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Forecasting of coconut production in India: A suitable time series model

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Department of Farm Engineering, Institute of Agriculture Science, Banaras Hindu University, VARANASI (U.P.) INDIA ■ ABSTRACT : Coconut is an important and versatile tree crop with diverse end-uses, supporting livelihood of many farm households in the primary sector, grown in many states of India. The present study is an attempt to find an appropriate model to forecast the coconut production in India. Time series data for a period of 61 years from 1951-2012 were used. The best model has been selected based on the minimum root mean square error values. It has been found that ARIMA (1, 1, 1) model was found to be as an appropriate model to forecast the production. Further production of coconut in the next coming years would be also concluded in this study. The finding of this study will be helpful for farmers, coconut based industries and policy makers.

- **KEY WORDS :** Coconut production, ARIMA, RMSE. Forecast, Ljung and Box Q statistic
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