

# Statistical Modeling on Groundnut Prices in Adoni Market using Hybrid Timeseries Models

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## ABSTRACT

Present study made an attempt to forecast the Groundnut prices in Adoni market of Andhra Pradesh through a comparative study on models namely ARIMA, GARCH, and hybrid ARIMA-GARCH model. The selection of the appropriate model was done on the basis of diagnostic criterion such as  $R^2$ , RMSE and MAPE. Finally, ARIMA (1,1,1) - GARCH (1,1) model emerged as the best model to forecast the groundnut price based on the selected diagnostic criterion and residual correlogram. By using the model, for January 2024, it was estimated at 6984.69 (Rs. Q.).

**Keywords:** *Groundnut, Price, ARIMA, and GARCH.*