

**ADOPTION OF MACHINERY IN TEA CULTIVATION
AND MANAGEMENT BY TEA SMALL HOLDERS IN
KALUTARA DISTRICT**

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ABSTRACT

Use of machinery is a vital investment to enhance the productivity and overall performance of the tea industry. It is considered to be a better solution for the problems of labor shortage and high cost of production. The purpose of this study is to identify the factors affecting the adoption level of machinery. This study was conducted using 154 tea small holders in Kalutara district. The sample for the research study was selected using multistage sampling technique. Data were collected using structured questionnaire and interviewing the tea small holders at their residences. Data were analyzed descriptively and using regression models. According to the results of the descriptive analysis, overall adoption level is 12.73%. Small holders have higher adoption regarding pruning machine (29.22%) and TRI selective tea harvester (20.13%) while lower adoption on Holing machine (7.14%), Fuel operated plucking machine (5.19%) and Battery operated plucking machine (1.95%). The tobit regression analysis revealed that Farming experience, Gender, use of Family labor, Information by TRI, Owned land and Yield positively affect the adoption level while Educational level of the farmer, Age of the farmer and Time spending in the tea land negatively affect the adoption level of machinery. Therefore, more attention should be given on these significant variables to find the appropriate strategies for increasing the adoption level on machinery by tea small holders in the study area. Awareness programs on machineries should be arranged frequently to improve the knowledge and awareness of the tea small holders in Kalutara district.

Key words: Adoption level of machineries, Tea small holding sector, Plucking machines, Pruning machine, Holing machine