

**Review Form 3**

Journal Name:	<a href="#">Asian Journal of Environment &amp; Ecology</a>
Manuscript Number:	Ms_AJEE_127325
Title of the Manuscript:	Status of Trace metals Concentrations in Lake Baringo Catchment: A review
Type of the Article	Review

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**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	Reviewer's comment	<b>Author's Feedback</b> <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. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The content in the manuscript may benefit the agriculture sector, fishing, human health and domestic uses of water from lake Baringo if major revision is done guided by the comments attached. This manuscript looks promising only if the issues are resolved. Extensive insights into possible water contamination serve to improve the welfare of human.	
Is the title of the article suitable? (If not please suggest an alternative title)	I have suggested as contained in the comments.	
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.	I have suggested fine details which I feel can improve the abstract. They are attached in the review sheet, comments to authors.	
Are subsections and structure of the manuscript appropriate?	The subsections are okay, though I have suggested numbering to done and deletion of some that do not fall as the title of manuscript portrays.	
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.	The manuscript is scientifically robust, although needs to be enhanced as per the comments given. Technically, it may serve important information to the public and government agencies on the status of trace metals in Lake Bogoria and provide avenue for other uses.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	The references need to be added. In fact not sufficient in some sections, however, I have provided suitable few suggestions and other relevant ones should be included.	

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<p>Minor REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>It was fairly good, I have highlighted some sections where improvement is needed in the manuscript for clarity purposes.</p>	
<p><b><u>Optional/General</u></b> comments</p>	<p>The content of this manuscript is fairly substantial. Can be improved! Dear authors,</p> <p>The topic of the manuscript "Status of Trace Metals Concentrations in Lake Baringo Catchment: A review" is interesting. The structure of this paper is fairly reasonable and the content is quite substantial. Before consideration for publication, the following issues should be revised. Consider labeling/numbering all the sub-sections starting from the introduction section for easy follow-up</p> <p><b>1. Title:</b> I believe you are referring to a lake Baringo in Kenya; It is important to include the word "Kenya" in your title to ensure clarity of the content.</p> <p><b>2. Abstract:</b></p> <ul style="list-style-type: none"><li>-Abstracts are normally in one paragraph. Kindly combine all these paragraphs into one using suitable conjunctions.</li><li>-Your first line of the abstract you saying, "Lake Baringo is one of the two shallow freshwater rift valley lakes", my question is, which is the other one because I cannot see it anywhere? Secondly, rift valley lakes in which country?</li><li>-The connection between your first paragraph to second is not good, i.e before mentioning heavy metals Cadmium, lead and arsenic, provide a brief statement/sentence that prepares the reader before mentioning them. What is the relationship between anthropogenic activities and formations and the mentioned metals?</li><li>-Rephrase Line 1 of paragraph two</li><li>-Rephrase line 13 of your abstract that starts "Therefore, potential sources,....." to link well with the previous sentence</li><li>-This abstract needs objective improvements and also to be in tandem with the title of the manuscript. For instance, from this study, which heavy metals are in high or low concentrations? This can be verified from standard values e.g WHO limits. Then you need to give your conclusion from the comparisons in a sentence or so. Then authoritatively give applicability of waters from lake Baringo. For example, if the levels metals are low following completed multiple studies then recommend use of this water for agriculture, fishing etc</li></ul> <p><b>3. Keywords:</b> It is good practice that keywords are limited to a maximum of five. Choose those that will ensure easy traceability of your article online.</p> <p><b>4. Introduction:</b></p> <ul style="list-style-type: none"><li>-The second paragraph completely misses references, enrich it with references such as <a href="https://link.springer.com/article/10.1007/s12011-024-04234-0">https://link.springer.com/article/10.1007/s12011-024-04234-0</a>; <a href="https://doi.org/10.1016/j.jtemin.2024.100188">https://doi.org/10.1016/j.jtemin.2024.100188</a>;   <a href="https://doi.org/10.1007/s44339-024-00003-9">https://doi.org/10.1007/s44339-024-00003-9</a> etc to back up your contents</li></ul>	

