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An application of ARIMA model in fenugreek wholesale price in Rajasthan

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ABSTRACT : The present study aimed to forecast the fenugreek prices for Rajasthan by using the time series data of monthly average prices for the period from January 2004 to June 2015 of Shri Madhopur market. In this paper different ARIMA time series models were specified and estimated. Forecasting performance of these models were evaluated and compared by using common criteria such as: root mean square error, mean absolute deviation and mean absolute percentage error. Empirical results showed that ARIMA (1,1,1) price forecast time series model fitted the price series well and they have correctly predicted the future trend of the price series within the sample period of the study. The accuracy percentage between the forecasted and actual price value of fenugreek were found to be 91 to 98 per cent. Thus, ARIMA (1,1,1) was the most representative model for the price forecast of fenugreek in Shri Madhopur market of Rajasthan. This model can facilitate the farmers and wholesalers in effective decision making.

Key Words: ACF, PACF, ARIMA, Forecasting, Rajasthan.