

Determinants of Sugarcane Production in the Monaragala District

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The main objective of this study is to determine the factors which affecting sugarcane production in Pelwatta area, Monaragala district. Data on yield of sugar cane, size of land, amount of fertilizer usage, labour cost, amount of seed usage and weeding cost were collected through a structured questionnaire from 150 randomly selected sugarcane farmers in the study. Frequency analysis, independent samples t – test and Cobb - Douglas production function was used as the main analytical methods in the study. Frequency of gender reveals that out of total respondents, 75% of them were males and 25% of them were females who engaged in sugar cane cultivation and among the farmers 41% of them have studied above G.C.E (O/L) and 59% of them studied up to G.C.E (O/L). Results of independent samples t – test indicates that, average production of sugarcane is higher among male farmers than females and among the farmers who studied above G.C.E (O/L) than the farmers who studied up to G.C.E (O/L). Cobb – Douglass production function was employed to estimate the parameters affecting sugarcane production and its results show that usage of fertilizer, usage of seed and costs of weeding positively while size of land and costs of labour have negatively impact on sugar cane production at 1% and 5% significant levels. The study suggests that, Department of Agriculture and the private sector should intensify the technical services and reduce the costs of inputs which would ensure the optimal allocation and application of inputs in sugarcane farming in the study area.

Keywords: Cobb - Douglas production function, Independent samples t – test, Sugar cane production, Usage of fertilizer.