

## **Case Study on Waste Water Management Systems Adopted by Different Industries**

J.S. Nishshanka, P.E. Kaliyadasa, S.R.W.M.C.J.K. Ranawana and P.W. Jeewanthi,

*Department of Export Agriculture, Uva Wellassa University*

Different industries discharge wastewater with different contaminants in the production process. The heavy metals and other inert materials present in wastewater will contaminate the environment by causing normal drainage systems and natural water resources polluted. Therefore, it is a timely need to study detail on potential industries that generate wastewater and their adoption measures at present to treat the wastewater. With that objective twenty companies that represent eight different industries were identified using secondary data and a structured questionnaire was used to collect data in this study. Data were analysed by descriptive analysis method using Minitab 17 software. The findings of this study emphasized that different industries have adopted different wastewater management systems and analysis methods, however, their wastewater treatment methods at present are of very expensive. Further cost for water consumption by eight different industries is significantly different every month and recorded an average of Rs. 4,700,000.00 per month. Among the eight different industries and the highest cost recorded in the glove industry that costs about Rs. 5,000,000.00 per month. Moreover, 98% of industries prefer to implement a cost-effective wastewater treatment method in which each industry would be able to reuse the water and enhance the efficiency of water usage in a sustainable way.

**Keywords:** Waste water treatments, Heavy metals, Industries, Water reuse