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Identifying the Influential Factors of Coconut Exports and Their Interrelationships to Enhance the Competitiveness of Sri Lanka's Kernel Product Exports in the Global Market

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Abstract

Sri Lanka's coconut industry is pivotal among the nation's exports, with kernel products representing a significant share of agricultural exports. This study explores the factors influencing the exports of coconut kernel products in Sri Lanka and their interrelationships. Monthly data on exports of kernel products, total coconut production, domestic consumption, Free on-board (FOB) value per nut in Sri Lanka and total FOB value of the Philippines, which is one of the main competitors, for the period of 2012 to 2023 were obtained from the Coconut Development Authority. The Vector Autoregressive (VAR) model was employed to analyze the data, using the EViews software package. According to the results of the Wald test, lagged values of coconut exports (F=7.31, p<0.05) and coconut production (F=3.06, p<0.05) are significant drivers of export performance. Results of the Portmanteau Autocorrelation test reveal that there is no serial autocorrelation, indicating that the model is acceptable. Coconut production granger causes exports, and a joint causality effect exists from total coconut production, domestic consumption, FOB prices in Sri Lanka and in the Philippines towards exports. Moreover, production grangercauses consumption. Impulse response analysis shows that the level of coconut exports fluctuates over time through positive and negative values for a shock given to the production, domestic consumption, FOB prices in Sri Lanka and in the Philippines, and the impact dissipates in the long term. The level of domestic consumption fluctuates significantly for a shock given to production. The variance decomposition analysis reveals that the variation in coconut exports is considerably explained by the level of exports itself both in the short and long run. When moving from short-term to long-term, the contribution from production (5.25%), consumption (0.34%), Sri Lankan FOB price (2.35%) and the FOB price of the competitor (6.67%) increases. The outcomes of the research emphasize that production, consumption, FOB prices of Sri Lanka and the competitor are important in determining the level of coconut exports in Sri Lanka. Identifying the influential factors and their interconnections offers invaluable insights for policymakers and stakeholders in Sri Lanka's coconut industry, and aids in formulating specific policies that can enhance the competitiveness of Sri Lanka's kernel product exports in the global market.

Keywords: Coconut exports, Coconut production, Domestic consumption, FOB, Vector autoregression