hrl.11.85>.
19. Salem, G.S.A., Kazama S, Shahid S and **Dey, N.C.**, "[Optimum abstraction of groundwater for sustaining groundwater level and reducing irrigation cost](#)", *Water Resources Management*, 2017, **31** (6), 1947–1959. <https://doi.org/10.1007/s11269-017-1623-8>
20. **Dey, N.C.**, Ali, M., Arif, T. and Ahmed, S.M., "[Women’s knowledge and perceived health effects from exposure to indoor air pollution: findings from a population-based cross-sectional survey in rural Bangladesh](#)", *J Health Sci Educ*, 2017, **1**(1), 1-5.
21. **Dey, N.C.**, Parvez, M., Saha, R., Khan, A.S.M., Khanam, R., Khan, R.U., Rahman, M., Barua, M. and Islam, A., "[Assessing willingness to pay for safe drinking water in Tala union of Shatkhira district, Bangladesh](#)". *BRAC University Journal: Science and Technology*, 2016, **XI** (1), 1-34.
22. Basak, J.K., Titumir, A.M.R., Baten, M.A. and **Dey, N.C.**, "[A review study on food consumption and hovered nutrition in Bangladesh: Progress and determinants of food security](#)", *J. Environ. Sci.*, 2015, **29**, 29-36. [ISSN 1561-9206].
23. Akter T and **Dey, N.C.**, "[Transition overtime in household latrine use in rural Bangladesh: a longitudinal cohort study](#)", *BMC Public Health*, 2014, **14**, 721. <https://doi.org/10.1186/1471-2458-14-721>.
24. **Dey, N.C.**, Hayakawa, S., Khan, N.A., Saifuddin, K and Samsuzzoha, M. "Retrieving Leaf Area Index (LAI) of Different Forest Species from Landsat TM/ETM+ Imaginary", *Dhaka University Journal of Earth & Environmental Sciences*, 2013, **2** (2): 9-14.
25. Basak JK, Titumir RAM, **Dey, N.C.**, "[Climate change in Bangladesh: A historical analysis of temperature and rainfall](#)", *J Environment*, 2013, **2**(2), 41-46.
26. Rabbi SE and **Dey, N.C.**, "[Exploring the gap between hand washing knowledge and practices in Bangladesh: a cross-sectional comparative study](#)", *BMC Public Health*, **13**, 89. <https://doi.org/10.1186/1471-2458-13-89>.
27. **Dey, N.C.**, Saha, R., Islam, A., "Assessing land use changes and land degradation in Bangladesh", *Stamford Journal of Environment and Human Habitat*, 2012, **1**(1), 60-70.
28. **Dey, N.C.**, Alam SM, Sajjan, A.K., Ali, M.A., Ibaraki, Y., Ghose, L., "[Assessing environmental and health impact of drought in the northwest Bangladesh](#)", *J Environ Science & Natural Resources*, 2011, **4**(2), 89-97. <https://doi.org/10.3329/jesnr.v4i2.10141>.
29. **Dey, N.C.**, Sujit, K. Bala, and Hayakawa, S., "[Assessing the economic benefits of improved irrigation management: a case study of Bangladesh](#)". *Water Policy J*, 2006, **8**(6), 573-84. doi:10.2166/wp.2006.058.
30. **Dey, N.C.** and Hayakawa, S., "[The characteristics of vegetation indices using landsat data of land cover species](#)", *Journal of Agricultural Meteorology*, 2005, **60**(5), 557-60. <https://doi.org/10.2480/agrmet.557>
31. **Dey, N.C.**, Bhuiyan, M.A., Mirjahan, M., "[Field verification of unsaturated hydraulic conductivity models based on soil moisture retention data](#)", *Bangladesh J Water Resource Res*, 2002, **19**, 57-67.

32. **Dey, N.C.** and Talukder, M.S.U., "Performance study of different tillage implements and their impact on yield characteristics of wheat", *Bangladesh J Scientific Research*, 2002,19(2), 40-5.
33. **Dey, N.C.** and Bhuiyan, M.A., "Evaluation and assessment of unsaturated hydraulic Conductivity of soil based on soil moisture retention data", *J Ag Eng*, 2002, 29 / AE: 37-41.
34. **Dey, N.C.** and Talukder, M.S.U., "The change of soil physico-chemical properties due to different tillage practices", *Bangladesh J Water Resource Research*, 2002,19, 101-6.

### Reesarch Monograph

35. **Dey, N.C.**, Bala, S.K., Islam, A.K.M., Saha, R., Rashid, A., "[Environmental and economic sustainability of groundwater for irrigation: Implication in food security in the northwest region of Bangladesh](#)", 2015, BRAC Research Monograph 62.
36. **Dey, N.C.** and Rabbi, S., "[Use of tubewell water for different purposes at household level: safety practices in rural Bangladesh](#)", *In: Achievement of BRAC-WASH program towards Millennium Development Goal and Beyond*, 2013, 9-30: BRAC Research Monograph 60.
37. **Dey, N.C.** and Akter, T., "[Women in water-hygiene and sanitation management at household in rural Bangladesh: changes from baseline to endline survey](#)", *In: Achievement of BRAC-WASH program towards Millennium Development Goal and beyond*, 2013, pp. 69-83:BRAC Research Monograph 60.
38. **Dey, N.C.**, Ali, A.R.M.M., Ashraf, A., Arif, T., Mobarak, A.M., Miller, M., "[Pilot interventions of improved cook-stoves in rural areas: Assessment of effects on fuel use, smoke emissions and health](#)", 2012: Research Monograph 53.
39. **Dey, N.C.**, "Case studies and best practices research on empowering women through clean cookstove project in Bangladesh. *In: A Roadmap for Promoting Women's Economic Empowerment* (edited by Buvinnic, Nicolas and Courey), 2013, Washington DC, USA: United Nations Foundation.

