Review Form 3

Journal Name:	Asian Journal of Research in Agriculture and Forestry
Manuscript Number:	Ms_AJRAF_130449
Title of the Manuscript:	ANALYSIS OF SELECTED CLIMATE VARIABLES AFFECTING COCOA OUTPUT IN CROSS RIVER STATE, NIGERIA (1993-2023)
Type of the Article	Original Research Article

PART 1: 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)
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 manuscript investigates the impact of climate variables on cocoa output in Cross River State, Nigeria, using the Autoregressive Distributed Lag (ARDL) model. The topic is relevant and important, given the significance of cocoa to the Nigerian economy and the potential effects of climate change on agricultural productivity. The study uses a robust methodology (ARDL) that is appropriate for the mixed integration levels of the variables.	
Is the title of the article suitable? (If not please suggest an alternative title)	Suitable	
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.	The implications of the findings are not fully elaborated. What do these results mean for policymakers, farmers, and other stakeholders? Suggestion: Expand on the implications. For example, "These findings highlight the need for climate-smart agricultural practices, such as"	
Is the manuscript scientifically, correct? Please write here.	Yes	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References must be revisited. Author(s) may Cite studies using similar methodologies (ARDL model) to strengthen the validity of the approach. NB: All references must be cross-checked before resubmitting; I saw this (Omosuyi et al., Oluwadunsin, and Funmilayo). And is that a reference? What type of intext reference is that? Justify	

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Is the language/English quality of the article suitable for scholarly communications?		
Optional/General comments	The objectives are not explicitly stated in the introduction, which weakens the logical flow from the problem statement to the results.	
	Suggestion:	
	Clearly state the objectives at the end of the Introduction. For example:	
	This study aims to: (1) assess the long- and short-term impacts of climate variables on cocoa output in Cross River State; (2) identify the most influential variables; and (3) provide actionable recommendations for sustainable cocoa production. With other objectives of your study.	
	2. The problem statement is not explicitly stated. While the introduction hints at declining cocoa yields and the potential role of climate change, it does not clearly articulate the specific research gap this study aims to fill. It does not explicitly say, for instance that, this research is important because there are few or no studies done on this subject in the Cross River State area of Nigeria.	
	Suggestions:	
	Clearly state the problem statement. For example:	
	"Despite the recognized importance of cocoa to the Cross River State economy, there is limited empirical evidence on the specific effects of climate variables on cocoa output in this region over the past three decades. Existing studies have focused on broader regional or national data, neglecting the unique climatic conditions and challenges faced by cocoa farmers in Cross River State."	
	Suggestions:	
	Provide a more detailed explanation of the ARDL model and its advantages.	
	Elaborate on the lag selection process, including the specific criteria used and the results of the selection process.	
	Justify the transformation of variables into natural logarithms. Explain why this was done and what the implications are for the interpretation of the results. The data sources are clearly identified, provide the data collection techniques employed.	
	COMMENTS UNDER RESULTS and DISCUSSION	
	Provide a brief discussion on the credibility of NiMet and the Cocoa Produce Office data, including whether data gaps or errors were addressed.	
	Example of my comment suggestion:	
	"The NiMet data were validated by cross-referencing with independent weather stations in Cross River State to ensure consistency and reliability. Similarly, cocoa output data were verified through annual reports and local records to address potential inconsistencies."	
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The inclusion of variables like evaporation and wind speed is not sufficiently justified in relation to cocoa production. Justify why these variables are relevant to cocoa farming.	
Suggestion: "Evaporation rates were included as they directly impact soil moisture availability, which is critical for cocoa production, particularly during flowering and fruiting stages. Wind speed was considered because it can influence pollination success and reduce relative humidity, thereby affecting fungal disease prevalence."	
CONCLUSION	
The conclusion is too brief and does not fully capture the significance of the study.	
Suggestions:	
 Author(s) must expand the conclusion to provide a more comprehensive summary of the findings and their implications. Suggest directions for future research. 	

PART 2:

		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)	

Reviewer Details:

Name:	Augustine Prosper Osei-Gyabaah
Department, University & Country	University of Energy and Natural Resources, Ghana

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