

Review Form 3

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| Journal Name: | Journal of Geography, Environment and Earth Science International |
| Manuscript Number: | Ms_JGEESI_130735 |
| Title of the Manuscript: | A Review of Water Resources Quality and Contamination Sources in Malawi: Implications for Sustainable Water Management and Public Health |
| Type of the Article | Review 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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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> |
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| 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. | <ul style="list-style-type: none"> In addition to providing a thorough analysis of contamination sources and their effects on public health, this manuscript is significant for the scientific community because it addresses important issues related to Malawi's water resource quality, which have wider implications for global water sustainability challenges. It also offers valuable insights into the intersection of environmental science, public health, and sustainable development by highlighting the need for stronger regulatory frameworks and continuous water quality monitoring, which contributes to the global conversation on achieving safe drinking water access. Additionally, it encourages collaboration and integrated water management approaches, which are crucial for tackling the challenges posed by climate change and ensuring long-term water security. | |
| Is the title of the article suitable? (If not please suggest an alternative title) | <ul style="list-style-type: none"> The title is appropriate because it "Malawi is concentrating on the quality of its water resources and the causes of pollution and emphasizes the article's review character " Highlights the consequences for public health and sustainable water management. But here's a slightly altered, more succinct, and targeted alternate title: "Assessing Water Quality in Malawi: Contamination Sources, Public Health Impacts, and Sustainable Management Strategies" | |

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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> | <ul style="list-style-type: none"> • Although the abstract is thorough, the following ideas may be made better: • Additional features • Name the causes of pollution in detail. The abstract lists industrial discharges, agricultural runoff, and poor wastewater management, but it would be useful to include other sources such household waste, mining operations, or natural catastrophes. • Emphasize the approach used in the study: Give a brief explanation of the review's methodology, including the databases that were searched, the time period taken into account, and the kinds of papers that were included. • Talk about the practical or policy implications: Stress how the study's conclusions can guide future research paths, practical solutions, or policy decisions. <p>Elimination</p> <p>Eliminate the words "ultimately contributing to the broader goals of resilience and sustainable development in the face of climate change" : This sentence adds background, but it also makes the abstract a little too lengthy.</p> <ul style="list-style-type: none"> • Alterations • Reword a few lines to make them more concise and clear: For instance, the line "The review underscores the necessity of establishing a continuous water quality-monitoring framework..." may be changed to "This review highlights the need for a continuous water quality-monitoring framework..." <ul style="list-style-type: none"> • Make use of more descriptive and aggressive verbs: To replace "examines," "highlights," and "advocates," think about using verbs like "investigates," "reveals," and "recommends." | |
| <p>Is the manuscript scientifically, correct? Please write here.</p> | <ul style="list-style-type: none"> • Based on the review of important facets of Malawi's water quality, causes of pollution, and sustainable water management, the manuscript seems to be scientifically correct. But here are some things to think about: • Utilization of Current and Diverse Sources: To guarantee that the results are current and pertinent, the article references a large number of recent scientific publications. Further research on new pollutants like medications and microplastics, however, could improve the article even more. • Integration of International Standards: By using Malawi Standards and World Health Organization (WHO) guidelines, the suggestions are guaranteed to be in conformity with internationally recognized frameworks, making them relevant in both domestic and global contexts. • Coverage of Health Implications: There is ample evidence linking water pollution to negative health effects, especially when it comes to heavy metals, fluoride levels, and microbiological contamination. Data backs up the concept of long-term exposure to chemical pollution and waterborne illnesses. • Suggestions for Integrated Water Management: In order to combat surface and groundwater pollution, the text skillfully highlights the significance of Integrated Water Resource Management (IWRM). For sustainable water usage, cooperation between communities, researchers, and the government is essential. <p>Suggestions:</p> <ul style="list-style-type: none"> • Consider including more specific examples of successful water quality interventions or policies from other countries for comparative analysis and to offer Malawi actionable solutions. • A deeper exploration of emerging contaminants such as pesticides, pharmaceuticals, and radioactive materials would provide a more comprehensive view of the current and future risks to water quality in Malawi. | |
| <p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> | <ul style="list-style-type: none"> • A diverse range of references, many of which are recent, especially those from the last few years, are included in the work. The review of Malawi's water quality problems and pollution sources is well supported by these references. Other references, nevertheless, could be helpful in the following areas: • Emerging Contaminants: More international research on emerging contaminants such as medications, microplastics, and endocrine-disrupting chemicals might improve the conversation, even if current references are given. A few more studies that concentrate on comparable settings (such Sub-Saharan Africa or other developing regions) can offer insightful background information. • Policy and Governance: The section on water governance might benefit from more sources that highlight effective policy interventions in other nations facing comparable difficulties. Examples of nations in Asia or Africa that have adopted Integrated Water Resource Management (IWRM) or stricter wastewater regulations could be useful. • Climate Change and Water Resources: Although climate change is brought up, more sources that concentrate on how it interacts with the management of water resources in Sub-Saharan Africa might deepen the conversation about upcoming difficulties. | |

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| | <ul style="list-style-type: none"> In conclusion, the references are current and generally adequate; nevertheless, the text might benefit from more information on new pollutants, effective water governance measures, and the effects of climate change. | |
| <p>Is the language/English quality of the article suitable for scholarly communications?</p> | <p>Although the article's language quality is generally appropriate for academic communication, there are a few places where it may be improved to make it more readable and clear:</p> <p>1. Sentence Structure: The content may be more difficult to read if certain sentences are too lengthy and intricate. They would be easier to read if they were divided into shorter sentences. An example of a sentence that could be condensed into two sentences to better illustrate the issues is the abstract, "Despite the country's rich freshwater resources, access to safe drinking water remains a significant issue due to pollution from agricultural runoff, industrial discharges, and inadequate wastewater management."</p> <p>2. Verb Tense Consistency: The article alternates between the present and past tenses on occasion. Clarity and flow would be preserved by using verb tenses that are constant. For instance, the past tense phrase "Groundwater quality has also deteriorated significantly" could be more in line with other present tense expressions.</p> <p>3. Article Usage: In some cases, the definite ("the") and indefinite ("a"/"an") articles are used inconsistently or are not used at all. For instance: "Heavy metal contamination including cadmium, lead, and chromium, is particular alarming." ought to be "Heavy metal contamination, including cadmium, lead, and chromium, is particularly alarming."</p> <p>4. Word Choice: To increase precision and clarity, some word choices should be made better. In the line "Emerging contaminants, including pesticides, pharmaceuticals, and radioactive materials present significant long-term risks," for instance, "present" might be changed to "pose" to more effectively express the idea of risk.</p> <p>5. Repetitive Phrasing: To prevent redundancy, some phrases and expressions that are used frequently might be shortened. For instance, "Public education on water treatment methods" can be rephrased or shifted to a different section of the text to prevent repetition when the subject is brought up later.</p> <p>6. Punctuation: To guarantee appropriate concept separation and enhance sentence flow, the piece would benefit from a thorough examination of the punctuation, particularly the commas.</p> <p>In conclusion, even if the language is usually decent, the essay would be clearer and more appropriate for scholarly publishing if it focused on sentence structure, verb consistency, and word choice.</p> | |
| <p>Optional/General comments</p> | <p>NIL</p> | |

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) |
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| <p>Are there ethical issues in this manuscript?</p> | <p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p> | |

Reviewer Details:

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