### Conference Proceedings

40. **Dey, N.C.**, Ghose, L., Rahman, M., Islam, M., "[Sustainability of WASH practices: Hygiene behavior in the rural settings of Bangladesh](#)", 2015, Proc. 38th WEDC International Conference, Loughborough University, UK.
41. Islam, M.N., Islam, M.Z., **Dey, N.C.**, "[Indigenous knowledge-based flood risk reduction and management by the Padma riverine char communities in Bangladesh](#)", Proc. Intl. Conf. Water & Flood Management 2013.
42. **Dey, N.C.**, Saha, R., Islam, M.N., Bala, S.K., Islam, A.K.M.S., "Influence of climate change and river water level on groundwater table in Bogra district of Bangladesh", Feroze Ahmed, Khalequzzaman and Tanvir Ahmez (editors). *In: Water Resources in South Asia: Conflict and Cooperation*, 2013, pp:68-75. (ISBN: 978-984-33-6234-6).
43. Shopan, A.A., Islam, A.S., Bala, S.K. and **Dey, N.C.**, "[Estimation of Evaptranspiration of Boro Rice in the Northwest Region of Bangladesh](#)", Proc. 4th Intl. Conf. on Water and Flood Management (ICWFM 2013), 4-5 October 2013, Dhaka, Bangladesh, Vol. 1, pp 325-336.
44. Shopan, A.A., Islam, A.S., **Dey, N.C.** and Bala, S.K., "[Estimation of the Changes of Wetlands in the Northwest Region of Bangladesh Using Landsat Images](#)", Proc. 4th Intl. Conf. on Water and Flood Management (ICWFM 2013), 4-5 October 2013, Dhaka, Bangladesh, Vol. 2, pp 521-528.
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66. **Dey, N.C.** et al., "[Application of RS information for assessing excess water on crop productivity & associated costs: a case study in northwest Bangladesh](#)", J Geol Geophys 2017, 6:5 (Suppl) DOI: 10.4172/2381-8719-C1-0011.
67. **Dey, N.C.** et al., "[Impact of flash flood'17 on livelihood and food habit of haor dwellers in northeast Bangladesh: BRAC's support to reduce vulnerability](#)", J Geol Geophys 2017, 6:5 (Suppl) DOI: 10.4172/2381-8719-C1-0011.
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72. **Dey, N.C.** et al., "Sustainability of WASH: Hygiene behavior in rural settings of Bangladesh". Proceedings of the 38 Int'l Conference on Water, Sanitation and Hygiene Services Beyond, 2015: Improving Access and Sustainability, held on 27 July to 1 August, Loughborough University, UK, pp.18.
73. **Dey, N.C.**, Bhuiyan M.A., Islam, M.A., Khan, N.A. and Karim, Z., "Environmental assessment of drought in the northwest region of Bangladesh", Proc. of the Special Conference on Climate Change and Bangladesh Strategy: Domestic Tasks and International Cooperation, 2015, 9p.
74. **Dey, N.C.** and Hayakawa, S., "Evaluation and assessment of local environmental conditions using remote sensing data", Proc. of the Research Seminar for Doctoral Thesis of the United Graduate Students of Tottori University, 2005, Mt. Daisen-Training Center in Tottori Prefecture, Tottori, Japan, 31p.
75. **Dey, N.C.**, Bidyuth K. Mahalder, Hayakawa, S. and Perveen, M.F., "Development of arsenic database using GIS", Proc. 6<sup>th</sup> Intl. Symposium on Plant Responses to Air Pollution and Global Changes, APGC2004, Oct. 19-22, Tsukuba Center for Institutes, Japan, 69p.
76. **Dey, N.C.**, **Bhuiyan, M.A.**, Parvez, M., Saha, R., Bhattacharya, P. "Exposure to drinking water contaminants- Arsenic, Iron, Salinity and E. coli: Policy recommendations for improving access to safe and affordable drinking water in coastal Bangladesh. In: Nasreen M., Farique F.S., Hossain K.M., and Khalequzzaman M (Editors), Disaster, Environment and **Health**. Institute of Disaster Management and Vulnerability Studies, University of Dhaka, Bangladesh.

**Popular Articles in the Daily News Papers 2017-2020**

77. [Rural water safety and community participation to fight Covid-19](#) 2020 (RED's self-funding)
78. Govt-NGOs can replicate Brac model for development, published in the Daily Star on 2 Nov 2017.
79. Flash flood causes TK 29b losses in haor region: study, published in the Financial Express on 2 Nov 2017.

