

Review Form 3

Journal Name:	Asian Journal of Advanced Research and Reports
Manuscript Number:	Ms_AJARR_125251
Title of the Manuscript:	Water Quality Monitoring of Tigris and Euphrates basin by Using Geographic Weighted Regression (GWR)
Type of the Article	Original Research Article

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PART 1: Review Comments

Compulsory REVISION 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)
<p>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.</p>	<p>This manuscript related to evaluation of the water quality in the Tigris and Euphrates basins of Iraq. They provided the possible causes of contamination and locations that may require attention. In this study they used remote sensing and geospatial analysis tools to evaluate the Tigris and Euphrates rivers' water quality.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes, this title is suitable for the article</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 description of using remote sensing and geospatial tools like Landsat 8 and Sentinel-5P for analysis is clear, but the sentence mentioning the "Analytical Hierarchy Process (AHP)" can be refined. The transition from data sources to the classification method (AHP) could use a smoother link, such as explaining why these data points (salinity, turbidity, etc.) are vital before mentioning how they're classified.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes, all the subsections and structure of the manuscript is good</p>	
<p>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.</p>	<p>(1) This manuscript having a high degree of scientific rigor and technical soundness, primarily due to its comprehensive use of remote sensing data and geospatial analysis to assess water quality in the Tigris and Euphrates basins. (2) This study comprises a range of sophisticated tools, including the Shuttle Radar Topography Mission (SRTM) for topographic analysis, Landsat 8 for salinity and turbidity measurements, Sentinel-5P for real-time nitrogen dioxide monitoring, and GCOM-C for chlorophyll concentration mapping. These datasets are well-integrated to offer a detailed, multifaceted evaluation of the river basins' water quality. (3) The use of the Analytical Hierarchy Process (AHP) to categorize water quality into different risk levels is particularly robust, as it allows for the consideration of multiple variables and their relative importance, thus providing a holistic assessment. (4) Overall, the combination of remote sensing technologies with spatial modeling and multi-criteria decision analysis ensures that the conclusions drawn are scientifically sound and relevant to sustainable water resource management in the region.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :</p>	<p>Your references are generally sufficient and recent, but I would recommend incorporating a few more from 2022 onward, if possible, include references that examine the interdisciplinary aspects of water resource management, integrating perspectives from sociology, economics, and environmental science to assess how water scarcity and pollution affect local communities and economies in Iraq and neighboring countries.</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Yes, the English language quality of this article is suitable for Scholarly communication.</p>	
<p>Optional/General comments</p>	<p>Manuscript is good and recommendable for further process</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>	

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