One-Day Field Visit to the
Sewage Treatment Plant (STP), Baranagar

Department of Geography, Barasat Government College

Date:	18th June 2025
Venue:	Sewage Treatment Plant (STP), Baranagar, Kolkata
Organized by:	Department of Geography, Barasat Government College
In collaboration with:	National Vocational Academy of India

Purpose and Objectives of the Visit

The field visit was organized with the primary objective of providing Semester IV students with firsthand exposure to the operations and processes involved in the treatment of urban sewage and effluent. The visit aimed to supplement theoretical classroom knowledge with practical understanding in the area of environmental management and urban infrastructure, which forms a vital component of their academic curriculum under the Summer Internship Programme.

This educational trip intended to:

- Introduce students to the functioning of a Sewage Treatment Plant (STP).
- Familiarize them with the different stages of sewage treatment.
- Create awareness about the significance of waste management and sustainability in urban areas.
- Strengthen their analytical and observational skills through on-site learning.

Participants

- Faculty Members Accompanying the Visit:
    - Dr. Shrabana Mazumder, Assistant Professor in Geography
    - Dr. Jaydip De, Assistant Professor in Geography
- Student Participants:
    - A total of 53 students from the 4th Semester of the Department of Geography, along with 2 students from the Department of Economics, participated in the visit as part of their Summer Internship Programme.

Activities and Observations

The visit commenced at approximately 11:30 AM upon arrival at the STP facility in Baranagar, maintained by Kolkata Metropolitan Development Authority (KMDA) and VA Tech Wabag. The students were welcomed and briefed by the plant officials and technical staff. The visit included a comprehensive guided tour through the various sections of the treatment facility, covering the following stages:

- Preliminary Treatment: Screening of large solid waste materials and grit removal.
- Primary Treatment: Sedimentation process allowing the heavier particles to settle.
- Secondary (Biological) Treatment: Aeration and microbial decomposition of organic matter.
- Tertiary Treatment: Final purification and disinfection of effluent before discharge.
- Sludge Management: Processing and disposal/reuse of solid waste materials collected during the treatment.

The staff explained each process in detail, highlighting both technical and environmental aspects of sewage treatment. Students were actively engaged, asking questions and noting operational insights, and many took photographs for academic documentation.

Learning Outcomes

- Students gained a practical understanding of urban waste management systems.
- They observed real-time operations that demonstrated the application of environmental and geographical theories.
- The visit provided insights into the challenges faced by urban sewage systems and the importance of sustainable environmental practices.
- The experience fostered a deeper interest in the field of environmental geography, pollution control, and urban infrastructure planning.

Conclusion

The field visit to the Baranagar STP was a highly enriching and informative experience for the participating students. It successfully bridged the gap between theoretical concepts and real-world practices in environmental management. The Department of

Geography extends its gratitude to the authorities of the Baranagar STP, KMDA, VA Tech Wabag, and the National Vocational Academy of India for their support and cooperation in making this visit a valuable academic exercise.