80. Half of the households in flood affected haors consume less food: BRAC study, published in the New Age on 2 Nov 2017.
81. Income of poor people in haor areas rises by 9pc, published in the Daily Sun on 2 Nov 2017.
82. Income of poor people in haor areas rises by 9 pc, published in the News today on 2 Nov 2017.
83. [Fire outbreak at Karail: Ignorance or negligence?](#), published on 19 March 2017, the Daily Star.
84. Government should formulate policy to preserve groundwater level: Study” published in the Financial Express on 25 May 2013.
85. Groundwater use for irrigation growing concern in northern region, published in the News Today on 25 May 2013.
86. Groundwater use concern in northern region: Study, published in the Daily Star on 25 May 2013.
87. Excess use of groundwater threat to agriculture: Study, published in the Daily Sun on 25 May 2013.

### 3.1.9 Invited Speaker/Presentation (#61)

1. **Invited Speaker**; Gave a presentation on ‘Environmental safeguard efforts and compliance” at Mid Term Review (MTR2024) of Bangladesh Rural WASH for Human Capital Development Project (2021-25), held at World Bank Conference Hall, Dhaka, on 4 March, 2024.
2. **Invited Speaker**; Conducted training on “Environmental, health and safety & legal issues in managing Micro-enterprise” where 22 staff (operation and management employee) of Partner Organizations of PKSf-an apex organization established by the Government of Bangladesh, held at PKSf Training Room, on 21-25 January 2024.
3. **Invited Speaker**; Virtual lecture on clean cooking situation in rural Bangladesh: Collaboration and reaching SDG 7 at Clean Cooking Situation and Rural Energy Nexus in Asian Countries, organized by [Beijing University of Chemical Technology \(BUCT\)](#), held on 26 August 2022.
4. **Invited Speaker**; Gave two presentations on the ‘Necessity to address environmental, social, and technological safeguards’ at ‘Training workshop’ organized by MAMATA, a partner organization of PKSf, held at Putia and Mirshrai branch offices, Chottogram, held on 16 and 17 August 2022.
5. **Invited Speaker**; Made a presentation on the ‘necessity to address environmental, social, and technological safeguards’ at ‘Training workshop among staffs, Focal Person, Area Manager, Manager and Field officers’ organized by PIDIM Foundation, a partner organization of PKSf, held at Putia and Mirshrai branch offices, Chottogram, held on 26 July 2022.
6. **Invited Speaker**; Gave a presentation on Progress on Environmental and Social Safeguards: Challenges and Opportunities at Training workshop among project staff and core staff of BASA Foundation, held on 6 June at BASA office, Valuka, Mymensingh.
7. **Invited Speaker**; Made a presentation on Progress on Environmental and Social Safeguards: Challenges and Opportunities at 1st Annual Coordination Meeting of BD Rural WASH for HCD Project at PKSf Bhaban (May 26, '22).
8. **Invited Speaker**; Gave a presentation on Environmental and Social Safeguards: Challenges and Opportunities at Local Entrepreneurship’s training and visited intervention sites at Jamalpur and Sherpur, during May 31-June 02, '22).
9. **Invited Speaker**; Virtual Knowledge Sharing Webinar on Clean Cooking and Air Pollution Related Research in Asian Countries, organized by [Beijing University of Chemical Technology \(BUCT\)](#), held on 27 October 2021.
10. **Invited Speaker**; Assessing exposure to drinking water contaminated by arsenic and iron: potential measures for improving access to safe and affordable water in the climate change vulnerable coastal area of Bangladesh, presented at [Geological Society of America \(GSA\)](#) online on 26-30 October 2020.
11. **Invited Speaker**; Sustainability of groundwater use for irrigation in the dry-season crops in the Northwest region of Bangladesh” presented at Oxford Round Table Conference on Environment, Climate Change and Global Warming, held on 22-25 July 2015 at Harris Manchester College, [the University of Oxford, UK](#).
12. **Invited Speaker**; Sustainability of WASH: Hygiene behavior in rural settings of Bangladesh, presented at the 38th WEDC Conference on WASH Services Beyond 2015: Improving Access and Sustainability, held on 27 July to 1 August 2015, organized by [Loughborough University, UK](#).

