

FACTORS AFFECTING DEMAND FOR
SRI LANKA TEA : A TIME SERIES ANALYSIS

By

EKANAYAKE MUDTYANSELAGE ERANAYAKE

Thesis

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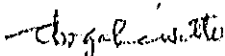
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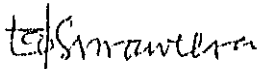
SRI LANKA

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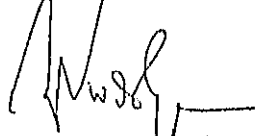
Supervisor


(Dr. C. Bogahawatte)

Examiner


(Dr. D. E. F. Suraweera)

Examiner


(Mr. A. S. Jayawardena)

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ABSTRACT

The contribution of tea sector to the Sri Lankan economy has been over 30.0 percent of total export earnings and over 63.0 percent of total agricultural exports during the last three to four decades. However, since the 1950's the dominant position Sri Lanka held in the world's tea economy underwent significant changes with the country's share of world production declining from 22.7 percent in 1951 to 9.7 percent in 1984 and the share of exports declining from 30.2 percent in 1951 to 22.0 percent in 1984. Meanwhile, the consumption of Sri Lankan tea in almost all traditional consuming countries has been declining over the same period.

It is generally believed that price and income elasticities of export demand for Sri Lankan tea are low in the world market while those of domestic demand for tea are relatively high. This study attempts to identify and to evaluate the factors which determined consumption, magnitudes of stocks and exports and prices of Sri Lankan tea during the period 1955 to 1984. Firstly, it attempts to develop a conceptual model for the behaviour of domestic and export demand for Sri Lankan tea and to hypothesize the major variables affecting demand and price relationships. Secondly, it develops a price forecasting model for tea prices at

both international and domestic markets and these models have been used to forecast monthly tea prices for the years 1985, 1986 and 1987.

The elasticity estimates derived from the demand model agree with prior expectations. In the case of domestic demand for tea, price and income elasticities were - 0.4209 and 1.0044 respectively. The cross-elasticities of demand with respect to prices of sugar and coffee were - 0.0107 and 0.0278 respectively and these were also found to be statistically significant. In the case of export demand for Sri Lankan tea, price and income elasticities were - 0.0627 and 0.4744 respectively and the former was not statistically significant. The cross-price elasticity with respect to coffee was 0.0999; though its magnitude is relatively low, its positive sign indicated the competition between tea and coffee in the world market. Exports of tea by other competing countries was also identified as an important causal variable in the export demand for Sri Lankan tea. In both domestic and export markets for Sri Lankan tea it was found that income was a significant causal variable.

From the above findings it is suggested that advertising, product diversification and maintenance of quality are essential to boost domestic consumption of

tea while international trade agreements, tea promotions campaigns, opening-up of new tea centres in both traditional and new consuming countries, product diversification schemes and production and export of quality teas are important policy measures to develop the export markets for Sri Lankan tea. In the case of price forecasting models, it was found that the ARIMA model fitted to the monthly world market prices of tea was able to predict monthly tea prices quite accurately even for ten month period while those fitted to Colombo auction prices of tea were able to predict accurately only for four months.