HOUSEHOLD WILLINGNESS TO PAY FOR IMPROVED SOLID WASTE MANAGEMENT IN ERAVUR URBAN COUNCIL AREA, BATTICALOA

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ABSTRACT

Solid waste has become a critical issue with rising population, urbanization and economic activities, especially in urban centres creating a negative impact on environment due to inappropriate handling of municipal solid waste. The study examined the socio economic profile of the households, the solid waste disposal practices of the households, the volume of waste generated by the households, how much the households are willing to pay for an improved solid waste management service and the factors affecting the willingness to pay of the households for an improved solid waste management service. The GN divisions were selected based on the degree of total population from selected area. Proportionate sampling was done and from Eravur-03A, Eravur-03, Eravur-02C, Eravur-02A, Eravur-01B GN divisions and a total samples of 100 households were studied. Contingent Valuation method was used for valuation. Multiple linear regression analysis was used to determine the factors that influence Willingness To Pay of households for improved solid waste management.

The average age of head of household was 42.63 years and the mean family size of a household was 4 persons. The average household income was Rs 34,440 per month. The average household expenditure was Rs 32,850 per month. The mean number of employed people in household was one person. Food wastes topped the list of solid waste materials and found almost all households. The average quantity of solid waste generated by every household was 2.61 Kg/day. The households that are not willing to pay produced larger amount of waste when compared to households which were willing to pay for an improved municipal solid waste management service (2.69 Kg per day and 2.55 Kg per day respectively). Food waste was generated in

greater amount (2.06 Kg/day) whereas plastic waste generation was very much lower (0.05 Kg/day) than all other types of waste. Every household generates 2060 g of food waste per day and food waste contributes nearly 79% of the total waste generated in the study area. Eravur-01B households generated the highest average quantity (3.17 Kg/HH/day) of solid waste among all five GN divisions in the Eravur Urban Council. Most of the households (43%) were very satisfied with existing collection service of the Urban Council. About 56.25% of the household feel that the disposal of such collected waste was not environmentally safe. Among the participating households in the study, 59% were willing to pay for an improved municipal solid waste management service. The mean willingness to pay of households was Rs 59.92 per month. Meanwhile the minimum and maximum willingness to pay of the households was recorded to be only Rs 20.00/month and Rs 100.00/month respectively. Most of the households preferred a monthly payment (86.45%) through collection tickets. Flat rate as basis for payment for the improved service was preferred 69.49% households and the rest preferred payment had to be depended on weight of wastes. Household willingness to pay was significantly affected by age, gender, employment, number of employed people and quantity of waste. It is recommended that households must be educated with proper solid waste management practices and the Eravur Urban Council should find a proper place for the final disposal of waste that should be environmentally safe for the public.

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