



Forecasting Milk Production in Tamil Nadu using ARIMA Model - An Empirical Study

Dr. C. A. Paari

Associate Professor, Department of Economics, Erode Arts Science College, Erode, TN – South India

R. Sathish

Research Scholar, Department of Economics, Erode Arts Science College, Erode, TN – South India

Abstract

Tamil Nadu is witnessing tremendous growth in milk production. The milk production has increased from 1.68 million tonnes in 1978 to 7.24 million tonnes in 2016. Tamil Nadu has been retaining its number one position in milk production for many years. Considering this, it is essential to know the future production to improve and sustain the growth and development of sector. The objective of the study is to find out most suitable forecasting method for milk production for sustainable future production and policy implications. The forecasting techniques ARIMA model was used to forecasting milk production. The data used in secondary data, collected from NDDB (1978 to 2016). Stationarity of data was checked with Unit root test and Autocorrelation Function (ACF) and Partial autocorrelation function (PACF), after confirming the stationarity, Autoregressive Integrated Moving Average (ARIMA) method was used. The results indicate that ARIMA (1, 1, 0) is more suitable method with the use of GRETL software package for forecasting of milk. Milk production is expected to be 8.25 million tonnes by 2023.

Key Words: Forecast, Milk Production, Stationarity, ARIMA.