

Ishraque Bin Khalil

Civil & Environmental Engineer

Dhaka, Bangladesh | Ishraque.aust145@gmail.com | [linkedin.com/in/ishraquebk](https://www.linkedin.com/in/ishraquebk) | researchgate.net/profile/Ishraque-Khalil

Objective

As a civil engineer with a passion for sustainable development and environmental conservation, I aim to utilize my skills and experience to contribute towards impactful projects in the development and environmental sectors. With a diverse background in WASH, feasibility studies, and ESIA, I am equipped with the necessary knowledge and expertise to successfully manage projects; while ensuring they align with sustainable development goals. I am committed to pursuing innovative solutions that prioritize environmental conservation and community empowerment, while delivering projects on time, within budget, and to the highest standards.

Educational Qualifications

Master of Science in Disaster Risk Reduction Engineering [M. Sc. Engg. (DRR)]

Bangladesh University of Engineering and Technology (2023)

Expected Graduation 2025

B. Sc in Civil Engineering

Ahsanullah University of Science and Technology (2015-2019)

CGPA: 3.052

Higher Secondary Certificate (HSC)

Dhaka City College (2012-2014)

GPA: 5.00 (on a scale of 5.00)

Secondary School Certificate (SSC)

Government Laboratory High School (2002-2012)

GPA: 5.00 (on a scale of 5.00)

Membership in Professional Association

- 1. Member of the Institution of Engineers, Bangladesh (IEB), A- 23306

Professional Training

- Environment and Social Impact Assessment (Clean & BWGED) 2024
- Environmental Modeling and ESIA (IWM) - 2023
- Energy Environment of Bangladesh (Clean & BWGED) - 2023
- Training on Urban Tree Inventory Using I-Tree (Compass, United States Forest Service) - 2023
- Professional AutoCAD Master course (CADD CORE TRAINING INSTITUTE) – 2019

Professional Experience

Environment and Resource Analysis Center (ENRAC)

Duration: January 2024 to Present

“Chattogram-Cox's bazar highway improvement project (phase-2) “

Client: Oriental Consultants Global (OCG). (JICA Funded)

Environmental Specialist, February 2025 to Present

- Environmental and Social Code of Practice preparation
- Preparing monitoring report
- Liaison with officials
- Conducting public consultation and reporting their feedback
- Coordination and Cooperation with JICA environmental team
- Field data management, Planning, analysis, and reporting
- Preparing project categorization report
- Provide guidance to get ECC from DoE
- Impact identification and provide probable measures
- Solving local issues in compliance with guidelines of donor funding agency

“Consultancy Services for Environmental and Social Assessment and Mitigation Measures for the Gas Sector Energy Efficiency Improvement Project “

Client: Bakhraabad Gas Distribution Company Limited (BGDCL). (MIIB Funded)

Environmental Specialist, November 2024 to January 2025

- Environmental and Social Code of Practice preparation
- Preparing monitoring report
- Liaison with officials
- Conducting public consultation and reporting their feedback
- Field data management, Planning, analysis, and reporting
- Preparing project categorization report
- Provide guidance to get ECC from DoE
- Impact identification and provide probable measures

“EIA Study and Environmental Survey under Railway Connectivity Improvement Preparatory Facility (RCIPF) Project of Bangladesh Railway. [SP5: Construction of DG/BG Line Parallel to The Existing Mg Line and Conversion of Existing MG Line Into DG/BG Line in Bhairab Bazar-Mymensingh Section.] “

Client: JV of OCG, EGIS & HSS & Association. (ADB Funded)

Environmental Specialist, June 2024 to Present

- EIA report preparation
- Preparing EMP, EMoP and monitoring budget
- Liaison with officials
- Conducting public consultation and reporting their feedback
- Supervision of Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Provide guidance to get ECC from DoE
- Impact identification and provide probable measures

“EIA Study and Environmental Survey under Railway Connectivity Improvement Preparatory Facility (RCIPF) Project of Bangladesh Railway. [SP7: Construction of A New BG Line Parallel to The Existing Line in Jessore-Benapole Rail Section.] “

Client: JV of OCG, EGIS & HSS & Association. (ADB Funded)

Environmental Specialist, June 2024 to Present

- EIA report preparation
- Preparing EMP, EMoP and monitoring budget
- Liaison with officials
- Conducting public consultation and reporting their feedback
- Supervision of Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Provide guidance to get ECC from DoE

