

Review Form 1.7

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_115751
Title of the Manuscript:	Energy Consumption Pattern in Irrigated Paddy Cultivation in Thiruvanamalai District of Tamil Nadu – A Case Study
Type of the Article	Research Article

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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> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> 1. Importance for the Scientific Community The manuscript is important for the scientific community as it provides a detailed analysis of energy consumption patterns in irrigated paddy cultivation, which is crucial for optimizing resource usage and improving sustainability in agricultural practices. The research focuses on a specific region in India, allowing for detailed analysis of factors affecting energy consumption. Understanding energy use throughout the various stages of production can help develop strategies to reduce the environmental impact of rice production. By identifying the sources and magnitudes of energy consumption at different stages of paddy cultivation, this study offers valuable insights for farmers, policymakers, and researchers striving for more efficient agricultural systems. 2. Title Suitability The title, "Energy Consumption Pattern in Irrigated Paddy Cultivation in Thiruvanamalai District of Tamil Nadu – A Case Study," accurately reflects the content and scope of the research. It clearly states the focus on energy use, cultivation type (irrigated paddy), and the specific location of the study. 3. Abstract Comprehensiveness The abstract of the article provides a comprehensive overview of the study, summarizing the objectives, methodology, key findings, and implications effectively. It concisely captures the essence of the research and its relevance to agricultural energy management. It highlights the high energy consumption in paddy cultivation, the different sources of energy analyzed (direct and indirect), the categorization based on farm size and machinery usage, and the key findings regarding energy use optimization. 4. Subsections and Structure The subsections and structure of the manuscript are appropriate, as they systematically present the background, methodology, results, and discussion of the study. The manuscript is well-structured with clear subsections that logically guide the reader through the research process. It starts with a background on the study area, then details the methodology used for data collection and energy calculations. The results section presents breakdowns of energy consumption by machinery and stages, followed by a discussion of these findings. Finally, a conclusion summarizes the key takeaways and emphasizes areas for improvement. 5. Scientific Correctness The manuscript appears to be scientifically correct 6. References The references provided in the manuscript are sufficient and include both recent and relevant sources from peer-reviewed journals and academic publications. However, additional references could enhance the contextualization of the study within the broader literature on agricultural energy management and paddy cultivation practices. The references cited are relevant to the topic and include recent publications (2012, 2018). Additional references on energy-saving techniques in 	

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	<p>paddy cultivation could strengthen the manuscript. Some suggestions include:</p> <ul style="list-style-type: none">Jat, R. K., Kumar, V., Sharma, P. C., & Singh, Y. V. (2013). Conservation agriculture in cereal systems: Present practices and future challenges. <i>Journal of Crop Improvement</i>, 27(6), 775-846.Zhang, H., Chen, X., Sun, H., Cao, W., Li, X., Wang, E., ... & Shen, X. (2013). Effects of long-term fertilization regimes on grain yield and water use efficiency of winter wheat under field conditions in the North China Plain. <i>Field Crops Research</i>, 147, 152-160.	
Minor REVISION comments		
1. Is language/English quality of the article suitable for scholarly communications?	Language Quality The language and English quality of the article are suitable for scholarly communications. The writing is clear, concise, and technically sound, adhering to the conventions of academic writing.	
Optional/General comments		

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>	

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