

Review Form 3

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_130922
Title of the Manuscript:	The Role of Smart Farming Technologies in Mitigating Climate Change and Enhancing Agricultural Sustainability
Type of the Article	Review 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.	The relevance of smart farming technology in reducing climate change and enhancing agricultural sustainability is covered in this manuscript. It addresses issues and future directions while offering insights into uses of AI, IoT, precision agriculture, and renewable energy. The report highlights important areas for additional research and policy intervention, making it pertinent to scholars, decision-makers, and industry stakeholders.	The manuscript highlights the importance of smart farm technology in combating climate change. It gives insights on the benefit of smart farm technology and how it can be used to promote sustainable food security.
Is the title of the article suitable? (If not please suggest an alternative title)	The title is suitable	Yes
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.	Essential elements of the study are covered in the well-structured abstract. The term "consolidates current literature" should be expanded to clarify methodology, quantitative results or significant findings should be briefly mentioned, and a remark on possible policy recommendations or solutions should be included at the end.	Amended as per comments
Is the manuscript scientifically, correct? Please write here.	The paper presents a scientifically solid assessment of the significance of smart farming technology in mitigating climate change; however, the section on climate adaptation should incorporate empirical research or real-world implementations, and certain claims require quantitative data or citations for greater validation.	Amended and inserted information per comment.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	<p>The references are generally relevant and recent, but there could be more citations from the past 3–5 years to ensure up-to-date literature coverage. Some suggestions to references, the authors may refer:</p> <p>Hoque, A., & Padhiary, M. (2024). Automation and AI in Precision Agriculture: Innovations for Enhanced Crop Management and Sustainability. Asian Journal of Research in Computer Science, 17(10), 95–109. https://doi.org/10.9734/ajrcos/2024/v17i10512</p> <p>Padhiary, M., Barbhuiya, J. A., Roy, D., & Roy, P. (2024). 3D Printing Applications in Smart Farming and Food Processing. Smart Agricultural Technology, 100553. https://doi.org/10.1016/j.atech.2024.100553</p> <p>Padhiary, M., & Kumar, R. (2024). Enhancing Agriculture Through AI Vision and Machine Learning: The Evolution of Smart Farming. In D. Thangam (Ed.), Advances in Computational Intelligence and Robotics (pp. 295–324). IGI Global. https://doi.org/10.4018/979-8-3693-5380-6.ch012</p> <p>Padhiary, M., Tikute, S. V., Saha, D., Barbhuiya, J. A., & Sethi, L. N. (2024). Development of an IOT-Based Semi-Autonomous Vehicle Sprayer. Agricultural Research. https://doi.org/10.1007/s40003-024-00760-4</p>	<p>Section 4.4 Added.`</p> <p>Changes made according to comments.</p>

Review Form 3

Is the language/English quality of the article suitable for scholarly communications?	The manuscript's language is suitable for scholarly communication, but some areas need refinement for clarity and fluency. Overly complex sentences need simplifying, minor grammatical inconsistencies need addressing, and smoother transitions between sections could improve readability and logical flow.	Corrected and simplified
Optional/General comments	Make the abstract clearer and give a more organized synopsis of the results. Improve the empirical backing for assertions, especially in the parts on case studies and climate adaptation. Add additional recent sources, particularly those pertaining to practical smart agricultural applications. Simplify complex statements and make sure they are grammatically correct to improve readability.	Amended as per comment

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?	(If yes, Kindly please write down the ethical issues here in details)	No ethical Issue