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ABSTRACT

Plastic waste management (PWM) has become a major concern due to the rapid development, urbanisation, growing population and complex life style of the people. Therefore it has become a critical issue of the country that needed urgent attention and permanent solution. Sri Lanka Navy (SLN) is also currently facing the issue of PWM due to the increasing number of the personnel in Navy. Even though SLN has not addressed this issue in effective manner and haven't implemented an effective PWM system. Therefore this research study is conducted to investigate the factors influencing the implementation of PWM in SLN. Initially, intense review of literature has carried out on the study area and researcher intended to investigate the three major factors of infrastructural, organisational and social which influence the PWM in SLN. Based on the literature review researcher developed conceptual frame work which consists with three independent variables and one dependent variable. Based on these variable hypotheses were developed in the methodology.

The sample selected is 200 naval personnel in the Western Naval area (WNA). The research was limited to the WNA 5 bases due to the time constraints. The mix method was used for data collection with questionnaire and face to face interviews. Convenience sampling technique is used as a sampling method. Thereafter collected data were analysed using SPSS software. Analysed data were presented through tabular formats, graph and charts. Frequency analysis has carried out for each independent and dependent variable and formulated hypotheses were tested through correlation analysis. It was proved that there is significant relationship between independent variables of infrastructural factors, organisational factors and social factors with the dependent variable of PWM in SLN.

Further correlation analysis proved that an infrastructural factor such as financial constraints, technological constraints and inadequate space for landfill is negatively affecting PWM in SLN. Then the organisational factors such as poor application of waste reduction methods, lack of managerial support, lack responsible personal, lack of policy implementation and lack of monitoring negatively affecting the PWM in SLN. Further social factors such as lack of knowledge, lack of awareness

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and lack of consideration about the environment also have negative effect against the PWM in SLN. Since the hypotheses are accepted researcher came in to the conclusion of all three independent factors have impact on the PWM in SLN. Therefore it is recommended SLN to implement proper PWM system considering infrastructural, organisational and social factors.

Key words: Plastic Waste Management, Infrastructural factors, Organisational factor, Social factors, Sri Lanka Navy