

### Review Form 3

Journal Name:	<a href="#">Asian Journal of Probability and Statistics</a>
Manuscript Number:	Ms_AJPAS_127412
Title of the Manuscript:	Using Fuzzy Clustering Analysis to Classify the Provinces of Iraq Based on Infrastructure Deprivation Levels
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. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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#### **Important Policies Regarding Peer Review**

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**Review Form 3**

**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>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.</b>	This manuscript offers a valuable contribution to data analysis and infrastructure planning by applying fuzzy clustering methods to classify Iraq's provinces based on infrastructure deprivation levels. It highlights disparities in essential services such as drinking water, sanitation, and electricity, providing a framework for policymakers to prioritize resources and interventions in the most deprived areas. Additionally, it advances the use of fuzzy clustering techniques, offering a nuanced approach to classifying data in contexts with ambiguous or overlapping boundaries, which is essential for complex socio-economic datasets.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	<b>Yes</b>	
<b>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.</b>	The abstract of the article provides a good overview of the research, outlining its aim, methodology, results, and conclusions.	
<b>Are subsections and structure of the manuscript appropriate?</b>	<b>Yes</b>	
<b>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.</b>	This manuscript demonstrates scientific robustness by applying fuzzy clustering analysis, a well-established technique in data science, to a real-world problem of infrastructure deprivation in Iraq. The methodology is technically sound, utilizing c-means clustering to handle overlapping data points and ambiguity in the classification of provinces based on infrastructure indicators. The manuscript appropriately uses relevant statistical tools, such as the NCSS system, to support the clustering process, ensuring the reliability of the results. The analysis takes into account multiple deprivation indicators, such as sanitation, drinking water, and electricity, which ensures a comprehensive and nuanced approach to classifying regions with complex socio-economic conditions.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	References are relevant to the topic; however, some date back to the 1960s, and only a few are recent sources. To ensure the references are sufficient and up-to-date, it is recommended to incorporate recent studies on modern applications	
<b>Minor</b> REVISION comments	Language is clear and suitable for scholarly communications The article communicates well but requires minor refinements in grammar and sentence structure.	
<b>Is the language/English quality of the article suitable for scholarly communications?</b>		
<b>Optional/General</b> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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