

ARIMA MODEL FOR FORECASTING OF RICE PRODUCTION IN INDIA BY USING SAS

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ABSTRACT

Autoregressive integrated moving average (ARIMA) approach has been applied for modeling and forecasting of rice production of India. Autocorrelation function (ACF) and partial autocorrelation function (PACF) functions were estimated, which led to the identification and construction of ARIMA models, for explaining the time series and forecasting the future production. A significant increasing linear trend in the total rice production in India has been found. The best identified model for the data under consideration was used for forecasting up to the year 2020 AD. The projected production by using ARIMA (011) would be increased to 112.90 million tonnes by 2020 AD.

KEYWORDS: ARIMA, ACF, PACF, AD, SAS