

ABSTRACT

The main objective of this research work is to select a suitable forecast model for Consumption and Transmission of Natural Gas (total eight data sets). The data is collected and compiled from publications of "Bureau of Statistics, Punjab". Eviews and Minitab software package have been used for the analysis purpose. The data comprises of yearly data of Punjab on Natural Gas Consumption (in thousand decca cubic meter) and Transmission (in kilometers).

Box-Jenkins Approach has been adopted. Stationarity of the series has been checked for each data set, correlogram has been performed for identification of order of ARIMA model and a class of models has been estimated. Then, most adequate and appropriate model is selected by comparing values of Akaike Info Criterion, Schwarz Criterion, S.E of Regression, Root Mean Square Error and Theil Inequality Coefficient for each model. In the end, forecasts have been made using selected models for 2011 and compared these forecast values with the actual values for 2011.