13. **Principal Investigator**; Assessing food security, water productivity and poverty-A comparative study between South-West Bangladesh & West Bengal, presented at Policy Dissemination Dialogue on Food Security by IUCN on 16 April 2014, Kolkata, **India**.
14. **Virtual Lecture**; Knowledge sharing Webinar on clean cooking and air pollution related research in Asian Countries, organized by [Beijing University of Chemical Technology \(BUCT\)](#), held on 27 October 2021.
15. **Invited Speaker**; Increased uses of groundwater in the northwest region of Bangladesh: A major concern for its sustainability through improving management practices and addressing adverse impact of climate change, presented at International Conference on Environment, Earth and Sustainable Technology (ICEEDT2020), held on 25-29 January 2020, Dhaka.
16. **Invited Speaker**; Challenges and opportunities of implementation research, presented at Global Conference on Implementation Science (GCIS) held on 29 June- 01 July, 2019 at Radisson Blu Water Garden, Dhaka.
17. **Invited Speaker**; Exposure to drinking arsenic, iron and salinity contaminated water in the coastal area of Bangladesh: A Pilot Study in Tala Union of Satkhira District”, presented at the Conference on Coastal and Marine Environment, organized by BAPA-BEN held on 8-9 January 2016 in **Dhaka**.
18. **Invited Speaker**; Assessment of water balance in the South-west coastal region of Bangladesh, presented at the Conference on Coastal and Marine Environment, organized by BAPA-BEN held on 8-9 January 2016 in **Dhaka**.
19. **Invited Speaker**; Willingness to pay for safe drinking water in the Coastal area of Bangladesh: A Pilot Study in Tala Union, Satkhira, presented at the Conference on Coastal and Marine Environment, organized by BAPA-BEN held on 8-9 January 2016 in **Dhaka**.
20. **Invited Speaker**; Impacts, vulnerability and adaptation options of drought on water and health sector of Bangladesh; presented at the National Workshop on Drought Risk Management in Bangladesh organized by Bangladesh Centre for Advanced Studies and CapNet held on 1-2 July 2015, **Dhaka**.
21. **Invited Speaker**; Impact of integrated use of WASH on prevention and control of water-borne diseases: BRAC’s intervention in rural areas of Bangladesh” at Bangladesh Realities and Way Forward- A Policy & Solution Conference: Realizing Universal Health Coverage Goals, organized by Power & Policy Research Centre, supported by the Rockefeller Foundation, The World Bank on 9-11 April 2015, Radisson Blue Water Garden, **Dhaka**.
22. **Invited Speaker**; The use of pesticides in vegetable farms and its impact on health of farmers and environment” presented at Annual Scientific Conference (ASCONXIII). Dhaka organized by ICDDR’B on 14-17 March 2011 in Dhaka.
23. **Invited Speaker**; “Exposure to drinking contaminated water due to arsenic, salinity and iron: Policy recommendations for improving access to safe and affordable water in the coastal area of Bangladesh” presented at International Conference on Environment, Disaster and Health, held on 18-20 December 2019 at University of **Dhaka**.
24. **Invited Speaker**; Research Career in Bangladesh & Global Perspective, presented in the seminar on the same topic, held on 23 March 2019 in Jagannath University, organized by Youth Centre for Research and Action (<https://ycfra.com/>), **Dhaka**.
25. **Invited Speaker**; Impact of climate change on agriculture and food security at Regional Workshop on Impact of Climate Change on Rural livelihood 2- 4 December, 2019 at CCDB HOPE Foundation Baroipara Savar **Dhaka**.
26. **Invited Speaker**; Challenges and opportunities of implementation research, presented at Global Conference on Implementation Science (GCIS) held on 29 June- 01 July, 2019 at Radisson Blu Water Garden, **Dhaka**.
27. **Invited Speaker**; Application of DSSAT model for assessing climate change effects on boro rice production in Bangladesh, presented at the 1st International Conference on Agricultural Models and Their Application in Modern Sustainable Agriculture & The 5th Symposium on the Development and Application of Agricultural System Models, held on November 11-14, 2018, in **Nanjing China**.
28. **Invited Speaker**; Flash Flood’17: Perspective from *haor* area in the North-East Bangladesh, presented at BAPA-BEN Special Conference on Flood, Water logging and Landslide, held on 12-13 January 2018 at Krishibid Institution of Bangladesh, Dhaka.
29. **Invited Speaker**; Safety of food: Hand washing with soap at rural households of Bangladesh, presented at 20th Global Summit on Food Processing, safety and Technology, held on 6-8 Nov 2017 Las Vegas, **Nevada, USA**.

