Waste audit and awareness on recycling program: a case study in Universiti Malaysia Sabah (UMS), Malaysia

Abstract

A waste audit was carried out in Universiti Malaysia Sabah on-campus residential colleges (AB, CD and E) from 8 to 22 March 2006 involving 1323 students. The waste audit was conducted to identify the total waste disposed by students and to determine the percentage of waste that can be recycled based on six categories: organic waste, plastics, paper, aluminum, glass, and others. The audit found that the organic waste has the highest percentage, while glass is the lowest percentage thrown by the students. Recycling and composting could greatly enhance the solid waste management in UMS, whereby UMS can reduce up to 85% of its solid waste from being sent out to the landfill. A survey was also conducted among 440 students from the waste audit participants, on their awareness level in recycling program, composting, role and responsibilities of students. The partial correlation analysis on the survey responses revealed that the students only understand the basic recycling program. This indicates that the solid waste campaign and approach design has to be more practical to increase the students’ knowledge and attention on the above matter. Nevertheless, this study has given an impact to the students about the consequence of recycling and composting, and the importance of their participation and support in helping the government to overcome the management and disposal of solid waste in Malaysia.