

MARKET CONDITIONS ON PLASTIC RECYCLING AND WAYS OF PROMOTING WASTE PLASTIC RECYCLING (A STUDY IN COLOMBO DISTRICT, SRI LANKA)

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Plastics, which are made of long chain molecules called polymers are one of the most commonly used materials in today's world. Consequently, with advanced technology and growing public concern about environment issues, plastic waste recycling offers a top shot solution. As plastic industry expanded, it is better for the plastic recyclers to have a good knowledge on market conditions of their products. It is expected to be one of the major areas which recyclers expect to know in the future, as recycling has been recognized as one of the profitable ventures at present. This study was carried out to find out the ways of promoting waste plastic recycling and market conditions for plastic recycling in Sri Lanka to enhance environmental sustainability. Colombo District of the Western Province was taken into consideration. Data were collected by a pre-tested questionnaire, which was given to a sample of fifty collectors and recyclers (n=50). As current market conditions, the highest waste quantities from different areas, public awareness of recycling waste, qualities and conditions of collected waste, market demand for recycled products, export status and domestic demand, technologies used and economic status were identified. Barriers preventing this development are seen as: low or fluctuating volumes of waste plastic, economic and financial barriers and environmental issues. The number of employees in waste sector is increasing, more than 60% of recyclers suggest to extend the capacity of the washing plant rather than having a new plant. As the scale increases more profit can be gained significantly ($p < 0.05$) through recycling, due to the low marginal cost of recycled plastics than using virgin plastics.

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