- Impact identification and provide probable measures

“EIA Study and Environmental Survey under Railway Connectivity Improvement Preparatory Facility (RCIPF) Project of Bangladesh Railway. [SP8: Conversion of the Existing MG Line into DG Line in Bangabandhu Bridge East-Tarakandi-Jamalpur-Dewanganj Bazar Section Including Construction of Tongi Bypass.] “

Client: JV of OCG, EGIS & HSS & Association. (ADB Funded)

Environmental Specialist, June 2024 to Present

- EIA report preparation
- Preparing EMP, EMoP and monitoring budget
- Liaison with officials
- Conducting public consultation and reporting their feedback
- Supervision of Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Provide guidance to get ECC from DoE
- Impact identification and provide probable measures

“EIA Study and Environmental Survey under Railway Connectivity Improvement Preparatory Facility (RCIPF) Project of Bangladesh Railway. [SP9: Assessment of Future Demand of Rolling Stocks and Feasibility Study with Detailed Design for Relocation, Redesign, Rebuilding and New Construction of Rolling Stock Maintenance Installations of Bangladesh Railway.] “

Client: JV of OCG, EGIS & HSS & Association. (ADB Funded)

Environmental Specialist, June 2024 to Present

- EIA report preparation
- Preparing EMP, EMoP and monitoring budget
- Liaison with officials
- Conducting public consultation and reporting their feedback
- Supervision of Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Provide guidance to get ECC from DoE
- Impact identification and provide probable measures

New Vision Solutions Ltd. (<https://newvision-bd.com/>)

Duration: January 2024 to Present

“Environmental and Social Impact Assessment (ESIA) report for the Establishment of Treatment Storage and Disposal Facility (TSDF) for Ship Recycling Industry and Others in Chattogram “

Client: New Vision Solutions Ltd. (JICA Funded)

Environmental Expert (Individual Consultant), January 2024 to June 2024

- Primary and secondary data collection supervision
- Field data management, Planning, analysis, and reporting
- IEE & ESIA report preparation
- Maintain liaison with officials
- Coordinate with JICA environmental expert
- Conduct KII & FGD with officials
- Coordinate & supervise field surveys
- Provide guidance to get ECC from DoE
- Stakeholder consultation & reporting their feedback
- Impact identification and provide probable measures

Onushandhani Creeds Limited (<https://ocreeds.com/team>)

Duration: September 2019 to January 2024

- Performing modeling studies (air, water & noise) for Meghna Rice-TFL (Bogura).

Client: Meghna Group of Industries (MGI)

Junior Engineer (Environment), October 2023 to January 2024

- Field data management, Planning, analysis, and reporting
- Conduct KII and FGD with stakeholders
- Liaison with officials
- Preparation of reports
- Coordinate field surveys
- Provide training and guideline to data collectors
- Ensure Primary and secondary data collection
- Air & Noise modeling
- Feasibility Study for “Bangabandhu River View City in Rajshahi”

Client: Rajshahi City Corporation (RCC)

Project Coordinator, September 2023 to January 2024

- Overall Project Management
- Field data management, Planning, analysis, and reporting
- Conduct KII and FGD with stakeholders
- Liaison with officials
- Preparation of data collection checklist
- Coordinate field surveys
- Provide training and guideline to data collectors
- Ensure Primary and secondary data collection
- EIA report preparation
- Preparation of EMP
- EIA for “Shah Amanat International Airport Development Project”

Client: Civil Aviation Authority of Bangladesh.

Junior Engineer (Environment), July 2023 to January 2024

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Coordinate field surveys
- EIA report preparation
- Liaison with officials
- Feasibility study of “Mujib International Convention Center” project.

Client: IRG Development Services Ltd.

Project Coordinator, January 2023 to January 2024

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Coordinate field surveys
- ESIA report preparation
- Liaison with officials
- EIA for "Extension of Bank Note and Others Security Production Area of The Security Printing Corporation Bangladesh Ltd (SPCBL)".

Client: Bangladesh Bank

Junior Engineer (Environment), June 2023 to January 2024

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Conduct KII and FGD with stakeholders

- Coordinate field surveys
- EIA report preparation
- Liaison with officials

Environmental Impact Assessment (EIA) For Setting Up A Bonded Warehouse At Abdul Monem Economic Zone (Amez), Munshiganj.

