

EFFECT OF THE AGRIBUSINESS CLUSTER APPROACH ON FARMERS' INCOME: A CASE OF *THAMBUGAMMA*, ANURADHAPURA DISTRICT

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The agribusiness cluster approach has become popular worldwide with the development of commercial agriculture as a powerful and innovative strategy for fostering economic development. Sri Lanka commenced this approach in 2018 to modernize its agriculture, but no studies have been undertaken yet to investigate its effect. This study aims to explore the effect of agribusiness cluster approach on farmers' income and the factors influencing their participation in the cluster. Thirty-five cluster and non-cluster farmers were selected purposively from the same geographical area as the sample. The determinants of farmer participation in the cluster were identified by fitting the binary logistic regression model. Extension ($p<0.001$), farming experience ($p<0.05$), credit access ($p<0.05$) and education ($p<0.10$) are positively influenced participation in the agribusiness cluster. This result shows that extension and credit are two major drivers in adopting the agribusiness cluster. Although gender, land size, family size and off-farm income showed positive coefficients, they were not statistically significant. Results of the independent t-test applied to compare the incomes between cluster and non-cluster farmers showed a significantly higher net income among cluster farmers ($p<0.05$). Farmers' perception of the cluster was evaluated using a 3-point Likert scale. The Likert scale questionnaire was reliable (Cronbach's Alpha=0.702). Nearly 80% of cluster farmers believe that their production cost has significantly decreased. The cost analysis exhibits a notably lower cost of production for cluster farmers. This difference results from a significant reduction in labour, fertilizer, and transport costs through implementing advanced agricultural practices like mulching, drip irrigation and utilization of insect proof nets for their cultivation. The study concludes that farmers with greater access to extension services, credit and farming experience are more likely to join agribusiness clusters. Hence, attention should be given to introduce an integrated package of extension, credit, and marketing to enhance the farmer participation in agribusiness clusters.

Keywords: Binary logistic regression, Cluster farmers, Cost of production, Farmers' perception of the cluster, Likert scale