

PLASTIC WASTE GENERATION IN RURAL COMMUNITIES – CASE STUDY IN KANDALAMA AND SIGIRIYA

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Generation of plastic waste in rural tourist hotspots in Sri Lanka has been increased due to the expansion of tourism industry. The plastic waste generation details, plastic waste disposal behaviour in *Sigiriya* and *Kandalama Grama Niladhari* (GN) divisions in *Matale* district were collected from a randomly selected sample (*Sigiriya*, $n=43$, and *Kandalama*, $n=72$). A pretested structured questionnaire and a diary maintained by respondents for a one-week time period were used for data collection. Results revealed that per capita plastic waste generation per week in *Sigiriya* and *Kandalama* GN Divisions is 0.174 kg and 0.061 kg, respectively. Plastic bottles were prominently used by households in *Sigiriya* GN Division, and shopping bags were predominantly utilized plastic items in *Kandalama* GN Division. Multiple linear regression results revealed that, income ($p<0.05$) impact on the plastic waste generation in households. A Structural Equation Model (SEM) was built, considering plastic consumption as the behaviour, while subjective norm, perceived behaviour control, attitude, and intention were considered as behaviour-specific beliefs. The structural validity of the questions and sample adequacy were checked for the SEM model. Results of the SEM model showed significant ($p<0.05$) relationship for perceived behavioural control and behaviour. It was revealed perceived behavioural control important in determining plastic consumption. The results guide to identify potential waste management strategies, alternatives for plastics, and sustainable solutions.

Keywords: Plastic waste generation, Rural, Theory of Planned Behaviour, Tourism