30. **Invited Speaker**; Application of RS information for assessing excess water on crop productivity & associated costs: a case study in northwest Bangladesh, presented at 2nd Int'l Convention of Geoscience and Remote Sensing, 8-9 Nov 2017 Las Vegas, Nevada, **USA**.
31. **Invited Speaker**; Impact of flash flood'17 on livelihood and food habit of haor dwellers in northeast Bangladesh: BRAC's support to reduce vulnerability, presented at 2nd Int'l Convention of Geoscience and Remote Sensing, 8-9 Nov 2017 Las Vegas, **Nevada, USA**.
32. **Invited Speaker**; Risk of shallow tubewells related to microbial contamination of drinking water in rural Bangladesh: A challenge to SDGs, presented at Environmental and Energy Resource Management Summit, held on 9-11 Nov 2017 **Washington DC, USA**.
33. **Invited Speaker**; Effects of climate change and boro rice area on the sustainability of groundwater in the northwest Bangladesh, presented at Environmental and Energy Resource Management Summit, held on 9-11 Nov 2017 **Washington DC, USA**.
34. **Invited Speaker**; Assessing ET of crop using remote sensing information and empirical model, presented at Global Conference on International Society of Ecological Modelling (ISEM2016), held on 8-12 May 2016 at Towson University, **MD, USA**.
35. **Invited Speaker**; Exposure to drinking arsenic, iron and salinity contaminated water in the coastal area of Bangladesh: A Pilot Study in Tala Union of Satkhira District, presented at the Conference on Coastal and Marine Environment, organized by BAPA-BEN held on 8-9 January 2016 in Dhaka.
36. **Invited Researcher**; Assessment of water balance in the South-west coastal region of Bangladesh, presented at the Conference on Coastal and Marine Environment, organized by BAPA-BEN held on 8-9 January 2016 in Dhaka.
37. **Invited Speaker**; Willingness to pay for safe drinking water in the Coastal area of Bangladesh: A Pilot Study in Tala Union, Satkhira, presented at the Conference on Coastal and Marine Environment, organized by BAPA-BEN held on 8-9 January 2016 in Dhaka.
38. **Invited Speaker**; Groundwater sustainability for ensuring food security" presented at 2nd Int'l. Conf. on Global Food Security, organized by Elsevier and Cornell University, held on 11-14 October 2015, Cornell University, Ithaca, **NY, USA**.
39. **Public Lecture**, Climate Change Impact on Agriculture at **Training course on "Introduction to Climate Change**, held on 16-20 Sept 2015 in Dhaka, organized by the Center for Climate Change and Environmental Research (C3ER) of BARC University.
40. **Invited Speaker**; Sustainability of groundwater use for irrigation in the dry-season crops in the Northwest region of Bangladesh, presented at Oxford Round Table Conference on Environment, Climate Change and Global Warming organized by Oxford University, UK held on 22-25 July 2015; at Harris Manchester College, **University of Oxford, UK**.
41. **Invited Speaker**; Sustainability of WASH: Hygiene behavior in rural settings of Bangladesh, presented at the 38th WEDC Conference on WASH Services Beyond 2015: Improving Access and Sustainability organized by Loughborough University, UK held on 27 July to 1 August 2015; **Loughborough University, UK**.
42. **Invited Speaker**; Impacts, vulnerability and adaptation options of drought on water and health sector of Bangladesh, presented at the National Workshop on Drought Risk Management in Bangladesh organized by Bangladesh Centre for Advanced Studies and CapNet held on 1-2 July 2015, Dhaka.
43. **Invited Speaker**; Impact of Integrated Use of Safe Water, Sanitation and Hygiene on Prevention and Control of Water-borne Diseases: BRAC's intervention in rural areas of Bangladesh, presented at Bangladesh Realities and Way Forward- A Policy & Solution Conference: Realizing Universal Health Coverage Goals organized by Power & Policy Research Centre (PPRC), supported by The Rockefeller Foundation, The World Bank on 9-11 April 2015, Radisson Blue Water Garden, Dhaka.
44. **Invited Speaker**; Planning assessment of economic benefit in case of proper practices of irrigation water management followed in Bangladesh, presented at Int. Conf. on Regional Cooperation on the Transboundary Rivers (ICRCTR 2004): Impact of the Indian River Linking Project organized by BAPA-BEN on 17-19 December 2004 in Dhaka.

45. **Invited Speaker**; Impact of BRAC's WASH implementation works: Research findings from baseline, midline and end-line surveys, presented at Dissemination Workshop on BRAC WASH Program organized by BRAC on 14 January 2015, BRAC Center Inn, Dhaka.
46. **Invited Speaker**; Assessing Food Security, Water Productivity and Poverty-A comparative study between South-West Bangladesh & West Bengal, presented at Policy Dissemination Dialogue on Food Security by IUCN on 16 April 2014, Kolkata, **India**.
47. **Invited Speaker**; Environmental and health impact of drought in the NW Bangladesh, presented at Green Economy and Sustainable Development organized by IUBAT on 23 Jan 2013, Dhaka.
48. **Invited Speaker**; Sustainability of groundwater use for irrigation in NW Bangladesh, presented at the Research to Inform Food and Nutrition Security Policies organized by FAO-GOB on Nov 28-29, 2012, Dhaka.
49. **Invited Speaker**; Food security, water productivity and poverty- A comparative study, presented at Joint Meeting to Develop Research Methodology organized by IWMI-IUCN on 1-2 Feb 2013 **Delhi, India**.
50. **Invited Speaker**; Cooperation-conflict in the management of groundwater, presented at the Cooperation-Conflict in the Management of CC organized by the CoCooN – DFID on Sep 2-7 2012, **Nairobi, Kenya**.
51. **Invited Speaker**; Effect of climate change & boro rice production on GWT in the Rajshahi district of Bangladesh, presented at the National Conference on Community Based Adaptation to Climate Change organized by the BCAS on 8-9 April 2012, Dhaka.
52. **Invited Speaker**; The use of pesticides in vegetable farms and its impact on health of farmers and environment, presented at Annual Scientific Conference (ASCONXIII). Dhaka organized by ICDDR'B on 14-17 March 2011 in Dhaka.
53. **Invited Speaker**; Women's role in managing household water in rural Bangladesh, presented at the Intl Conf. on Environmental Science & Technology (ICEST2010) organized by American Academy of Sciences on 12-16 July 2010, **TX, USA**.
54. **Invited Speaker**; Status of arsenic contamination in groundwater of southern Bangladesh: A population-based survey, presented at Intl Conf. on Environmental Science & Technology, organized by American Academy of Sciences on 12-16 July 2010, **TX, USA**.
55. **Invited Speaker**; Application of pesticide use in vegetable farms and its environmental and health impact, presented at Intl Conf. on Environmental Science & Technology (ICEST2010) organized by American Academy of Sciences on 12-16 July 2010, **TX, USA**.
56. **Invited Speaker**; Environmental assessment of drought in the northwest region of Bangladesh, presented at the Int'l Conf. on Bangladesh Environment (ICBEN 2010) organized by BAPA-BEN on 3-4 January 2010, Dhaka.
57. **Invited Speaker**; Impact of intensive cropping on the degradation of natural resources in some selected AEZ Regions of Bangladesh, presented at Workshop on Informed Policy Making for Food Security: Food Policy Monitoring Unit of Ministry of Food and FAO the UN on 18-19 February 2009. Dhaka.
58. **Invited Speaker**; Pesticide occurrence in shallow depths of groundwater in central Bangladesh, presented at Int. Conf. on Water and Flood Management (ICWFM 2007) organized by Bangladesh University of Engineering and Technology on 12-14 March, 2007, Dhaka.
59. **Doctoral Student**; Relationship between soil surface conditions and spectral reflectance, presented at the Joint Research Symposium of the Arid Land Research organized by Arid Land Research Center, Tottori University, Tottori on 6 Dec 2005, **Japan**.
60. **Doctoral Student**; Shallow groundwater quality assessment due to pesticides use in the agricultural field of SibpurUpazila, Bangladesh, presented at the Int. Conf. on Monitoring, Prediction and Mitigation of Water-Related Disaster, MPMD-2005 organized by the Kyoto, University in **Japan**.
61. **Doctoral Student**; Development of arsenic database using GIS, presented at the 6th Int. Symposium on Plant Responses to Air Pollution and Global Changes (APGC2004) Tsukuba University, Japan on 19-22 October 2004 Tsukuba, **Japan**.

