

**IMPACT OF GOOD AGRICULTURAL PRACTICES ON
TECHNICAL EFFICIENCY OF TEA SMALL HOLDERS**

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ABSTRACT

Tea is pre-eminent among Sri Lanka's plantation crops and it is one of the most important industries in the country in terms of employment and foreign exchange earnings. Sri Lanka's tea small holders, who account for 76% of the national tea output, are the mainstay of Sri Lanka's tea industry, are facing some serious problems like increasing cost of production and reducing marginal profits that will directly contribute towards reducing the national tea output in the future. However given the high cost of production, there is a belief that it is very difficult to increase profitability without increasing costly inputs. Good Agricultural Practices addresses environmental, social and economical sustainability and often in combination with effective input use, is one of the best ways to increase smallholder productivity without costly inputs. With this background, in this study Technical efficiency of tea small holders in Kuruvita was estimated in order to identify the impact of Good Agricultural Practices and other inputs on increase production.

The primary data collected during the period January to May 2014 relevant to 84 small holder tea producers in Kuruvita DS Division. Maximum likelihood estimates of the stochastic frontier model were estimated for green leaf yield as a function of land extend, family and hired labour, fertilizer, agrochemicals and dolomite, using Cobb-Douglas model. Land extend, family labour and hired labour showed significant effect on yield in a positive way, chemicals also showed a significant effect but in a negative way. The mean technical efficiency of tea small holders in Kuruvuta found to be 63.17 per cent. The determinants of technical efficiency such as age, education, gender, occupation and experience of farmer, trainings, membership of TSHs' associations, age of plantation and most importantly adoption level to Good Agricultural Practices were

investigated, following the Battese and Coelli (1995) specification. Gender and GAP adoption level has significant effects on technical inefficiency. The coefficient for GAP adoption level is -0.12193 and significant at 1% level on technical inefficiency.

Key words: Technical efficiency, Good Agricultural Practices, Tea small holders, Stochastic frontier production model