

### Review Form 3

Journal Name:	<a href="#">Journal of Scientific Research and Reports</a>
Manuscript Number:	Ms_JSRR_130320
Title of the Manuscript:	<b>Innovative Approaches to Bengal gram Yield Mapping: Integration of Sentinel-1 SAR and Crop Simulation Models for Precision Agriculture</b>
Type of the Article	<b>Original Research Article</b>

#### **PART 1: Comments**

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	This manuscript provides a significant contribution to the scientific community by demonstrating the integration of Sentinel-1 SAR remote sensing and the DSSAT crop simulation model for accurate yield prediction, particularly for Bengal gram in a semi-arid region. It highlights the potential of SAR data to overcome weather-related limitations in agricultural monitoring, offering a reliable solution for large-scale yield forecasting. The validation of spatial yield predictions with high accuracy further reinforces the applicability of this approach in precision agriculture.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The title is suitable as it clearly conveys the key focus areas of the manuscript: innovative methods, Bengal gram yield mapping, integration of Sentinel-1 SAR data, and crop simulation models in the context of precision agriculture.	
<b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b>	The abstract is comprehensive and effectively highlights the key aspects of the study, including the integration of Sentinel-1 SAR data with the DSSAT model, the focus on Bengal gram yield prediction, the accuracy of the methodology, and the potential for future advancements.	
<b>Is the manuscript scientifically, correct? Please write here.</b>	The manuscript is scientifically correct.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	<p>The references are sufficient but some of the references are old and outdated, authors should incorporate more and recent references additionally.</p> <p><b>Suggested Additional References:</b></p> <ol style="list-style-type: none"> <li><b>Hoque, A., &amp; Padhiary, M. (2024).</b> <i>Automation and AI in Precision Agriculture: Innovations for Enhanced Crop Management and Sustainability</i>. Asian Journal of Research in Computer Science, 17(10), 95–109. <a href="https://doi.org/10.9734/ajrcos/2024/v17i10512">https://doi.org/10.9734/ajrcos/2024/v17i10512</a></li> <li><b>Padhiary, M., &amp; Kumar, R. (2024).</b> <i>Enhancing Agriculture Through AI Vision and Machine Learning: The Evolution of Smart Farming</i>. In D. Thangam (Ed.), <i>Advances in Computational Intelligence and Robotics</i> (pp. 295–324). IGI Global. <a href="https://doi.org/10.4018/979-8-3693-5380-6.ch012">https://doi.org/10.4018/979-8-3693-5380-6.ch012</a></li> </ol>	

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Is the language/English quality of the article suitable for scholarly communications?	English quality is good, minor corrections and grammars may be corrected.	
<b>Optional/General</b> comments	Few more recent references may be added One or two numeric results may be reflected in the conclusion	

### **PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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:**

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