Client: Huntsman Bangladesh

Project Coordinator, March 2023 to August 2023

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Conduct KII and FGD with stakeholders
- Coordinate field surveys
- IEE & EIA report preparation
- Liaison with officials
- Feasibility study of “Construction of Residential Buildings and Formal Infrastructure for Officers, Sailors and Civilian Manpower Working at Coast Guard Dockyard at Ghazaria, Munshiganj” project.

Client: Bangladesh Coast Guard

Project Coordinator, January 2023 to July 2023

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Coordinate field surveys
- IEE & ESIA report preparation
- Liaison with officials

" Assess the Flow of Waste and Develop Excreta Flow Diagram (SFD) and Waste Flow Diagram (WFD) for Fifty Municipalities of Bangladesh. "

Client: WaterAid Bangladesh

Supervisor, January 2023 to September 2023

- Provide Training to the enumerators
- Liaison with officials
- Coordinate and Supervise the field surveys
- Report preparation

“ Initial Environmental Examination (IEE), Environmental and Social Impact Assessment (ESIA) of the Benapole to Jashore Gas Pipeline Construction. “

Client: Dipon Gas Company Ltd.

Junior Engineer (Environment), January 2023 to Present

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- Coordinate field surveys
- IEE & ESIA report preparation
- Liaison with officials

“ Establishment of 50 Seat Medical College and upgradation and modernization of Existing Railway Hospital into 250 beds at Paksey in Pabna“

Client: Ernst & Young Global Limited & DECON (PPP Project)

Junior Engineer (Environment), December 2022 to June 2023

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- KII & FGD with officials
- Coordinate field surveys

- EIA & SIA report preparation

“ Environmental Assessment Report (EAR) of Shalbaghan Reservoir, Teknaf. “

Client: Department of Public Health Engineering (ADB Funded)

Junior Engineer (Environment), December 2022 to June 2023

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- KII & FGD with officials
- Coordinate field surveys
- EAR report preparation

“ Environmental and Social Management Framework for the Dhaka BRT Project (Operational Phase). “

Client: INSUCO (ADB Funded)

Junior Engineer (Environment), December 2022 to January 2023

- Primary and secondary data collection
- Field data management, Planning, analysis, and reporting
- KII with officials
- Coordinate field surveys

Environmental Impact Assessment Study of The Proposed Bangabandhu Sheikh Mujib Hi-Tech Park, Rajshahi. “

Client: Bangabandhu Sheikh Mujib Hi-Tech Park, Rajshahi

Junior Engineer (Environment), August 2022 to January 2023

- Primary and secondary data collection
- Field data analysis and reporting
- Coordinate field surveys
- Liaison with officials
- Preparation of the draft ESIA report
- Baseline environmental data collection
- Coastal Embankment Improvement Project Phase-II. “

Client: Knowledge Management Consultants (KMC) Ltd. (WB Funded)

Junior Engineer (Environment), July 2022 to February 2023

- Primary and secondary data collection
- Field data analysis and reporting
- Coordinate field surveys
- Liaison with officials
- Preparation of the draft ESIA report
- Overall project management (ESIA part)
- Urban Interchange Including Pedestrian Facility Improvements at Bijoy Sarani, Dhaka Under DNCC. “

Client: Bangladesh University of Engineering and Technology (BUET)

Junior Engineer (Environment), January 2022 to August 2022

- Primary and secondary data collection
- Field data analysis and reporting
- Coordinate field surveys
- Liaison with officials
- Baseline environmental data collection
- Overall Project Management
- Feasibility Study on Establishments of 21 Cultural Centers in The Name of 21 Bangladeshi Legends. “

Client: Bangladesh Shilpakala Academy

Junior Engineer, August 2022 to September 2022

- Primary and secondary data collection

- Field data analysis and reporting
- Liaison with officials
- BSCIC Chemical Industrial Park Project. “

Client: Acumen Engineering Ltd

Junior Engineer (Environment), August 2021 to Present

- Primary and secondary data collection
- Field data analysis and reporting
- Liaison with officials
- Baseline environmental data collection
- Western Economic Corridor & Regional Enhancement Program (WeCARE)

Client: Local Government Engineering Department (WB funded)

Junior Engineer, August 2021 to December 2022

- Primary and secondary data collection
- Field data analysis and reporting
- Coordinate field surveys
- Liaison with officials
- Preparation of the draft Inception report
- Project planning and management
- Traffic study cum junction design in Dhaka South City Corporation (DSCC) under Dhaka City Neighborhood Upgrading Project (DCNUP). “

