

Review Form 3

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_128665
Title of the Manuscript:	Evaluation of the amount of organic carbon stored in Togo's cashew (<i>Anacardium occidentale</i> L.) plantations regarding the climatic gradient.
Type of the 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.	This manuscript holds significant importance for the scientific community as it provides valuable insights into the carbon sequestration potential of cashew plantations in relation to climatic gradients. By quantifying the carbon stocks in both biomass and soil across different zones, it highlights the role of cashew-based cropping systems in mitigating climate change. The findings contribute to the understanding of sustainable agroforestry practices and their ecological benefits, offering a framework for policymakers and researchers to promote carbon-efficient farming systems. Moreover, it underscores the potential of cashew plantations in enhancing soil health and reducing greenhouse gas emissions, thereby aligning agricultural practices with global climate goals.	
Is the title of the article suitable? (If not please suggest an alternative title)	The current title, "Evaluation of the amount of organic carbon stored in Togo's cashew (<i>Anacardium occidentale</i> L.) plantations regarding the climatic gradient," is informative but could be refined for clarity and conciseness. It can be simplified while maintaining the essence of the study. Here's a suggested alternative: "Carbon Sequestration Potential of Cashew (<i>Anacardium occidentale</i> L.) Plantations Across Climatic Gradients in Togo"	

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<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 fairly comprehensive, providing details about the study's objectives, methods, and key findings. However, a few improvements can make it more concise and impactful while ensuring clarity and better alignment with scientific conventions. Below are some suggestions:</p> <p>Suggestions for Improvement:</p> <ol style="list-style-type: none"> 1. Clarify Objectives: The objective of linking carbon sequestration to climatic gradients is mentioned but could be stated more explicitly at the beginning. <ul style="list-style-type: none"> o Suggested addition: <i>"This study evaluates the carbon sequestration potential of cashew plantations in Togo, emphasizing variations across climatic gradients."</i> 2. Study Scope and Significance: Add a brief sentence explaining the broader significance of carbon-efficient cropping systems in climate change mitigation and sustainable agriculture. 3. Details on Methods: While the use of allometric equations and soil analysis is mentioned, the abstract could briefly state how these techniques relate to the climatic zones for better context. 4. Remove Overlap: The phrase "Cashew trees were classed based on their diameter at breast height" is detailed but not critical for the abstract. Consider removing it or summarizing. 5. Include Conclusions: Add a concluding sentence summarizing the implications of the results for future research, policy, or farming practices. 	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>Based on the abstract provided, the manuscript appears to be scientifically sound and well-structured, with appropriate methods and clear results. However, the following points should be verified or refined to ensure scientific accuracy and clarity:</p> <p>1. Scientific Basis for Carbon Sequestration Analysis</p> <ul style="list-style-type: none"> • The use of allometric equations for estimating biomass carbon stocks is a well-accepted method. Ensure the equations are relevant to cashew trees and appropriate for the specific region and climatic conditions. • The laboratory analysis for soil carbon stock must include a description of the methodology (e.g., Walkley-Black method or dry combustion), as the method choice can influence the accuracy of the results. 	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Yes</p>	
<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality of the abstract is generally clear and understandable, but there are areas where improvements can be made to enhance readability, flow, and overall suitability for scholarly communication. Here are some points to consider:</p> <p>1. Clarity and Precision</p> <ul style="list-style-type: none"> • Some sentences are slightly long and could benefit from restructuring for clarity. For instance, the sentence <i>"Cashew trees were classed based on their diameter at breast height (0-5 cm, 5-10 cm, 10-15 cm, and > 15 cm)"</i> could be more concise. • The phrase <i>"amount of organic carbon stored"</i> could be replaced with <i>"carbon sequestration"</i> to be more precise and to align with common terminology used in climate change and agroforestry research. <p>2. Grammar and Punctuation</p> <ul style="list-style-type: none"> • The phrase <i>"The study was run from March to October 2023"</i> could be revised to <i>"The study was conducted from March to October 2023"</i>, which is more formal and commonly used in academic writing. 	
<p>Optional/General comments</p>	<p>NA</p>	

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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>	

Reviewer Details:

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