### **3.1.10 Professional training received**

- Training on World Bank's ESF Capacity Development Program. One of the objectives of the program is to ensure better Occupational Health and Safety (OHS) assessment and management for employees in the workplace as mandated by the WB's ESF and ESSs. This training course focused on the main principles and concepts, with links to further details, examples, and case studies. The three-day-long OHS training took place virtually from June 21-23, 2022, from 9.50 AM to 4 PM.
- Training on "Engaging University Faculties for Capacity Building in Achieving SDGs on Sustainable Food and Agriculture" organized by Food and Agriculture Organization of the United Nations (FAO) Bangladesh, held at BARD Cumilla, held in October 12-16, 2019.
- Sharing knowledge, experience and perspective on "Energy Costing in Innovative Award Learning Event on MDG Costing Tools in Asia, organized by UNDP Regional Centre Bangkok held in August 11-13, 2008.
- Hands on training on MDGs Costing Tools, organized by UNDP Regional Centre Colombo and UNDP Bangladesh held in April 19-25, 2008.
- Training on "Improvement of Skill and Work Environment of Landless Wage Earners in Rice Processing Systems in Bangladesh" Research and Extension in Farm Power Issues (REFPI), Dept. of Farm Power & Machinery and DFID held in September 28-29, 2002.
- Training on "Statistical Package for Social Science (SPSS)" held at Advanced Center for Courses in Eng. & Social Sciences (ACCESS), BETS, Dhaka, held in August 18 to December 8, 1999.
- Training on "Application of GIS in Development Planning" held at Bangladesh Agricultural Research Council (BARC), Dhaka, held in April to June 10, 1999.
- Training on "Application of GIS in development" held at Bangladesh Agricultural Research Council (BARC), Farmgate, Dhaka, held in January 10-18, 1999.
- Training on "Bio-gas Technology" held in Bangladesh Council of Science and Industrial Research (BCSIR), Dhaka, held in December 6-15, 1998.
- Awarded Certificate of Excellence for successful completion of SPSS Training by ACCESS, BETS Group, Dhaka, held in Aug 18 to Dec 20, 1000)

### 3.1.11 Training/Public Lecture Conducted:

1. **Public Lecture;** Conducted training on "Environmental, health and safety & legal issues in managing Micro-enterprise" where 22 staff (operation and management employee) of Partner Organizations of PKSF-an apex organization established by the Government of Bangladesh, held at PKSF Training Room, held on 3-7 March 2024.
2. **Public Lecture;** Gave a presentation on 'Environmental safeguards: Challenges and opportunities" at Upazila Facilitators (UF) Training on Bangladesh Rural WASH for Human capital Development Project, organized by Technical Assistant (TA) Firm, held at RDRS Conference Hall, Kurigram, Rangpur on 10-11 April, 2023.
3. **Public Lecture;** Gave a presentation on 'Necessity to address environmental, social, and technological safeguards' at Training workshop, organized by the HOPE as a partner organization of PKSF, Nabinagar Upazila, Brahmanbaria district, held on 20 September 2022.
4. **Public Lecture;** 'Environmental safeguards: Challenges and opportunities" at Upazila Facilitators (UF) Training on Bangladesh Rural WASH for Human capital Development Project, organized by Technical Assistant (TA) Firm, held at RDRS Conference Hall, Kurigram, Rangpur on 10-11 April, 2023.
5. **Public Lecture;** 'Necessity to address environmental, social, and technological safeguards' at Training workshop, organized by the HOPE as a partner organization of PKSF, Nabinagar Upazila, Brahmanbaria district, held on 20 September 2022.
6. **Virtual Lecture;** Clean cooking situation in rural Bangladesh: Collaboration and reaching SDG 7 at Clean Cooking Situation and Rural Energy Nexus in Asian Countries, organized by [Beijing University of Chemical Technology \(BUCT\)](#), held on 26 August 2022.
7. **Public Lecture;** 'Necessity to address environmental, social, and technological safeguards' at 'Training workshop' organized by MAMATA, a partner organization of PKSF, held at Putia and Mirshrai branch offices, Chottogram, held on 16 and 17 August 2022.
8. **Public Lecture;** Necessity to address environmental, social, and technological safeguards' at 'Training workshop among staffs, Focal Person, Area Manager, Manager and Field officers' organized by PIDIM Foundation, a partner organization of PKSF, held at Putia and Mirshrai branch offices, Chottogram, held on 26 July 2022.

