

EXPLORING SOURCES OF PLASTIC WASTE IN THE COLLEGES OF EDUCATION IN GHANA: THE CASE OF PRESBYTERIAN WOMEN'S COLLEGE OF EDUCATION-GHANA

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ABSTRACT

Plastic waste generation by individuals and households in higher institutions may not be considered as serious crime, but its long-term financial and environmental consequences can be devastating. This study explored the major sources of plastic waste generation in Presbyterian Women's College of Education Settings and their financial and environmental consequences. A seven week cross-sectional survey to identify the sources of plastic waste generation in the college was conducted. Self-reported data on type and quantity of plastic waste generated were gathered from 480 participants using structured questionnaire, interview and inspection of contents of waste bins used by the college community. The quantitative data gathered was analyzed using descriptive statistics and one-way ANOVA. Thematic content analysis technique was applied to the qualitative data. The results of the study revealed that over 88% of the study participants generate plastic waste in the college. The results further pointed to the college departments as the major sources of plastic waste generation in the college (53%). The plastic waste from these sources have contributed to the financial and environmental burden in the college. The ANOVA test results also revealed statistically significant differences in plastic waste generation by households, departments, residential halls and the sales point. The study concluded that the increasing plastic waste generation and its financial and environmental burdens on the college was due to management failure to institute policy framework to regulate plastic waste generation and its disposal in the college. The study recommends that college students should be educated on the need to purchase food items from college canteen in re-usable plastic bowls. In addition, parents should be educated on the need to purchase re-usable food containers for their wards in the college's Demonstration school. Instituting these measures will help reduce the increasing plastic waste generation in the college and consequently lessens the financial and environmental burdens plastic waste generation continues to impose on the college.

Keywords: Plastic waste generation, financial burden, environmental impact, college of education, Akuapem South, Ghana.