

E1-36: Forecasting future export market prices and volumes of natural rubber

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Rubber industry in Sri Lanka has a long history and is one of the key foreign income earners to this country. Natural rubber (NR) is Sri Lanka's second most important export crop and presently Sri Lanka exports around 70 million kg of NR, and earns about Rs 5700 million in foreign exchange annually. The price of rubber has stagnated over a long period but picked up in 1995 and stabilised in 1996. Liberalization of the trade in 1977, resulted in a boost in the domestic rubber products industry. In this context rubber is now exported as well as utilised locally in rubber based industries.

The enhanced prices earned more foreign exchange to the country but created problems to rubber based exports since that increased the cost of inputs. If this industry is to survive in today's competitive market, a comprehensive study aiming at the policy level changes is necessary.

The main objective of this study was to construct a set of suitable forecasting models for the volume of exports of natural rubber and the average F.O.B. (free on board) price of natural rubber. The F.O.B. prices were analysed using

the time series approach. The relationship between the volume of exports of NR and the factors influencing the volume of exports was examined by fitting a multiple regression model. The conventional multiple regression modeling procedure is altered by using the past values of the response variable (volume of NR exports) also as explanatory variables.