9. **Public Lecture**; Progress on Environmental and Social Safeguards: Challenges and Opportunities at Training workshop among project staff and core staff of BASA Foundation, held on 6 June at BASA office, Valuka, Mymensingh.
10. **Public Lecture**; Progress on Environmental and Social Safeguards: Challenges and Opportunities at 1st Annual Coordination Meeting of BD Rural WASH for HCD Project at PKSF Bhaban (May 26, '22).
11. **Public Lecture**; Environmental and Social Safeguards: Challenges and Opportunities at Local Entrepreneurship's training and visited intervention sites at Jamalpur and Sherpur, during May 31-June 02, '22.
12. **Public Lecture**; Virtual Knowledge Sharing Webinar on Clean Cooking and Air Pollution Related Research in Asian Countries, organized by [Beijing University of Chemical Technology \(BUCT\)](#), held on 27 October 2021.
13. **Training facilitator**; Impact of climate change on agriculture and food security, held at Regional Workshop on Impact of Climate Change on Rural livelihood 2- 4 December, 2019 at CCDB HOPE Foundation Baroipara Savar Dhaka.
14. **Public Lecture** on "Climate Change Impact on Agriculture" at **Training course on "Introduction to Climate Change"**, held on 16-20 Sept 2015 in Dhaka, organized by the Center for Climate Change and Environmental Research (C3ER) of BARC University.
15. **Public Lecture**; Impacts, vulnerability and adaptation options of drought on water and health sector of Bangladesh, presented at the National Workshop on Drought Risk Management in Bangladesh, organized by Bangladesh Centre for Advanced Studies and CapNet held on 1-2 July 2015, Dhaka.
16. **Public Lecture**; Effect of climate change & boro rice production on GWT in the Rajshahi district of Bangladesh, presented at the National Conference on Community Based Adaptation to Climate Change organized by the BCAS on 8-9 April 2012, Dhaka.
17. **Public Lecture**; Environmental and health impact of drought in the NW Bangladesh, presented at Green Economy and Sustainable Development organized by IUBAT on 23 Jan 2013, Dhaka.
18. **Public Lecture**; Impact of BRAC's WASH implementation works: Research findings from baseline, midline and end-line surveys, presented at Dissemination Workshop on BRAC WASH Program organized by BRAC on 14 January 2015, BRAC Center Inn, Dhaka.
19. **Public Lecture**; Sustainability of groundwater use for irrigation in NW Bangladesh, presented at the Research to Inform Food and Nutrition Security Policies organized by FAO-GOB on Nov 28-29, 2012, Dhaka.
20. **Public Lecture**; The use of pesticides in vegetable farms and its impact on health of farmers and environment, presented at Annual Scientific Conference (ASCONXIII). Dhaka organized by ICDDR'B on 14-17 March 2011 in Dhaka.
21. **Public Lecture**; Environmental assessment of drought in the northwest region of Bangladesh, presented at the Int'l Conf. on Bangladesh Environment' (ICBEN 2010) organized by BAPA-BEN on 3-4 January 2010, Dhaka.
22. **Public Lecture**; Pesticide occurrence in shallow depths of groundwater in central Bangladesh, presented at Int. Conf. on Water and Flood Management (ICWFM 2007) organized by Bangladesh University of Engineering and Technology on 12-14 March, 2007, Dhaka.

### 3.1.12 Example of Mentoring/Supervision of national & international students/research staff (out of #50)

#### Ph.D./Masters Thesis Supervision

I have supervised 20 master's students and mentored over 30 research associate and research fellow from national and international universities and two PhD students (one of them has already graduated). Currently, I am serving as External Member of Doctoral Committee, providing guidance to Sania Binte Mahtab, Assistant Professor of Water Resources Engineering of BUET, who is pursuing her doctorate at Institute of Water and Flood Management, BUET (from June 2021 to the present).

Students details including their thesis title are as follows:

[Sania Binte Mahtab](#) (PhD student), Institute of Water and Flood Management, Bangladesh University of Engineering & Technology, Dhaka

**Thesis topic:** Non-stationary estimation of extreme design rainfall at daily and sub-daily scale in a changing climate.

#### Ariful Islam

Institute of Water and Flood Management, Bangladesh University of Engineering & Technology, Dhaka

Master's thesis: Assessment of vegetation damage of the Sundarbans and Storm Surge Inundation in the Southwest Coastal Region of Bangladesh for three recent Cyclones using Satellite images (Master degree awarded in April, 2022).

**Abul Fattah M. Tarekul Islam** (PhD on Water Resource Management).

Thesis title: Assessment of wheat productivity of wheat and maize under changing climate in the NE Bangladesh using RS data and crop modelling. Institute of Water and Flood Management of Bangladesh University of Engineering and Technology, Dhaka 1000. Graduated on 17 December 2019).

