

Review Form 3

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_125512
Title of the Manuscript:	Assessment of Irrigation Requirements for Summer Paddy Cultivation on Vertisols in Raipur, Chhattisgarh
Type of the Article	Original Research Article

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	This manuscript is much appreciated by me and the rest of the scientific community in the sense that, to summarize, the issues of water shortages and elevated agriculture, particularly in summer paddy production, highlight the crucial need for effective water management. This is especially true in the context of rice cultivation. Utilizing tools such as CROPWAT 8.0 for crop water requirement estimation and irrigation scheduling can significantly improve sustainable water use and contribute to food security in regions such as Chhattisgarh, where irrigation is essential for agricultural productivity. This is especially true in regions where water stress is increasing.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title can be renamed as: An assessment of Irrigation Requirements for Summer Paddy Cultivation on Vertisols in Raipur, Chhattisgarh	
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.	Explain in some words, why you have chosen the FAO-CROPWAT 8.0 model over the others to assess your system properly. Please, mention the exact findings that you have used to evaluate your model.	
Are subsections and structure of the manuscript appropriate?	<ol style="list-style-type: none"> 1. The introduction section contains so many paragraphs. You should combine some of them. 2. You should reorganize the subsections of the materials and method section. 3. It is suggested to add mathematical modelling for the different performance indicators. 4. You can summarize the data using tables. Insert tables for different sub-sections of materials and methods. 5. You should also explain it that, how climate data, soil data, and crop data help you to estimate the water requirements and scheduling significantly. 6. The sub-sections of the results and discussion and the materials and method parts are almost the same. It is always not suggested to use the same sub-sections again and again for different headings. 7. The results and discussion section should be rewritten and decorated in a significant way so that it can effectively visualize your methodology. 8. Restructure the results and discussion section adding the obtained results of different performance indicators in different graphs. Graphical representation for the performance analyses of your model needs to be added here with comparison. 9. 	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	<p>The authors need to focus on arranging the materials and method section and results and discussion effectively. To make your manuscript scientifically correct and robust you need to emphasize on adding some more figures and tables in the subsection of the materials and method section including all of your data. Authors need to mention what are the systematic mathematical modelling they have used for their model.</p> <p>Additionally:</p> <ol style="list-style-type: none"> 1. Background of the research needs to be revised by including the recent publications. 2. Authors need to justify their model and validate it to identify whether the obtained results are scientifically correct or not. (Experimental comparison or literature review needs to be modified to validate your model effectively). 3. Add the originality of this research and specify different performance indicators to be investigated in the introduction part. 4. The manuscript lacks the state of the problem of the research and also the proper justification of your model. Reorganize the manuscript in this regard. 5. Justify the proposed system by discussing different irrigation technologies and 	

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	irrigation fundamentals. As your manuscript is based on effective irrigation requirements of summer cultivation, you need to focus on this. Why do you choose this system over others?	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	References should be updated by including recent publications. Also, the reference style should be consistent (check the upper case and lower case sentences in a single reference). Although some articles have been reviewed, the research works related to the different irrigation technologies around the world are not enough to justify the originality of the research.	
<u>Minor REVISION</u> comments Is the language/English quality of the article suitable for scholarly communications?	The manuscript contains some systematic grammatical errors. Authors need to focus on that also. The manuscript should also be well organized by properly identifying your goals and fulfilling your goals. Paraphrasing needs to be done. (Suggestion: Use Grammarly premium).	
<u>Optional/General</u> comments	Could you please clarify how you are confident that the model you have used can evaluate water resource management and assist the agricultural sector in the future?	

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:

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