Sukonno Chakma

• Rangamati, Bangladesh

Website

EDUCATION

Shahjalal University of Science and Technology, Sylhet, Bangladesh Bachelor of Science in Oceanography

o GPA: 3.28/4.0

Graduated: 21 January 2024

2023

RESEARCH INTERESTS

- Remote Sensing
- o Geospatial analysis
- Environmental hazards mapping
- o GIS applications in disaster risk management

EXPERIENCE

2023 **Group Project**

Inspection of short-term Chlorophyll Change in the Arabian Sea: A spaceborne assessment of Tropical Cyclone Impacts

- Analyzed short-term chlorophyll variation in relation to tropical cyclones.
- Utilized satellite remote sensing (MODIS, VIIRS) and GIS tools (ArcGIS, SNAP) for data analysis.
- Slower-moving cyclones caused greater chlorophyll increases than faster ones (correlation: -0.41).

Keywords: Remote Sensing, Chlorophyll Concentration, Tropical Cyclones, Arabian Sea.

Undergraduate Project

Tropical cyclone vulnerability assessment on the Eastern Coast of Bangladesh.

- o Collected elevation (Copernicus DEM), land cover (Landsat-2), census (BBS), and infrastructure data (LGED) for geospatial vulnerability modeling.
- Geospatial analysis (ArcGIS Pro) with pairwise comparison weighting.
- Identified high-risk (32%) and low-risk (46%) zones based on physical, social, and mitigation factors.

Keywords: Geospatial analysis, vulnerability mapping, GIS (ArcGIS Pro), Remote sensing, Risk assessment of disasters.

Intern 2025

Assessment of water quality parameters and their impact on tilapia production in aquaculture Ponds.

- o Collected daily measurements (morning/noon/evening) using multiparameter meters and test kits, analyzed diurnal/spatial trends, and benchmarked against optimal aquaculture thresholds.
- o Identified critical risks—low morning DO (3.4–3.9 mg/L), high NH (2 mg/L in Pond 1)—and recommended aeration, feeding adjustments, and pH stabilization.

Keywords: Aquaculture, Water quality analysis, Tilapia health, DO/pH/NH monitoring, Diurnal variation.

LEADERSHIP, PRESENTATIONS, AND INTERNSHIPS

International Symposium on Marine Resource Management

24-25 March 2023

o Volunteer

Bluetech life science and Agro Ltd.

13-20 February 2025

o Internship

International Conference on MSP for Advancing Sustainable Blue Growth

15–16 April 2025

Oral presentation

SKILLS

Programming: Python, RStudio, HTML, CSS **Software:** ArcGIS Pro, SNAP, Wordpress

Oceanographic Tools: Grab Sampler, Water Multi-parameter, pH Meter, Mini CTD, Plankton Net, Algal Torch
Laboratory Techniques: Hydrometer Analysis, Bacteria culture, Microscopy, Microorganism Identification

Office Tools: Microsoft Office (Word, Excel, PowerPoint)

Technical Skills: Hardware Troubleshooting, System Configuration, OS Management

Languages: English (Proficient), Bangla (Fluent), Hindi (Conversational), Japanese (basic), and Chakma

(Native)

STANDARDIZED TEST SCORES

IELTS – Overall Band: 7

Listening: 7.5, Reading: 7, Speaking: 6, Writing: 6.5

REFERENCES

Mahnaz Islam Sonia (Project Supervisor)

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