Management of Solid waste generation in cafeterias of Endayesus campus of Mekelle University, Ethiopia

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ABSTRACT: This study on the quantification and characterization of solid waste generated in selected private and government cafeterias in Endayesus campus of Mekelle university, Ethiopia was carried out during May to August 2018. The government cafeterias mainly provide service to students and the private cafeterias to the staff, some students and visitors of the university. Besides quantification and characterization of waste, information on waste management practices followed by the cafeterias were collected through a survey among cafeteria managers. It was found that the total waste generated by the cafeterias was 2076.2 kg per day and 0.211 kg per day per person, of which 98.4 per cent was of organic type. Further, an average of 505.34 numbers of plastic bottles was generated daily from the cafeterias. Whereas the average generation of waste per day per person of private cafeteria was 0.104 kg that from government cafeteria was 0.317kg. Government cafeteria was found to produce higher quantity of waste per person per day than private cafeteria. A positive correlation of 0.986 was obtained between number of customers and quantum of waste generated in cafeterias. Besides, the diversity of wastes was higher for private cafeteria than government cafeteria. Although quantitative waste reduction was noticed on Friday and Saturday it was not statistically significant. All waste items except left over food were found stored together as mixed waste in cafeterias before disposal. No waste segregation and processing of wastes were done in the campus. The necessity of waste segregation, recycling and reduction of food waste and recycling or reuse of plastic bottles is stressed in the study for better waste management.

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