## **Environmental Economics and Resource Management**

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## Study of Consumption and Disposal Practices Related to Polythene Shopping Bags

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## **Abstract**

The widespread use of polythene shopping bags raises significant environmental concerns about adverse effects to marine ecosystems, wild life and impacts resulting from litter all of which require public resources to mitigate or manage. The main objective of this study is to understand the consumer behaviour on polythene bag usage, their awareness on adverse impacts and their willingness to pay for a tax on reducing polythene bag usage. Data were collected from 100 respondents selected from different locations in Sri Lanka conveniently using a structured online questionnaire. In investigating an economic instruments for reducing pollution from polythene bags, payment from the polluter was obtained from two different methods such increasing the price of the polythene bag and imposing a tax on production of polythene shopping bags. In this analysis, it was considered two different dependent variables and the four independent variables. Those dependent variables are willingness to pay for polythene shopping bag and imposing tax on production. Four independent variables were considered for each regression models such as Household income, number of times of usage of polythene shopping bags, environmental impacts and adequacy about government initiatives. The results indicate that among the respondents 86% have all types of polythene waste and 81% separate polythene waste from their collected waste stream, 60% sort polythene waste as clean and unclean before disposal, 61.50% hand over polythene waste to municipal solid waste collectors and 18% of respondents dump the garbage pit in the backyard and 13% of respondents burn it. Most (85%) of respondents don't agree that burning polythene is harmful to life and 92% don't agree that dumping polythene bags to garbage pits will provide breeding grounds to mosquitos. Majority is using the bags only one or two times but printed /branded bags are being used one to five times. Majority (36%) of respondents suggests a tax of Rs. 5.00 to pay for a polythene shopping bag which can carry 2-3kg per bag and 31 per cent respondents suggested Rs. 2.00. Most of the respondents prefer to switch to a bio-degradable or reusable bag completely if the government put a blanket ban on polythene. The study suggests that educating and making awareness related to the usage and disposal practices related to the polythene shopping bags is very important for the behaviour of the consumer. Introducing an economic instrument related to increasing the price of the polythene shopping bag or imposing a tax at the production or switch to a reusable bag or any other environmentally friendly alternative as a substitute for polythene shopping bags would be a timely action as the majority of the selected sample is ready and willing to embrace these alternatives.

Keywords: Polythene, Shopping bags, Reusable, Consumer behaviour, Price