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-Add more references to paragraph four and five. Your work becomes more clear and well supported when you add references after every one or two sentences. I recommend references such as <https://www.nature.com/articles/s41598-021-94616-4>; <https://www.sciencedirect.com/science/article/pii/S0889157522004070>; <https://doi.org/10.1186/s42269-021-00613-y>; | <https://doi.org/10.1007/s44339-024-00003-9> etc

-Break paragraph five into shorter paragraphs. It is too long

-Line 2 of page 6 is completely misplaced. Moreover, the way you have described Lindane which is an insecticide with its concentrations in fish; You need to do the same to all heavy metals in Lake Baringo to point a clear picture and provide valid status of these metals in Lake Baringo.

- To me Lines 1-28 of page 6 looks misplaced, does not support the title of manuscript. Should be deleted or amended.

-The last sentence of the introduction section looks repetitive from the abstract. Can be deleted.

- Introduction section of any manuscript should concisely describe the title and revolves around it, please improve it tremendously and be articulate in your communication.

**5. Location and geological setting of Lake Baringo basin**

-The altitude of lake Baringo in the introduction section is 935 meters and in this section it is 975 meters above sea level, which one is correct? Besides, ensure correctness of information and avoid repetition of statements already mentioned in the introduction section.

-Provide a map of the study area to back up your description in this section. Pictorial representations improve understanding and reading of your article.

-I see redundant statements here which do not enrich your manuscript title, delete them and be clear and possibly half the content in this section

**6 Materials and methods**

-Table 4 should be Table 1, since haven't seen any Table 1,2 and 3 previously. Labeling be done chronologically

**7. Results and discussions**

-In table 2, on the column headed, "Elements", numbering must be done chronologically; the column headed "sources" should be changed to, "References" followed by conventional way of writing each of the references.

-Please Table 3 looks not well organized, it is hard to understand, you can use columns neatly and improve orientation of its content to make it easy to understand. Also extend to Table 5 and 6 kindly. Finally, align these tables to where they are being discussed to make easier for the reader to refer.

**8. Trace elements in lake water**

-Kindly add more references in this section and possibly comparative studies to diversify it.

**9. Flouride ion concentrations in the Lake Baringo basin**

-This section looks misplaced and deviates significantly from the title of this manuscript; "Status of Trace Metals Concentrations in Lake Baringo Catchment: A review". Flouride is not a trace metal rather an anion. If it is considered relevant, then the title needs to be adjusted accordingly.

**10. Trace metals in suspended and bottom sediments**

-There is a problem with sentence one of this section, check. Looks incomplete.

-Provide references in this section

-The two paragraphs of this section can be joined and bring Table 5 next to this section

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	<p>-Add more content</p> <p><b>11. Trace elements in fish species</b></p> <p>-This section can instead read as" trace elements in fish species found in Lake Baringo" to further highlight on the title.</p> <p>-In addition, it is not done satisfactorily since has not captured several studies on metal concentrations in the fish species and recommend based on the studies whether fish consumption from this Lake is detrimental to human health or it is within recommended levels.</p> <p>-Can be improved!</p> <p>-I do not understand the importance of target hazard quotient (THQ) here. Just mentioning and describing the parameters, NO!, what of its usefulness in this manuscript??</p> <p><b>12. Conclusion</b></p> <p>-This section needs to be significantly improved and summarize this work holistically.</p> <p>-What are the findings of this work about Lake Baringo concerning individual studies carried out in it?</p> <p>-You need to answer your title of this work, what is the status of trace metal concentrations in this lake? And the usefulness of this information</p> <p>-Draw a conclusion from it and make appropriate recommendations.</p> <p><b>13. References</b></p> <p>Check on the references to match the guidelines given by the Asian Journal of Environment &amp; Ecology</p>	
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**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:**

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