

Review Form 3

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_121246
Title of the Manuscript:	Effect of water conservation technologies on water use efficiency of green gram pearl millet intercropping system in semi-arid Kenya.
Type of the Article	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)
<p>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.</p>	<p>The manuscript titled "Effect of Water Conservation Technologies on Water Use Efficiency of Green Gram Pearl Millet Intercropping System in Semi-Arid Kenya" holds significant importance for the scientific community, especially those focused on agricultural sustainability and water management in arid and semi-arid regions. The research provides valuable insights into how different water conservation technologies can enhance soil moisture retention and improve water use efficiency, crucial for crop productivity in regions facing water scarcity. By comparing various technologies such as ngolo pits and contour furrows, the study offers practical solutions that can be adopted to mitigate the impacts of climate change on agriculture. I appreciate this manuscript for its thorough experimental design, robust data analysis, and practical implications, all of which contribute to advancing our understanding of sustainable agricultural practices.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The article's title, "Effect of Water Conservation Technologies on Water Use Efficiency of Green Gram Pearl Millet Intercropping System in Semi-Arid Kenya," effectively captures the study's focus. However, for improved clarity and conciseness, an alternative title could be: "Impact of Water Conservation Technologies on Soil Moisture and Water Use Efficiency in Green Gram and Pearl Millet Intercropping in Semi-Arid Kenya."</p>	
<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 generally comprehensive as it provides a clear overview of the study's objectives, methods, results, and conclusions. However, there are a few areas where it could be improved for clarity and completeness:</p> <ul style="list-style-type: none"> *The abstract should briefly mention the importance of the study, highlighting the challenges of water scarcity in semi-arid regions and the potential benefits of water conservation technologies. *The abstract should provide more specific details about the experimental design, including the types of water conservation technologies tested and the cropping systems used. *The results section should include more specific data points or findings, such as the exact percentage increase in soil moisture or water use efficiency observed with different technologies. *The conclusion should emphasize the practical implications of the findings, such as how they can inform agricultural practices in semi-arid regions. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes, the subsections and structure of the manuscript are generally appropriate.</p>	
<p>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>	<p>The manuscript is scientifically robust and technically sound due to its well-defined experimental design and comprehensive data analysis. The use of a randomized complete block design with replicates ensures that the results are statistically significant and reliable. The detailed methodology, including soil moisture measurements and water use efficiency calculations, demonstrates a thorough approach to investigating the effects of water harvesting technologies and cropping systems. Furthermore, the manuscript's findings are supported by relevant literature, providing a strong basis for the conclusions drawn. This rigorous approach ensures the validity and reliability of the research outcomes, making a valuable contribution to the scientific community.</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 in the manuscript are generally sufficient and include a mix of recent and older foundational studies. However, ensuring that all cited references are up-to-date and relevant to the current state of research is crucial for maintaining the manuscript's scientific integrity.</p>	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The language and English quality of the article are generally suitable for scholarly communication. However, there are a few areas where clarity and readability can be improved. Overall, with a few minor adjustments, the language quality will be excellent for scholarly communication.	
Optional/General comments	The manuscript provides a comprehensive analysis of water conservation technologies and their effects on water use efficiency in semi-arid Kenya. The experimental design and statistical analysis are robust. However, the methodology section could benefit from clearer descriptions of procedures and data collection methods. Additionally, consider incorporating more visual aids, such as figures or tables, to better illustrate key findings. Overall, the study contributes valuable insights but requires minor revisions for clarity.	

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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