

Review Form 3

Journal Name:	Asian Journal of Agricultural Extension, Economics & Sociology
Manuscript Number:	Ms_AJAEES_130342
Title of the Manuscript:	Climatic Determinants of Shrimp Yields in Tamil Nadu, India: Insights from Transfer Function Models
Type of the Article	Original Research 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 study highlights the localized impacts of climate on shrimp production, offering valuable insights for sustainable aquaculture. It provides a scientific basis for adapting shrimp farming to climate variability and informs strategies to mitigate climate-related risks.	
Is the title of the article suitable? (If not please suggest an alternative title)	Suggestion: Climatic Determinants of Shrimp Yields in Tamil Nadu, India: A Transfer Function Analysis	

Review Form 3

<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>Clarify the Scope and Purpose: Begin with a sharper statement on the importance of the study and its objectives to immediately engage readers.</p> <p>Streamline Results Description: Condense the discussion of district-specific findings to avoid repetition while maintaining clarity. Focus on major trends rather than listing all individual effects for each district.</p> <p>Simplify Terminology: Use less technical jargon (e.g., "ARIMA-based transfer function models") or briefly explain terms for a broader audience.</p> <p>Emphasize Key Takeaways: Highlight the practical implications (e.g., district-specific strategies) earlier, possibly integrating them into the results summary.</p> <p>Refine Future Directions: Make the suggestion for future research more concise and focused on its significance.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>Introduction:</p> <p>Enhance Conciseness: Streamline the background information on global aquaculture and shrimp farming to reduce redundancy and focus on Tamil Nadu's context.</p> <p>Clarify Research Gap: Condense the discussion of existing research gaps and emphasize how your study specifically addresses these gaps.</p> <p>Simplify Technical Details: Briefly explain technical terms like "transfer function models" and "ARIMA-based regression models" or move these details to the methodology section.</p> <p>Highlight Relevance: Bring out the practical implications of your research for policymakers and practitioners earlier in the introduction.</p> <p>Refine Objectives: Make the study's aim more concise and directly link it to the identified gaps for better readability.</p> <p>Organize for Flow: Consider reordering paragraphs for a logical progression from global context → regional significance → research gaps → objectives.</p> <p>Material and Methodology:</p> <p>Enhance Structure and Flow: Create clear subheadings for each major part (e.g., Data Collection, Transfer Function Model Framework, Model Estimation, Model Evaluation) for better readability and navigation.</p> <p>Simplify Technical Jargon: Streamline complex terms or briefly explain them for clarity (e.g., explain "stationarity" or "maximum likelihood estimation" in simpler terms).</p> <p>Clarify Key Details: Specify how missing data, if any, were handled during the analysis. Provide details on why ARIMA and TFM were selected over other potential models for the study.</p> <p>Improve Equation Explanation: Ensure the equation and its components are consistently formatted and fully described. For instance, explain clearly what each term (e.g., ϵ_i) represents.</p> <p>Highlight Data Preprocessing: Briefly describe preprocessing steps such as log transformation and why they were necessary (e.g., normalizing data or stabilizing variance).</p> <p>Eliminate Redundancies: Merge repeated content (e.g., ARIMA components are mentioned twice in slightly different ways).</p> <p>Add References for Methods: Cite key sources for ARIMA and transfer function modeling to bolster credibility.</p> <p>Emphasize Diagnostics and Validation: Include a brief justification for why specific diagnostic tests (e.g., Ljung-Box) and evaluation metrics (e.g., AIC, BIC) were chosen.</p> <p>Results and Discussion:</p>	

Review Form 3

	<p>Thiruvallur District (3.1): Simplify the description of climate impacts (e.g., summarize precipitation and temperature effects succinctly). Discuss the implications of significant lagged effects and model performance without excessive repetition. Use concise language for metrics like AIC, chi-square, and predictive accuracy.</p> <p>Cuddalore District (3.2): Reduce emphasis on minor metrics (e.g., mean and standard deviation) and focus on critical findings. Summarize the environmental challenges (e.g., excess precipitation and its impacts) without duplicating references. Highlight the limitations due to the small sample size (n=9) earlier in the discussion.</p> <p>Thanjavur District (3.3): Provide a balanced discussion of significant positive and negative predictors. Discuss practical recommendations to mitigate temperature and precipitation-related challenges. Avoid repeating general climate-related effects already mentioned for other districts.</p> <p>Nagapattinam District (3.4): Clarify the contrasting effects of summer and winter precipitation with a focus on practical implications. Integrate insights on lagged production effects into broader discussions on sustainability and resource management. Ensure alignment between discussion points and figure interpretations.</p> <p>Optional Enhancements: Include a concluding subsection (3.5 Comparative Analysis) summarizing cross-district trends and key takeaways. Address broader implications for policy and aquaculture practices in the context of climate variability.</p> <p>Add Discussion. Add Future Aspects</p>	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	n/a	
Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	n/a	

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:

Name:	Abdul Basit
Department, University & Country	Pakistan