

## APPLICATION OF ARIMA MODEL FOR PREDICTING CASHEW NUT PRODUCTION IN INDIA – AN ANALYSIS

E. ELAKKIYA<sup>1</sup>, M. RADHA<sup>2</sup> & R. SATHY<sup>3</sup>

<sup>1</sup>Research Scholar, Department of Physical Sciences and Information Technology, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India

<sup>2</sup>Assistant Professor, Department of Physical Sciences and Information Technology, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India

<sup>3</sup>Professor, Department of Physical Sciences and Information Technology, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India

## ABSTRACT

A statistical modeling approach (Box-Jenkins' ARIMA model) has been used for the study to predict Cashew nut production in India. The order of the best ARIMA model was found to be (2,1,1). Further, efforts were made to predict, as accurate as possible, the future cashew nut production for a period up to five years of fitting ARIMA (2,1,1) model to our time series data. The prediction results were shown that the annual cashew nut production to grow in 2016, then its take a sharp dips in 2015 and in subsequent years 2016 through 2020.

KEYWORDS: ARIMA Model, Cashew Nut, Data and Predicting