

Statistical Modelling on India Coffee Exports - A Time Series Approach

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ABSTRACT

The research paper is an attempt to model and forecast the exports of coffee from India by using annual time series data from 1971-2020. A comparative study was made among linear and non-linear regression models, Auto Regressive Integrated Moving Average (ARIMA) and Artificial Neural Network models (ANN) as to find out an appropriate model to capture the trend of coffee exports. The model selection criterion for this study were Root Mean Squared Error (RMSE) and Mean Absolute Percentage Error (MAPE). The Ljung-Box test was also tried to verify the adequacy of the selected model. Finally, NNAR (5-10-1) model was found as the most appropriate to capture the trend of coffee exports from India, and forecasts were estimated as 5502.49 (Cr.) for the year 2024.

Keywords: *Coffee, Forecasting and Regression.*