

The Role of e-Waste Pickers in Wattala and Kolonnawa Local Authority Areas: Contribution to the Circular Economy

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The present study investigated the role of waste pickers in e-waste management and their contribution to circular economy. Data was gathered through in-depth interviews with 60 randomly selected waste pickers from the Kolonnawa UC and Wattala PS areas. The data was analyzed using SPSS software. The sample comprised 33.33% women in Wattala, while in Kolonnawa, the sample comprised entirely males. The findings revealed that 21.67% of waste pickers earn a monthly income of Rs.10,000 to Rs.30,000 in both areas by selling e-waste. Frequently, waste pickers in Wattala collect e-waste from houses (31.58%) while in Kolonnawa, waste is collected from streets and dump sites (31.33%). Computers (9.67%) and mobile phones (11.68%) are the most common e-waste types in Kolonnawa and Wattala, respectively. The amount of e-waste collected per picker is between 15 and 25 kg per month. The waste pickers primarily engage in three methods of e-waste management: The majority sell e-waste without repair (58.25%), a considerable proportion repairs and then uses the waste themselves (24.27%), and a smaller portion repairs and subsequently sells the waste (17.48%). Heavy metals dismantled from e-waste, such as Copper (Cu), Silver (Ag), Gold (Au), and Mercury (Hg), are sold in local markets (3.34%) contributing to the circular economy. Nearly 39% report suffering wounds while engaged in e-waste collection. A high proportion of pickers (78.33%) are aware of the detrimental environmental impacts of e-wastes. This study highlights the need for government involvement in improving the livelihoods, working conditions, and the socio-economic status of waste pickers.

Keywords: *e-Waste Pickers, Circular Economy, e-Waste Management, Social Participation*