

ABSTRACT

Meat is one of the major by product of Pakistan. It plays an important role in the economy of Pakistan. This study is aimed to fit a suitable ARIMA models as well as regression model for the estimation of the production of meat, beef, mutton and poultry meat, considering a number of predictor variables such as Livestock Population- buffalos, cattle's, goats, sheep's, poultry birds and human Population. This study attempts to outline the practical steps which need to be undertaken to use autoregressive integrated moving average (ARIMA) time series and Econometric models for forecasting Pakistan's beef, mutton, poultry meat and total meat. A framework for ARIMA forecasting is drawn up. On the basis of in-sample and out-of-sample forecast it can be concluded that the model has sufficient predictive powers and the findings are well in line with those of other studies.

Further, in this study, the main focus is to forecast the beef, mutton, poultry meat and total meat on annual basis in order to provide policy makers a systematic forecast, which would helpful whether you are an individual investor or simply someone who is trying to estimate future financial pattern and also Govt. of the Punjab, L&DD Department, to take appropriate measures in deciding the changes that need to be made. We estimate the ARIMA model to project production of beef, mutton, poultry meat and total meat by using past trend of meat production from 1972-73 to 2007-08. Our estimates show that projected supply beef, mutton, poultry meat is 1.549, 0.554, 0.601 million metric tonnes in 2007-08, which will reach to 3.790, 1.224, 2.260 million metric tones respectively in 2019-2020. The aim is to determine the more accurate forecast for beef, mutton, poultry meat and total meat, for this purpose, different ARIMA models are used and better models are given. On the basis of different criteria best models are selected.