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E-waste management practices: flea market as a stimulator to promote reuse and recycling of used computers and mobile phones

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The increasing demand for Information and Communication Technology and the rapid turn-over in technology is creating a growing e-waste stream all over the world. It is an issue driven by the rapidly increasing quantities, the hazards involved with disposal, and the valuable materials in it. In Sri Lanka too, use of computers and mobile phones are increasing and the disposal of waste will be a huge issue in future. Therefore it is very important to carry out studies to investigate the possibility of reuse e-waste through flea market. The purpose of this research is to investigate the feasibility of flea markets as a strategy for e-waste reuse in the Kandy Municipal Council, with special attention on used computers and mobile phones. Data collection was done through two questionnaire surveys: Questionnaire I to find out stakeholders' and people's perception on electronic items, disposal practices of e-waste, and reuse through the flea market strategy, and Questionnaire II to evaluate efficacy of the flea market as a strategy for e-waste management. The outcome of the study showed that one third of the consumers were not aware of the term e-waste, or the health risks and environmental threats associated with it. Nearly one third of the population buy used computers and mobile phones. People use PCs for nearly 05 years and mobile phones for 03 years. The majority (81.3%) do not dispose of e-waste, but 53% stored e-waste at home. 40% Considered consumers are responsible for e-waste management rather than government or producers. 59% Were unaware of authorized collectors fore-waste. Feedback from awareness program indicated 100% awareness of e-waste and its impacts. 65% Did not consider used electronics to be waste. 82.5% Were willing to direct their e-waste to flea markets. The efficacy of the flea market was assessed and found to be successful as an appropriate strategy for e-waste management. It is important to implement awareness programs to increase consumers' knowledge on e-waste and to conduct flea markets for reuse of e-waste.

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