

Municipal Solid Waste Generation Trend in the Metropolitan Cities of the Muslim World

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Abstract : One of the most important environmental issues in developing countries is municipal solid waste management. In this context, knowledge of the quantity and composition of solid waste provides the basic information for the optimal management of solid waste. Many studies have been conducted to investigate the impact of economic, social and cultural factors on generation trend of solid waste, however, few of these have addressed the role of religion in the matter. The present study is a field investigation on generation trend of solid waste in Mashhad, a metropolitan city in northeastern Iran. Accordingly, the religious rituals, quantity and composition of municipal solid waste were considered as independent and dependent variables, respectively. For this purpose, the quantity of the solid waste was initially determined. Afterwards, they were classified into 12 groups using the relevant standard methods. The results showed that the production rate of the municipal solid waste was 1,507 tons per day. Composing 65.2% of the whole; the organic materials constitute the largest share of the total municipal solid waste in Mashhad. The obtained results also revealed that there is a positive relationship between waste generation and the months of religious ceremonies so that the greatest amount of waste generated in the city was reported from Ramadan (as a religious month) in a way that it was significantly different from other months.

Keywords : Mashhad, municipal solid waste, religious months, waste composition, organic waste

Conference Title : ICCEE 2015 : International Conference on Civil Engineering and Environment

Conference Location : Chicago, United States

Conference Dates : October 08-09, 2015