ABSTRACT

The purpose of this study is to model the different vegetable's prices through the univariate and multivariate time series methodologies. The data on five vegetable's prices and Kerosene, Petrol and Diesel Prices for two cities which are Lahore and Faisalabad has been taken from the Federal Bureau of Statistics (FBS) on the monthly basis from January, 2000 to December 2009 comprising of 120 observations for each city. The stationarity of all the variable's prices are checked by subjective as well as objective methods. The different vegetables prices of two cities of Punjab by taking the Kerosene, Petrol and Diesel Prices as the auxiliary variables have been modeled. Univariate ARIMAX forecast models for different vegetable's prices under study are estimated. Granger causality test is applied to assess the direction of causality that may run among vegetable's prices. Finally multivariate VARX forecast models have been developed to see the effect of different vegetable's prices on each other. VAR-X technique indicates that the lag order should be 1 and therefore our estimated multivariate model is VAR-X (1) model. 1 means that there will be change in the selected vegetables prices after one month.