# An Assessment of Factors Influencing Tea Factory Productivity: A Case Study at Kahawatte Plantations PLC

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Tea is the most prominent plantation crop in the Sri Lankan agricultural sector contributing heavily to the development of the Sri Lanka economy by generating foreign exchange. Productivity is considered one of the main indicators that measure the efficiency of an individual, institution, or state in a general. In recent years, falling international tea prices and the rising cost of tea production have made the market highly competitive. Kahawatte Plantation PLC is a leading agribusiness company in the plantation industry in Sri Lanka. Pelmadulla estate belongs to the low country region of the Kahawatte Plantation PLC. Crops such as tea, rubber, and cinnamon are cultivated in the Pelmadulla estate, and the case study was conducted in the Neelagama tea factory of Kahawatte Plantation PLC. The purpose of the study was to determine the tea factory productivity level, trends, and the factors influencing productivity. The study used a questionnaire as the primary data collection instrument. Secondary data related to the factory was collected for three years period from 2020 to 2022. Mainly factors related to factory productivity such as labour, electricity usage, firewood usage, green leaves, and refused tea were collected. SPSS was used to perform the statistical analysis. The results revealed that factory productivity measured in terms of the out-turn of made tea to-green leaf was determined by rainfall, labour, and the ratio of factory running capacity to full capacity. Analysis of production data revealed that made tea per man day varied significantly from a maximum of 51 kg to a minimum of 8 kg. This variation can be attributed to the quality of green leaves delivered to the factory. Refused tea percentage too varied significantly from 4% to 43%, this too can be attributed to the quality of green leaves. The climatic factors especially, the precipitation affected the factory productivity by impacting the green leaves quality. The factory running capacity was 32% which is far below the potential capacity. The case study results revealed that the low factory productivity was due to the inferior quality of the green leaves, shortcomings in the production process, defects in the machinery and a shortage of skilled labour. This in turn contributed to high electricity and firewood consumption. Based on findings from the case study an operational manual was developed to enhance the factory productivity.

**Keywords:** *Electricity, Factory Productivity, Firewood, Kahawatte Plantation PLC, Labour, Tea*