Client: Dhaka South City Corporation (WB funded)

Junior Engineer (Environment), August 2021 to June 2022

- Primary and secondary data collection
- Field data analysis and reporting
- Coordinate field surveys
- Liaison with officials
- Preparation of the draft Inception report
- Baseline environmental data collection
- Feasibility Study for “Road improvement project at Noakhali “

Client: Roads & Highways Department (RHD) Noakhali

Junior Engineer, August 2021 to November 2021

- Primary and secondary data collection
- Field data analysis and reporting
- Coordinate field surveys
- Liaison with officials
- Preparation of the draft feasibility study report
- Feasibility Study for “Road improvement project at Feni “

Client: Roads & Highways Department (RHD) Feni

Junior Engineer, August 2021 to December 2021

- Primary and secondary data collection
- Field data analysis and reporting
- Coordinate field surveys
- Liaison with officials
- Preparation of the draft feasibility study report
- Feasibility Study for “ New road construction at Cumilla District. “

Client: Roads & Highways Department (RHD) Cumilla

Junior Engineer, August 2021 to November 2021

- Primary and secondary data collection
- Field data analysis and reporting
- Coordinate field surveys
- Liaison with officials
- Preparation of the draft feasibility study report
- Feasibility Study for “ Improvement of Khutakhali-Moheshkhali road (Z-1131)- Cox’s Bazar District. “

Client: Roads & Highways Department (RHD)

Junior Engineer, July 2021 to August 2021

- Primary and secondary data collection
- Field data analysis and reporting
- Liaison with officials
- Preparation of the draft feasibility study report
- ESIA for “Climate change-adapted urban development (CCAUD) “Project.

Client: Local Government Engineering Department

Junior Engineer (Environment), June 2021 to August 2021

- Primary and secondary data collection
- Field data analysis and reporting
- Preparation of the draft ESIA report
- Liaison with officials and experts
- Arsenic Risk Reduction Project (ARRP)

Client: Department of Public Health Engineering, Tangail Division

Trainer, May 2021 to December 2022

- Overall Project Co-ordination
- Reporting daily progress
- Give training to the testers
- Support the monitoring team
- DWASA Baseline Survey for Water Network Development at Jatrabari

Client: Ludwig Pfeiffer Bangladesh

Survey Supervision Engineer, March 2021 to November 2021

- Primary and secondary data collection
- Coordinate field surveys
- Reporting daily progress
- Liaison with officials
- Survey Supervision
- EIA for “ Effluent Treatment Plant (ETP) construction at four industries near BSCIC, Sirajganj (shahjadpur). “

Client: Four Weaving Factory & Masrising Industry

Junior Engineer (Environment), January 2021 to April 2021

- Primary and secondary data collection
- Field data analysis and reporting
- Preparation of draft IEE report
- Facilitate industry survey
- Conducting KII with stakeholders

Environmental testing (Water quality, Noise, Air quality)

- Liaison with officials
- Conducting FGD's with industry owners
- EIA for “ Rangpur, Nilphamari, Pirganj & their adjacent area's gas distribution network.“

Client: Pashchimanchal Gas Company Limited (PGCL)

Junior Engineer (Environment), October 2020 to January 2021

- Primary and secondary data collection
- Field data analysis and reporting
- Facilitate Household survey

Environmental testing (Water quality, Noise, Air quality)

- Liaison with officials
- Feasibility Study “ Construction of Cable Car at Naf Tourism Park, Teknaf, Cox’s Bazar ‘

Client: Chittagong University of Engineering and Technology (CUET)

Junior Engineer, March 2020 to May 2021

- Primary and secondary data collection
- Field data analysis and reporting
- Overall management
- Preparation of draft feasibility study report
- Coordinate the HH and TIA Survey team
- Liaison with officials
- Conducting FGD's with teknafe locals
- Conducting KII with stakeholders
- Gazipur city corporation master plan

Client: Gazipur city corporation (GCC)

- Junior Water Supply Engineer May 2020 to November 2020
- Primary data collection of existing water supply
- Field data analysis and reporting
- Research and documentation
- Coordinate with the field team
- Develop a relationship with the municipality and different public organizations like DPHE
- Design of two number of solar-powered production wells and mid-chlorinated pipe water supply network

Client: Dushthya Shashthya Kendra (DSK)

Junior Engineer, December 2019 to May 2020

- Primary and secondary data collection
- Field data analysis and reporting
- Facilitate ODK survey
- Overall management
- Preparation of draft report
- Coordinate the ODK Survey team
- Liaison with DSK officials
- Conducting FGD' with locals of Tarabo & Sitakunda
- Narayanganj city corporation solid waste master plan

Client: Narayanganj city corporation (NCC)

ODK Survey Coordinator, December 2019 to February 2020

- Primary data collection using an open data kit (ODK)
- Field data analysis and reporting
- Research and documentation
- Coordinate with the research team
- Keraniganj water supply and sewerage master plan.

