

Impact of Labour out-Migration on Technical Efficiency of Cinnamon Farmers in Kamburupitiya, Matara District

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This research examines the impact of labour out-migration on technical efficiency of cinnamon farmers using a sample of 150 Cinnamon farm families in Kamburupitiya DS division, Matara district, Sri Lanka. Technical efficiency was estimated using a stochastic frontier function with a Cobb-Douglas model, incorporating technical inefficiency effect model. Results indicate that mean technical efficiency of Cinnamon farmers of the total sample is 77.61%. Still, there is a remaining potential to develop the output levels without increasing input levels by 22.39%. Land extent, labour and fertilizer cost increase the Cinnamon production and education of household head and household size increase the efficiency of farmers in the total sample. Mean technical efficiency of migrant households and non-migrant households are 95.05% and 75.27% respectively when considering no effect from migration. Nevertheless, the mean technical efficiency of migrant households decreases up to 73.74% after concerning the migration impact. Age of household head and extension services will increase the efficiency and experience of household head decreases the efficiency of migrant households while education of household head will increase the efficiency of non-migrant households. For the migrant households, even though 72% of migrants are sending remittances, it will not increase the Cinnamon production. This could be due to the fact that either over use of remittances on Cinnamon or not using remittances as an input for Cinnamon. Number of migrants has a significant effect on increasing the inefficiency. These results clearly show that migration has a negative impact on production and efficiency of Cinnamon. These findings recommend that family members should use remittances in effective manner to compensate the negative effect from migration and there should be actions to reduce the number of migrants from that area.

Keywords: Outmigration, Technical efficiency, Cinnamon farmers, Stochastic frontier analysis