

Review Form 3

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_127857
Title of the Manuscript:	Effect of large scale paddy drying using solar bubble drying on milling qualities of milled paddy
Type of the Article	

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>
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.	This manuscript is significant for the scientific community as it addresses a critical challenge in post-harvest rice management: the development of cost-effective and efficient drying methods for rural areas. By evaluating the feasibility and effectiveness of solar bubble drying (SBD) compared to traditional methods, the study provides valuable insights into improving rice milling qualities, including total rice yield and head rice yield. These findings have practical implications for enhancing rice storage and processing, especially in resource-constrained regions like Odisha, India, contributing to food security and sustainable agricultural practices	
Is the title of the article suitable? (If not please suggest an alternative title)	The title, " Effect of Large Scale Paddy Drying Using Solar Bubble Drying on Milling Qualities of Milled Paddy ," is informative and gives a clear idea of the study. However, it could be slightly refined for clarity and brevity. Suggested : Impact of Solar Bubble Drying on Milling Quality of Large-Scale Paddy	

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<p>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.</p>	<p>The abstract is generally comprehensive, covering the aims, methodology, key findings, and the study's implications. However, it could be strengthened by including a few additional details and clarifications to improve its completeness and focus. Here are some specific suggestions</p> <p>Areas for Improvement</p> <p>Structure and Flow: The abstract has a good beginning but loses flow with overly dense information. Breaking it into distinct parts (background, objective, methods, results, and conclusion) will improve readability. Example: A clear statement of conclusion or impact at the end is missing.</p> <p>Language and Clarity: Phrases like "So for offseason use of paddy" and "So to overcome this problem" are informal. Replace with more professional wording. Suggested revision: "For the offseason utilization of paddy, drying is critical for long-term storage." "To address the challenge of low-cost drying methods in rural areas, this study investigates..."</p> <p>Methodology Description: The method description is minimal. Mentioning the sample size, experimental duration, or key conditions briefly would strengthen the abstract. For example: "The drying performance of the solar bubble dryer (SBD), developed by IRRRI, was compared against open sun drying (SD) and solar tunnel drying (STD) under the climatic conditions of Odisha."</p> <p>Result Interpretation: The results are informative but lack interpretation. Why are the SBD results better? Are the improvements statistically significant? Briefly addressing these points will make the results more meaningful.</p> <p>Grammar and Technical Errors: "About 65% population of India" → should be "About 65% of the population in India." "Head rice yield was higher (56.24±0.80%) in SB dried product" → revise to "The head rice yield was higher (56.24±0.80%) for paddy dried using SBD."</p> <p>Impact Statement: The abstract does not explicitly state the practical implications of the findings. Including a sentence on how SBD could benefit rural farmers or improve rice quality would strengthen it. Example: "The results suggest that the solar bubble dryer offers a viable, cost-effective alternative for improving milling quality and rice yield in rural settings."</p> <p>The abstract effectively conveys the importance of the study but would benefit from improved structure, language clarity, and a stronger emphasis on practical implications. Addressing the above points will enhance its overall impact</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The manuscript appears to be scientifically correct in its general premise, methodology, and results. The study addresses a critical issue, developing cost-effective drying methods for paddy in rural areas. The use SBD as an innovative solution aligns with current agricultural needs, especially in tropical regions like Odisha.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Add recent references in the introduction section and only one reference is provide in discussion part kindly include more recent and relevant references</p>	

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<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Some sentences are overly long and difficult to follow, Grammatical and Technical Errors need to be rectified</p>	
<p>Optional/General comments</p>	<p>The conclusion is effective but could emphasize the practical implications more strongly. Suggest future areas of research, such as scaling up SBD technology or analyzing its economic feasibility compared to existing methods</p> <p>Conclusions (suggested)</p> <p>The solar bubble dryer (SBD), developed by IRRI, Hohenheim University, and GrainPro, offers a cost-effective and efficient alternative to traditional drying methods, particularly for rural areas lacking access to modern infrastructure. In this study, SBD demonstrated promising results for drying paddy compared to STD and SD. Total rice yields were 68.70±1.21% for SBD, 67.44±1.39% for STD, and 66.63±1.71% for SD, with no statistically significant differences among the methods. However, SBD achieved the highest head rice yield (56.24±0.80%), surpassing STD (54.35±0.19%) and SD (52.46±1.09%), indicating better preservation of grain integrity. Beyond milling performance, SBD excelled in maintaining superior cooking quality parameters, including water uptake, elongation ratio, volume expansion, and reduced solid loss, offering a more consumer-acceptable product. These findings highlight SBD's potential as a sustainable and scalable solution for paddy drying, particularly in resource-constrained settings, providing significant advantages in reducing post-harvest losses, improving rice quality, and enhancing rural livelihoods. Future research should explore long-term storage implications and cost-benefit analysis to validate SBD's adoption on a larger scale.</p> <p>Areas for Improvement of manuscript</p> <ol style="list-style-type: none"> Abstract: The abstract is informative but overly dense. Simplifying and clearly stating the key findings and implications could improve readability. Introduction: While informative, the introduction could benefit from better structuring to avoid overwhelming the reader with data early on. Literature Review Integration: The cited studies are relevant, but their connection to the research focus could be better emphasized to create a seamless narrative. Figures: Missing or unclear figures (e.g., Fig. 1, Fig. 2, Fig. 3) detract from the completeness of the presentation. Conclusion: The original conclusion lacked a forward-looking perspective. It could better emphasize the broader impact and future scope, as revised earlier. 	

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

Reviewer Details:

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