Client: Vitti Sthapati Brindo Ltd.

Junior Engineer, September 2019 to August 2019

- Primary and secondary data collection

- Field data analysis and reporting
- Research and documentation
- Coordinate with the research team
- DWASA surface water quality monitoring program

Client: Dhaka Water Supply and Sewerage Authority (DWASA)

Water Quality analyst, August 2019 to March 2021

- Primary data collection
- Field data analysis and reporting
- Water quality testing
- Coordinate the field team

Notable Project

Undergraduate Thesis:

Project Name: Assessment of Escherichia Coli Removal Efficiency of Buriganga River Using a Hybrid Constructed Wetland System

Publications

Ishraque Bin Khalil, Shoaib Ahmed Tonmoy, Golam Morsad, & Summya Sharmin. (2024). Climate-Resilient Social Afforestation in Sandwip: A Community Driven Initiative to Mitigate Coastal Disaster Vulnerability. *Journal of Water Resource Research and Development*, 7(3), 41–56. <https://doi.org/10.5281/zenodo.13917425>

Conference Proceedings

- Morphological Assessment of Sandwip Island Using GIS and Remote Sensing Technology, 7 International Conference on Civil Engineering for Sustainable Development (ICCESD 2024), Khalil, I. B., Azad, M., & Madani, M. A.-U.-Z.
- Hybrid Construction Wetlands: A Sustainable Solution for Treating Raw Water Using Recycled Concrete Waste Media to Achieve SDGS, 7 International Conference on Civil Engineering for Sustainable Development (ICCESD 2024), Khalil, I. B., Madani, M. A.-U.-Z., & Rahman, J. N.
- Integrated Solid Waste Management Master Plan for Narayanganj City Corporation of Bangladesh. ICBEN – 4: 33. Abstract - R. Ali, S. Hossain, I.B. Khalil and A.R. Mollick 2020.

Works Under Preparation

- Tomas Jr. Diquito*, Ishraque Bin Khalil (**), Khondokar Nazia Jarin “A Two Deade Analysis of Natural Disasters in Bangladesh and Philippines: Causalties, Impacts, and Coping Strategies”
- Ishraque Bin Khalil*, Khondokar Nazia Jarin “Potentiality of Rainwater Harvesting in Hilly Areas of Sylhet District and Using It for Irrigation Purposes”
- Abdur Razzak Zubaer*, Md. Mehedi Hasan Emon, Md. Muhibbullah, Rubaiyat Ashrafee, Ishraque Bin Khalil (**) “An EIA of a Sanitary Landfill in Teknaf Municipality: A Case Study”
- Mehedi Hasan Emon, Abdur Razzak Zubaer, Ishraque Bin Khalil (**) “A Comprehensive Review of Landfill Liner Utilizing Recycled Materials”

Peer Review Experience

- Journal of Engineering Research and Reports (Reviewed 1 Article)
- International Journal of Environment and Climate Change (Reviewed 1 Article)
- The book Geography, Earth Science and Environment: Research Highlights (Reviewed 1 Article)
- Asian Journal of Environment and Ecology (Reviewed 1 Article)
- Asian Journal of Research in Agriculture and Forestry (Reviewed 1 Article)

Research Interest

Environmental Engineering, Environmental Science, Environmental Impacts, Waste Management, Climate Change, Water Sanitation and Hygiene, Transportation Planning, Traffic Cost Estimation, Road Network Design.

Language Proficiency

- Bengali (Spoken and Written): Mother Language
- English (Spoken and Written): Fluent

Computer Skills

- 1. Civil Engineering Software: Auto CAD 2D & 3D, ETABS, ArcGIS
- 2. Microsoft Office: MS Word, MS Excel, MS PowerPoint
- 3. Other: Adobe Photoshop, Adobe Illustrator, Canva, Inshot, and Capcut.