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TIME SERIES MODEL FOR TRADITIONAL EXPORT INCOME IN SRI LANKA.

A PROJECT REPORT PRESENTED BY

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The objective of this study is to fit a time series model for monthly Traditional export income. Secondary data for the income of traditional crops, tea ,rubber and coconut for the past seven years were collected from the Central Bank reports. The major steps of the analysis are: Identification of the model, estimation of the parameters of the model, diagnostic checking of the model adequacy and forecasting future income.

Seasonality, trend and autocorrelation are the important characteristics of the time series. Seasonality can be very regular or can be changed slowly over period of month of year. A trend component is a long term movement in the series. Autocorrelation is a local phenomenon, which is positive or negative. Based on the above verifications, the analysis is performed for this project.

Based on the minimum AICC, BIC and likelihood statistics values, several models such as AR, MA and ARMA models were fitted. As a diagnostic tool estimated noise sequences are tested. Two or three models were selected and compared the forecasting values of the models. Finally the best model was selected to forecast the monthly export income up to month 2009 December. ITMS software package was used to analyses the data.