



Time-Series Analysis of Fluctuations in Petroleum's Price of Last Fifteen Years in Patna

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Abstract : *The study is carried out to overview the trend of fluctuations in petrol prices and forecast the future prices of petrol on the assumption that the future trend will hold similar to past trend. Sharp growth in the prices of petrol captures the community's attention and affects country's economy and way of life. This often manifests itself in calls for formal enquiries into how petrol is priced. An analysis of historical data is used to show the trend of fluctuations in oil prices and the result of this analysis is used to forecast the future prices. Due to the non-linear and unpredictable nature of oil prices, a lot of forecasting techniques have been developed.*

In this paper, a widely used technique TIME-SERIES analysis has been used to forecast the prices of petrol for last 15 annual period i.e., Sep 2004 to Aug 2019.

Keywords: *Petroleum, Fluctuations, Economical impacts, Time-series, Forecasting.*

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Introduction :

The significance of oil as an input into the macro economy, and its ability to predict future growth in economic variables, suggests that the oil price is an important variable to consider the context of consumption.

The oil prices always make the front page in India and are considered as one of the most important indicators in the global economy. The fluctuations of oil prices always met with a strong response in this nation. The price structure of the petrol is the sole reason for this kind of response. Government and business spend a lot of time and energy to figure out where oil prices are headed next, but forecasting is an intext science.

Forecasting is one such scientific technique which helps organizations/processes in decision