

ABSTRACT

Biogas has become progressively feasible option, attracting not only Pakistani villages, but also urban towns as the price of natural gas increases as supply decreases. This study examined the production and characterization of biogas from animal manure and halophyte biomass. To achieve this, a detailed review of the literature was first carried out. The halophytes and animal manure were used as raw materials for biogas production and their effects on the final product were examined. Detailed studies of various production techniques were carried out and finally one was selected based on economy, processing and ease of work. For the collection of biomass halophytes were taken from the University of Karachi while animal manure was arranged from Goth located near Malir Karachi. Based on literature studies, the preparation of biomass sample and aerobic digestion has taken place in the lab of Environmental Engineering Department, NEDUET, Karachi. The results of this project illustrates that maximum value of the biogas volume is 3000ml and 3019ml which is obtained by Cow + Phragmite combination in the summer season by using water displacement method and measuring tape method respectively.