

Abstract

Increasing amounts of municipal solid waste are becoming an issue for urban and rural municipalities. Integrated solid waste management (ISWM) is widely used throughout the world for coping with such rapid increase and variation in waste profile. Integrated solid waste management needs a strong legislative framework as well as reinforcement measures besides professional institutions for being implemented. In the study area (Ramallah and Jericho cities), no cleaner production methods are applied for waste reduction, no recycling and reuse alternatives, no composting plants exist. This thesis assesses the technical and economic status of existing system. Two types of questionnaires were used, the first for institutional and the second for household survey. It is found that the solid waste management in the study area is not self sustaining since the overall all cost recovery from actual expenditures is 67% and 15% for Jericho and Ramallah respectively, suffering from lack of coordination, primary collection methodology is different, in Jericho it is the curb side collection, while in Ramallah it is community bin collection, only 12 % and 2% of respondents in Jericho and Ramallah respectively had received environmental education. The residents showed high objection to waste segregation at source, 63% and 92% of respondents in Jericho and Ramallah cities respectively reported that, and they showed high concern about location and size of containers. Moreover, the residents are not satisfied about the street sweeping; only 35 % of the streets are being cleaned. A waste physical composition study was performed at two municipal solid waste disposal sites throughout the province with varying demographic and socioeconomic attributes. The results of the municipal solid waste composition survey showed the following results: the organics 40.15 % and 41.63 %, plastics 20.44% and 30.19% paper and cardboard 21.12% and 10.58%, glass 4.39% and 2.02% and metals 2.43% and 3.23% for Ramallah and Jericho respectively.

It is recommended to revise the cost tariff system for solid waste as well as the collection methodology and routes, the public should be environmentally educated, institutions should be strengthened and finally continuous physical and chemical characteristics of waste profile should be dynamically conducted to identify the better future collection and disposal alternatives.