

**FERTILIZER ALLOWANCE AND TECHNICAL  
EFFICIENCY OF TEA SMALLHOLDERS IN  
NIWITHIGALA SECRETARIATE DIVISION**

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By

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## ABSTRACT

Fertilizer is one of the major inputs in tea cultivation and it incurs a higher cost to tea smallholders. The present Government decided to convert the fertilizer subsidy to a cash allowance, under the 2016 budget. This cash allowance is allotted to tea small holders at regular intervals for the purchase of fertilizer from the open market. The government's intention of granting this allowance is to improve the tea productivity in tea smallholdings thereby to improve the quality of life of tea small holders. Therefore, this study was carried out to evaluate the technical efficiency of Tea Smallholders who utilize the fertilizer allowance to apply fertilizer for their tea lands. Primary data from 200 tea small holders in six subdivisions in Nivithigala Secretarial Division were gathered to estimate the technical efficiency using stochastic frontier model. According to the Cobb-Douglas specification, the coefficients for the amount of fertilizer, land extend and total labour have a positive significant effect on tea yield. The inefficiency model indicated that the age of household head, dependency ratio and dummy variables for occupation have a significant effect on decreasing inefficiency. The coefficient of the amount of allowance has a negative value and shown to decrease the inefficiency. Intercropping in the tea land and experience have positive values and shown to increase the inefficiency. The average technical efficiency of the smallholders who receive the allowance in Niwithigala area is 81% and this is almost 7% higher than that of those who do not receive the allowance. Overall findings suggest that the efficiency of green leaf production can be improved by providing fertilizer allowance to tea smallholders.

*Key words:* Fertilizer allowance, Cobb-Douglas production function, Technical efficiency, Stochastic frontier, Maximum likelihood estimator