



Phone : 2353-6653 & 2370-3841  
E-mail : principal@gurudascallege.edu.in

# GURUDAS COLLEGE

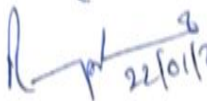
(GOVT. SPONSORED)  
NARIKELDANGA, KOLKATA-700 054

Ref. No. GSC/

Dated : ..... 201

## NOTICE

★ Educational excursions on Economic botany and Horticultural practices will be held on 29/01/2025 at 'Dhapa' and The 'Agri Horticulture Society of India', Alipore. All Students of Sem III Botany Major and Minor are informed to meet at Gurudas College gate at 10:00 A.M Sharp. Students are also instructed to carry college Id Card and all necessary things required for the said visit.

  
22/01/2025

Head  
Department of Botany  
Gurudas College,  
(Govt Sponsore.)  
Calcutta-700054

# **Excursion Report: Visit to Dhapa, East Kolkata Wetland**

**Date:** 29th January, 2025

**Venue:** Dhapa, East Kolkata

**Participants:** Semester III Botany Major and Minor students of Botany dept, Gurudas College

## **Objective:**

The educational excursion aimed to provide students with hands-on experience and exposure to economic botany, horticultural practices, and ecological importance of East Kolkata Wetlands.

## **Report:**

The excursion conducted under the able guidance of Dr. Ripan Chandra Das (HOD), Dr. Mousumi Das, Dr. Goutam Kumar Pahari, Dr. Anwasha Biswas, Prof. Monalisa Roy, Dr. Suptotthita Choudhury and Dr. Moumita Bishai. Upon arrival at Dhapa, East Kolkata, students were introduced to the unique ecosystem of the East Kolkata Wetlands (EKW).

EKW is a significant biodiversity-rich Ramsar Site in West Bengal, India. This place is a remarkable example of a natural wastewater treatment system, utilizing the city's sewage to produce fish, vegetables, and other agricultural products. EKW is a mosaic of landforms including predominantly water dominated areas (used as fish farms) to land centric usages for agriculture, horticulture and settlements. It utilizes wastewater and solid waste from Kolkata and surrounding areas, reducing the need for waste treatment plants. It produces 20,000 MT of fish, 50,000 MT of vegetables, and irrigates 4,700 ha of paddy lands annually. Students learned about the intricate relationships between the wetland's flora, fauna, and microorganisms, and their role in maintaining the ecosystem's balance.

During the visit, students observed the various components of the EKW, including:

1. Carbon Sequestration: Reduces carbon footprint.
2. Improved Water Quality: Treats raw sewage, reducing organic nutrients through natural processes.
3. Enhanced Water Availability: Acts as a sponge, soaking up excess water, recharging groundwater, and storing water for agro-economic activities.

4. Retained Soil Moisture: Plant belt along the bheri maintains soil moisture through natural adsorption process.
5. Reduced Sedimentation: Depressions in the wetlands trap sediments, enhancing soil quality.
6. Controlled Soil Erosion: Plant belt along the bheri controls soil erosion by holding onto the soil with their roots.
7. Regulated Air Temperature: Higher relative humidity over EKW cools the air, transporting water droplets to the city of Kolkata.
8. Controlled Floods: Traps excess water during floods, utilizing it for various purposes.
9. Bioremediation: Water hyacinth wall around the boundaries of the bheri reduces organic and inorganic nutrients.
10. Habitat for Rich Biodiversity: Provides suitable habitat areas for a variety of resident and migratory species.
11. Harvest food crops: Provides large cultivation of food crops such as Broccoli, Brinjal, *Amaranthus*, Maize, Paddy, Mustard, *Ipomea*, etc

**Outcome:**

The educational excursion to Dhapa, East Kolkata, was a resounding success. Students gained valuable insights into the ecological, economic, and social significance of the East Kolkata Wetlands. They viewed various cultivation processes of economically important very useful plants. The trip reinforced theoretical concepts learned in the classroom, providing students with a holistic understanding of economic botany, horticultural practices, and ecological conservation.

**Conclusion:**

The excursion to Dhapa, East Kolkata, was an enriching experience for students, providing them with valuable insights into the ecological, economic, and social significance of the East Kolkata Wetlands. The Department of Botany, Gurudas College, is grateful to the local authorities and stakeholders for facilitating the excursion and looks forward to future collaborations.

# Snapshot of the Day:



