Biogas Plant Visit by the Students and Faculty of DES, GBU

The students of M.Sc. Environmental Science (II and IV Semester), Department of Environmental Science, School of Vocational Studies and Applied Science, Gautam Buddha University, Greater Noida, U.P., visited a Biogas Energy Plant located at Sarita Vihar, New Delhi on 16 Feb, 2023.

The plant is being operated at Avtar Singh Dairy Farm under the supervision of **Perfect** Bio—Waste-Power-Management Pvt, Ltd. Company, Okhla Industrial Area, Phase-1, New Delhi.

The team of students was accompanied by Dr. Bhaswati Banerjee, Head, Department of Environmental Science, GBU, and two faculty members, Dr. Asha Pandey, and Dr. Shiv Shankar, Department of Environmental Science. The purpose of the visit was to sensitize students about the significance, production, and applications of different forms of bioenergy in general and Biogas in particular.

The plant operator Mr. Samundar Singh demonstrated the technicalities and functioning of the plant to the team. He informed that the plant was successfully commissioned in July 2022 and has been running smoothly at a feedstock load of 10 tonnes per day. The methane gas produced from the plant is utilized for generating 500 units of electricity per day which is effectively used in the adjoining dairy farm operations. The company is among the oldest organizations in India involved in generating power from waste, with the utilization of future fuels such as BIO-GAS/BIO-ENERGY / COMBINED HEAT AND POWER and other renewable by-products like bio manure. The students saw diverse and sustainable aspects of biogas production and learned about the future research priorities in the area of bioenergy production. The learning outcomes of the visit may be summarized as follows:

- Technical discussion on the utilization of animal dung in biogas and electricity production
- Understanding of a sustainable model for energy production in urban/semiurban set-up