**Md. Murad Hasan**

Institute of Water and Flood Management, Bangladesh University of Engineering & Technology, Dhaka  
Master's thesis on "Drought impacts in natural resources in the Northwest region of Bangladesh"; Master degree awarded in 2013.

**Md. Shafiqul Islam**

Department of Environment Science, Jahangirnagar University, Savar, Bangladesh  
Master's thesis on "Groundwater quality assessment in the NW region of Bangladesh", Master degree awarded 2012.

**Md. Jamal Hossain**

Department of Environment Science, Jahangirnagar University, Savar, Bangladesh  
Bachelor's project on "Water quality of surface and groundwater for irrigation and drinking in the NW region of Bangladesh", Bachelor degree awarded 2012.

**HumyraHasnat, MBBS**

James P Grant School of Public Health of BRAC University  
Summative Learning Project (SLP) on "Effects of flood on water, sanitation and hygiene and coping strategies for reduction the effects of flood in Matlabupazilla, Chadpur"; MPH degree awarded 2015.

**Moe Aye, MBBS** (from Philippine)

James P Grant School of Public Health of BRAC University  
SLP on "Does flood always bring negative effects? A study on the relationship between flood and pneumonia, and measures for reduction of flood related pneumonia in MatlabUpazila, Bangladesh"; MPH degree awarded 2015.

**NasrullahNaich, MS** (from Pakistan)

James P Grant School of Public Health of BRAC University  
SLP on "Relationship between flood and diarrhea: A study among children under five living in flood affected area in Matlabupazila, Bangladesh"; MPH degree awarded 2015.

**Rifat Ues Sayeed, MBBS**

James P Grant School of Public Health of BRAC University  
SLP on "Effect of river flood in morbidity and mortality and measures taken to reduce those: A Cross-sectional study among the urban people of Matlab, Bangladesh"; MPH degree awarded 2015.

**Shaimaarzuman Shahin, MS**

James P Grant School of Public Health of BRAC University  
SLP on "A study on nutritional Status of under five year children in flood affected area- Matlabupazila, Bangladesh"; MPH degree awarded 2015.

**Nasima Afsari, MBBS**

MPH student of Department of Global Health, George Washington University, USA  
Practicum plan on "Improving fecal sludge management system in South East Asian Countries", completed 2015.

**Dana Ansberga (from Australia)**

Aarhus University, Australia  
Master thesis on "Status of food security and climate change adaption strategies: Comparison between Semi-dry and Wetland areas in Southwest Bangladesh"; Master degree awarded in 2013.

### Mentoring

Tahera Akter, MS, MSc  
Research Fellow, Research and Evaluation Division, BRAC  
Supervisor for conducting research on WASH and DMCC (Disaster, Environment and Climate Change) issues.

Ratnajit Saha, MSc  
Senior Research Associate, Research and Evaluation Division, BRAC  
Supervisor for conducting research on WASH and DMCC (Disaster, Environment and Climate Change) issues.

Mahmood Parvez  
Research Associate, Research and Evaluation Division, BRAC  
Supervisor for conducting research on WASH and DMCC (Disaster, Environment and Climate Change) issues



Sifat E Rabbi, MS  
PhD Candidate of PIK - Potsdam institute for Climate Impact Research  
Senior Research Associate, Research and Evaluation Division, BRAC  
Supervisor for conducting research on WASH and DMCC (Disaster, Environment and Climate Change) issues.

Jarrold P. Vassallo BEc (Hons) (Univ. of Sydney), MPhil (Univ. of Cambridge)  
PhD Candidate; Judge Business School, University of Cambridge  
Topic of research “Climate change impact of landuse change and productivity in last 30 years in Bangladesh”.

### 1.1.13 Country visited

Bangladesh, China, India, Japan, Kenya, Thailand, UK and USA.



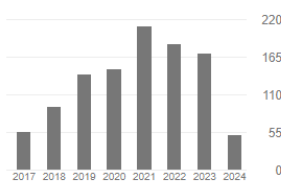
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TITLE	CITED BY	YEAR
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<a href="#">Sustainability of groundwater use for irrigation of dry-season crops in northwest Bangladesh</a> NC Dey, R Saha, M Parvez, SK Bala, AKMS Islam, JK Paul, M Hossain Groundwater for Sustainable Development 4, 66-77	113	2017
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<a href="#">Exploring suitable sites for installing safe drinking water wells in coastal Bangladesh</a> R Saha, NC Dey, S Rahman, L Galagedara, P Bhattacharya Groundwater for Sustainable Development 7, 91-100	65	2018
<a href="#">Effectiveness of a community-based water, sanitation, and hygiene (WASH) intervention in reduction of diarrhoea among under-five children: Evidence from a repeated cross ...</a> NC Dey, M Parvez, MR Islam, SK Mistry, DI Levine International journal of hygiene and environmental health 222 (8), 1098-1108	58	2019
<a href="#">Microbial contamination of drinking water from risky tubewells situated in different hydrological regions of Bangladesh</a>	50	2017

### Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

Dr. Nepal C. Dey

31.05.2024

Name of Expert

Signature

Date