

## Review Form 1.6

Journal Name:	<a href="#">Asian Journal of Research in Computer Science</a>
Manuscript Number:	Ms_AJRCOS_78163
Title of the Manuscript:	Indian Commodity Market Price Comparative Study of Forecasting Methods - A Case Study on Onion, Potato and Tomato
Type of the Article	Original Research Article

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalajrcos.com/index.php/AJRCOS/editorial-policy> )

**Review Form 1.6**

**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<ol style="list-style-type: none"> <li><b>1. The abstract and Introduction need to be re-written. The abstract only needs to state that your study is a comparative analysis of Auto ARIMA, RNN, LSTM, VAR and Random Forest Regression in their ability to predict Retail prices of potatoes, onions and tomatoes (in that order since that is the order of importance of the 3 crops). You should then state the variables used by you. End the introduction by stating which models were found better for which of the 3 commodities.</b></li> <li><b>2. In the introduction, the first four sentences</b> "Forecasting agricultural commodity futures prices will help to know the anomalies and other variables like diesel, the volume of Onion, Tomato and Potato" [1]. Data collected from different websites is knowledge for analyzing past trends and commodity price patterns. Noisy and Nonstationary data means agricultural product prices can differ according to news and events. [2]. Noisy and Non-stationary data lead to poor agricultural commodity price prediction results. "Forecasting prediction methods are generally based on the assumption that variables are independent, normal distribution, which is contradicted with real market" [3]. <b>seem random and unconnected and must be removed. You could start with outlining the importance of Potatoes, onions and tomatoes in India (in 4-5 lines). The next paragraph can outline the fluctuations in their prices and problems caused to farmers and consumers (another 4-5 lines). Then you could give an outline of your study (number of sections and what you attempt to convey in each section). You could do it differently of course, but please don't let it seem like disjointed sentences put together/.</b></li> <li><b>3. References to XGBoost to be amended: Correct me if my knowledge is outdated, but XGboost is not a statistical technique. It is an open source software for gradient boosting. Rather than specifying XGBoost as a separate technique on par with Auto Arima, VAR etc you should state the technique (perhaps Regression with gradient boosting) which you employed. You may state that you have used XGBoost for it, but XGBoost (in my opinion) cannot be considered as a statistical predictive technique.</b></li> </ol>	
<b>Minor</b> REVISION comments	<ol style="list-style-type: none"> <li><b>1. Literature review should not include where you got your secondary data from. It should outline relevant studies on prices of the 3 commodities and if there are no such studies, you could outline resources from where the reader could get more knowledge about the statistical techniques you have employed.</b></li> <li><b>2. The section on business understanding may be put as part of the introduction.</b></li> <li><b>3. Avoid erroneous statements like "Onion, Tomato and Potato are an important commercial tree crop mainly cultivated in Mumbai, Bengaluru and Delhi." They are traded in these cities, not cultivated. There is not much farming in most cities.</b></li> <li><b>4. Avoid ambiguous statements like "Onion (Allium cepa) is one of the second most important commercial crops of the India which is next to Potato." Either it is one of the most important or the second-most important. Be specific.</b></li> <li><b>5. Avoid confusing word construction like "of wholesale prices, retail prices, arrival volumes and Diesel prices of the agricultural commodities". Prefer to</b></li> </ol>	

**Review Form 1.6**

	<p>use“of wholesale prices, retail prices, arrival volumes of the agricultural commodities and Diesel prices” Diesel prices are not different for different commodities.</p> <p>6. Use “mandis” not “mandi’s” wherever you use it as a plural. Use “mandi’s” only if you use it as a possessive.</p> <p>7. Avoid sentence fragments and correct wherever, you have omitted leaving a space between two words.</p>	
Optional/General comments	<p>While the paper is mainly to compare the price different forecasting techniques for the 3 commodities, it dwells too much on testing the data and too little on the predictive techniques actually used. I understand that the results of so many techniques could take too much space. However, the paper could have elaborated a little more on those techniques. For example, I presume that a Choleski decomposition has been used in the VAR. The author could have mentioned the order in which the variables were chosen (since the contemporaneous causality flows from top to down).</p>	

**PART 2:**

	Reviewer’s comment	Author’s comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Sameer G. Thakur</b>
Department, University & Country	<b>University Of Mumbai, India</b>