

**Review Form 3**

Journal Name:	<a href="#">Journal of Experimental Agriculture International</a>
Manuscript Number:	Ms_JEAI_129041
Title of the Manuscript:	<b>Economic Analysis of Unmanned Aerial Vehicle using Machine Learning: Drones in Agriculture Pertaining to Farmer Producer Organisations</b>
Type of the Article	<b>Original Research Article</b>

**General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

<https://r1.reviewerhub.org/general-editorial-policy/>

**Important Policies Regarding Peer Review**

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>

Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

**PART 1: Comments**

	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <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>	<b>This manuscript provides valuable insights into the economic advantages of integrating drone technology into agriculture, addressing a critical gap in existing research on the financial viability of UAVs in farming. By presenting a comprehensive cost-benefit analysis, the study highlights significant cost savings, improved profitability, and resource efficiency associated with drone-assisted farming compared to conventional methods. Its findings contribute to the growing body of knowledge on precision agriculture, offering practical implications for policymakers, researchers, and Farmer Producer Organizations in optimizing farming practices. Furthermore, it underscores the transformative potential of drones in promoting sustainable agriculture and enhancing food security, particularly in regions facing labor shortages and resource constraints.</b>	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	<b>The title, "Economic Analysis of Unmanned Aerial Vehicle using Machine Learning: Drones in Agriculture Pertaining to Farmer Producer Organisations," is descriptive but could be refined for better clarity and focus. The phrase "using Machine Learning" is not directly elaborated on in the manuscript, which might confuse readers. In Addition the title could benefit from being more concise while emphasizing the economic analysis and agricultural application. Suggested Alternative Titles: 1. "Economic Analysis of Drone Technology in Agriculture: Insights from Farmer Producer Organizations in Tamil Nadu" 2. "Assessing the Economic Impact of UAVs in Indian Agriculture: A Study of Paddy Cultivation in Tamil Nadu" 3. "The Financial Viability of Drone-Assisted Farming: Evidence from Tamil Nadu Farmer Producer Organizations" 4. "Cost-Benefit Analysis of Drone Technology in Agriculture: A Case Study of Paddy Farming"</b>	

**Review Form 3**

<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 of the article is comprehensive and effectively summarizes the key aspects of the study, including the context, methodology, findings, and implications. However, it can be further refined for clarity and focus. Suggested Additions:</p> <ol style="list-style-type: none"> <li><b>Explicit Mention of Objectives:</b> The abstract could explicitly state that the study aims to analyze the economic viability of drone-assisted farming compared to conventional methods.</li> <li><b>Highlight Environmental Benefits:</b> Mentioning the environmental advantages of drone technology, such as reduced pesticide usage and minimized runoff, would emphasize its sustainability impact.</li> <li><b>Integration of AI:</b> If machine learning or AI is a significant component of the drone technology studied, it should be briefly highlighted in the abstract for coherence with the title.</li> </ol> <p>Suggested Deletions or Refinements:</p> <ol style="list-style-type: none"> <li><b>Remove Redundant Details:</b> The abstract could eliminate some specific figures, such as the precise gross returns, as these are more suitable for the results section in the main body. Instead, focus on overall trends like "net returns were significantly higher with drones."</li> <li><b>Clarify Terminology:</b> Replace technical terms like "partial budget analysis" with a simpler explanation, such as "a comparative economic analysis," unless the target audience is expected to be familiar with this method.</li> </ol>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The manuscript appears to be scientifically correct based on the provided content. It effectively uses established methods, such as partial budgeting, to analyze and compare the economic impacts of drone-assisted and conventional farming practices. The findings are logically presented, supported by detailed data, and align with the stated objectives of the study.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The references are well-detailed and cover a wide range of topics relevant to drones in agriculture, precision farming, and smallholder farming. I observed and suggest t:</p> <p><b>Sufficiency and Recency:</b></p> <ol style="list-style-type: none"> <li><b>Sufficiency:</b> The references seem sufficient in covering a broad scope of the topic, including technology applications, socio-economic impacts, and specific agricultural practices. They provide a good foundation for the manuscript.</li> <li><b>Recency:</b> <ul style="list-style-type: none"> <li>The list includes several recent works (e.g., 2022, 2023, 2024), indicating that the references are up-to-date.</li> <li>Older works (e.g., 2012, 2013) are justified as they represent foundational studies or pivotal</li> </ul> </li> </ol>	
<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality of the article appears to be suitable for scholarly communication, but some areas may require improvement to ensure clarity, flow, and precision</p>	
<p><u>Optional/General</u> comments</p>		

**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:**

<p>Name:</p>	<p><b>Noble Nwanhele</b></p>
<p>Department, University &amp; Country</p>	<p><b>Akanu Ibiam Federal Polytechnic, Nigeria</b></p>