A Comparison and Forecasting of Oilseeds Crop Production Using Time Series Models

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Abstract

Time series models have been commonly used in a broad range of scientific applications, including agriculture production. Some of the major advantages of time series models include their systematic search capability for identification, estimation, and diagnostic checking. Time Series Models, like the Autoregressive Integrated Moving Average (ARIMA), and the Exponential Smoothing Models, can satisfactorily describe time series that exhibit non-stationary behaviors both within and across seasons. The time-series data on yield (Kg/ha) of major oilseed crops (Linseed, Groundnut, Sesame, Castor) grown in India during the period 1960-61 to 2016-17 have been collected as secondary data. The aim of study is to find the trends in some important oil seeds crop production using the ARIMA and Exponential Smoothing Time Series Modeling and both methods are compared and forecasted.

Keywords: Oilseed crop production, ARIMA, Exponential Smoothing.

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