

Review Form 1.7

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_118728
Title of the Manuscript:	Application of Machine learning techniques models for forecasting of Redgram prices of Andhra Pradesh, India.
Type of the Article	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.journaljsrr.com/index.php/JSRR/editorial-policy>)

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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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>yes</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>Need improvement</p>	
<p>Optional/General comments</p>	<p>Suggestions for improvement added separately</p> <p>Areas for Improvement:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Literature Review: While the transition from traditional models to ML techniques is discussed, more specific examples and case studies from existing literature could further contextualize the relevance of this transition. <input type="checkbox"/> Justification for Model Selection: The rationale behind selecting specific ML algorithms (ANN, SVR, RF) over others could be elaborated to justify their applicability to Redgram price forecasting. <input type="checkbox"/> Dataset Characteristics: A brief discussion on the characteristics and preprocessing of the dataset could provide better context for the analysis. <input type="checkbox"/> Visualization of Results: Including more visual representations of the model performances, such as error distribution plots or comparison charts, could enhance the presentation and interpretation of the results. <input type="checkbox"/> Discussion of Seasonal Patterns: The article mentions seasonality in agricultural markets, but a more in-depth analysis of how each model handles seasonal variations could provide valuable insights. Discussing the performance of models specifically in capturing seasonal trends would enhance the study. <input type="checkbox"/> Hyperparameter Optimization: While the performance of ML models is discussed, details on the hyperparameter tuning process for models like SVR, ANN, and RF are sparse. Elaborating on the techniques used for optimizing these parameters (e.g., grid search, cross-validation) would strengthen the methodology. <input type="checkbox"/> Economic Implications: The practical implications of accurate price forecasting for farmers and 	

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	<p>policymakers are briefly touched upon. A more detailed discussion on how the findings can directly benefit these stakeholders, including potential policy recommendations, would add practical value to the research.</p> <p><input type="checkbox"/> Comparison with Recent Techniques: The study primarily focuses on well-established models. Including comparisons with more recent advancements in ML, such as deep learning models (e.g., LSTM, GRU) or ensemble methods, could provide a more comprehensive view of the state-of-the-art in price forecasting.</p> <p><input type="checkbox"/> Robustness Checks: Conducting robustness checks to validate the findings under different scenarios, such as varying data splits, different time periods, or including external factors (e.g., weather data), would enhance the credibility and generalizability of the results. This could involve testing the models on additional datasets or performing sensitivity analyses.</p>	
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PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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