

Journal Name:	Journal of Global Ecology and Environment
Manuscript Number:	Ms_JOGEE_12704
Title of the Manuscript:	Assessments of soil quality and soil erosion hazards in Arjasa Agricultural Sub Watershed, Indonesia
Type of the Article	

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.

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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.	<p>This manuscript is significant for the scientific community as it provides a comprehensive analysis of soil quality indicators and their relationship with erosion in the Arjasa Subwatershed. The study employs advanced statistical methods, including ANOVA, Duncan's test, and PCA, to identify key factors influencing soil quality, offering a robust framework for soil quality assessment. Additionally, the findings highlight the interplay between soil types, land use, and topography in determining soil health, contributing valuable insights for sustainable land management and conservation strategies. The moderate negative relationship between erosion and soil quality further underscores the urgent need for targeted interventions, aligning with global efforts to mitigate soil degradation.</p>	
Is the title of the article suitable? (If not please suggest an alternative title)	<p>The current title of the article, while descriptive, could be refined to better reflect the core findings and significance of the study.</p> <p>"Assessment of Soil Quality and Erosion Hazards Using Statistical and PCA Analysis: A Case Study of the Arjasa Subwatershed"</p> <p>This title or like this emphasizes the key methodologies employed and highlights the geographic focus, making it more precise and engaging for the target audience.</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 is mostly comprehensive and includes critical components of the study, such as the objective, methods (e.g., ANOVA, Duncan’s test, PCA), key findings (soil quality index, erosion hazards, and correlation between them), and implications for soil conservation. However, a few refinements can enhance clarity and impact: While the abstract contains key quantitative results (e.g., soil quality index values and erosion hazard range), their broader significance could be highlighted more clearly, emphasizing how these findings contribute to scientific understanding. Adding a concluding sentence explicitly connecting the findings to soil management practices or policy recommendations would strengthen its practical relevance.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>Based on the provided manuscript, the study appears to be scientifically sound and well-structured. The methodology, including the use of ANOVA, Duncan’s test, and PCA, is appropriate and effectively addresses the research objectives. The statistical techniques are correctly applied to assess soil quality and erosion hazards, and the findings are presented clearly, supported by sufficient evidence and interpretation.</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 provided are comprehensive, but they lack specific citations directly addressing Land Use and its relationship with soil organic carbon (SOC). Given the frequent use of the term Land Use (mentioned nearly 25 times in the manuscript), it is essential to include scholarly references that specifically explore the connection between land use and SOC or Soil. Suggested Additions: Exploring Land Use and Soil: Tsegaye, B. (2019). Effect of land use and land cover changes on soil erosion in Ethiopia. <i>International Journal of Agricultural Science and Food Technology</i>, 5(1), 026-034. Veisi Nabikandi, B., Shahbazi, F., Hami, A., & Malone, B. (2024). Exploring carbon storage and sequestration as affected by land use/land cover changes toward achieving sustainable development goals. <i>Soil Advances</i>, 2, 100017.</p>	

	<p>These additions will provide a more comprehensive background, strengthening the manuscript's context regarding land use and its impact on soil quality and SOC.</p>	
<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language and English quality of the article are generally suitable for scholarly communication. The writing is clear and conveys the main ideas effectively. However, there are a few areas where minor grammatical adjustments and refinements are needed to enhance the overall flow and precision. Additionally, ensuring consistency in terminology, especially with technical terms, will further improve the clarity and academic rigor of the manuscript. Overall, with some careful proofreading and minor revisions, the article can meet the standards expected for scholarly communications.</p> <p>for example: the sentence "Soil samples were collected randomly representing the entire sub-DAS at a depth of 0-20 cm as many as 30 sample points." is somewhat unclear. or this: "Soil samples were collected randomly from the entire sub-DAS at a depth of 0-20 cm, totaling 30 sample points."</p> <p>A more detailed review is needed for phrases and sentences to ensure greater accuracy. These edits improve the clarity and readability of the text, making it more suitable for academic communication.</p>	
<p><u>Optional/General</u> comments</p>	<p>Revise Figure 2 by modeling it after the flowchart in the following article to enhance the clarity and presentation of your research methodology: [https://doi.org/10.1016/j.soilad.2024.100017].</p> <p>Correct heading numbering i.e. 1. Introduction, 2. Material and method and so on.....</p> <p>Based on the results of your study, consider adding a section for limitations and recommendations following the conclusion.</p>	

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
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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