

Review Form 1.7

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| Journal Name: | Journal of Engineering Research and Reports |
| Manuscript Number: | Ms_JERR_96236 |
| Title of the Manuscript: | Delineation of Ground water potential zoning using GIS and Remote Sensing by AHP of Sunsari District (Koshi Basin) area of Nepal |
| Type of the Article | Case study |

General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljerr.com/index.php/JERR/editorial-policy>)

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PART 1: Review Comments

| | 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>Compulsory REVISION comments</p> <ol style="list-style-type: none"> Is the manuscript important for scientific community? (Please write few sentences on this manuscript) Is the title of the article suitable? (If not please suggest an alternative title) Is the abstract of the article comprehensive? Are subsections and structure of the manuscript appropriate? Do you think the manuscript is scientifically correct? Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p> | <p>Abstract:</p> <p>-The abstract could be reduced or scaled down to 250 words or less. This will perhaps, make the section more succinct. Some lines (Lines 13-17) could be summarized in this regard.</p> <p>Keywords:</p> <p>-I humbly suggest authors omit or remove words already stated in the title and include words which are not in the title to enhance readability or give the paper more audience.</p> <p>Introduction:</p> <p>-Lines 31-32 need to be rephrased or rewritten for clarity purposes. The sentence has several defects.</p> <p>Line-46: This line or sentence is ambiguous and needs to be reconstructed.</p> <p>-Research progress in relation to other similar studies conducted elsewhere or in the study area must be integrated in the introduction section. What is known about the topic, and what is unknown that is currently driving the current study objectives? Or perhaps, what study opportunities exist that is driving this study. It needs to be made clear in the introduction.</p> <p>-Kindly use this current literature on how Sarfo et al. (2022) utilized AHP tool in their GIS and land use study to enrich this literature/aspect of your work.</p> <p>*** Sarfo, I., Shuoben, B., Otchwemah, H.B. et al. (2022). Validating local drivers influencing land use cover change in Southwestern Ghana: a mixed-method approach. <i>Environ Earth Sci</i> 81, 367 (2022). https://doi.org/10.1007/s12665-022-10481-y</p> <p>*** Sarfo, I., Shuoben, B., Beibei, L. et al. (2021). Spatiotemporal development of land use systems, influences and climate variability in Southwestern Ghana (1970–2020). <i>Environ Dev Sustain</i> 24, 9851–9883 (2022). https://doi.org/10.1007/s10668-021-01848-5</p> <p>- The authors could integrate some global theories which dwells on water resource management and Sustainable Development Goals/spatial sustainability to enrich the literature. The literature/studies above could be helpful.</p> <p>-Again, the contributions of this study/study's importance must be integrated briefly in the last part of the introductory section.</p> <p>Methodology:</p> <p>--I see authors used the inverse distance weighted interpolation (IDW) procedure for the analysis of rainfall amounts received and further analysis. However, the source of the data and type of data used were not given. They must be included in the methodology section.</p> <p>-If intermediate preference between adjacent scales and values for inverse comparisons were considered, kindly add them respective values to this table. You can refer to this study for guidance or enrich this section with these studies:</p> <p>- Sarfo, I., Shuoben, B., Otchwemah, H.B. et al. (2022) Validating local drivers influencing land use cover change in Southwestern Ghana: a mixed-method approach. <i>Environ Earth Sci</i> 81, 367 (2022). https://doi.org/10.1007/s12665-022-10481-y</p> <p>Results</p> | |

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| | <p>-The quality of Fig. 4 is very poor. Authors should consider increasing/enhancing the dpi as well as the fonts of the legend and grid coordinates around the figure for clarity purposes.</p> <p>-Figure title "Elevation distribution of the study area" must be removed since the caption already captures that.</p> <p>-Authors could consider using a symbology that fits elevation if they can.</p> <p>Table 6:</p> <p>-The coordinates; thus, latitudes and longitudes without the units (i.e., E or N, W..in degrees or de. m) make it quite misleading. Kindly add the units in column header for the respective coordinates like you did for precipitation.</p> <p>-Kindly remove the axis title from the various figures since they have already been given figure captions under them. The font size and dpi. for all the figures need to be enhanced for clarity and readability purposes.</p> <p>SECTION 3.2:</p> <p>-This section must solely present results and not capture methodology aspect. Kindly remove all details and formula/expressions to the methodology section, maintaining the aspects that solely dwell on the study's results.</p> <p>-Equations must be numbered and placed in the appropriate sections. Refer to the main text for more details.</p> <p>-All aspects that dwell on procedure or validation must be moved to the methodology section.</p> <p>SECTION 3.3.2:</p> <p>It is strange how authors introduce co-efficient of determinant (R^2) here but does not explain its variables and interpretation in the methodology section. In this instance, what does the 0.4 mean. Ideally, this results means $0.4^2 \times 100\%=16\%$. Hence, 16% of the variation in one variable is explained by another variable which is clearly weak or does not show strong association. Authors should note that correlation does not always mean causality. The results generated here must be explained.</p> <p>Discussion:</p> <p>-The results and discussion section did not adequately explain the results of this study.</p> <p>-What do the results generated mean?</p> <p>-How do the understudied variables relate to each other?</p> <p>-Authors failed to compare the results of this study to existing literature or other studies conducted elsewhere. Does this study agree or refute/disagree with existing studies? If so, what could be the potential factors></p> <p>-Again, other parameters that drive these where not fully digested.</p> <p>Conclusion:</p> <p>-The concluding section is too lengthy or long. The key findings need to be summarized instead of repeating them verbatim like how they were presented in the results and discussion section. The main findings need to be summarized.</p> <p>References:</p> | |
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| | -The references given here are incomplete and incorrect. Volume, issue and page numbers among other details are missing where necessary. Authors should check the format for the journal and adhere to it accordingly. | |
| Minor REVISION comments 1. Is language/English quality of the article suitable for scholarly communications? | Other comments: -Major grammatical defects and syntax errors were identified. Moderate parts/sections of this manuscript were corrected. Authors need to thoroughly revise the proficiency level of the paper before resubmitting the paper. -Some aspects need to be re-organized to ensure coherence and consistency of sections/findings in the manuscript. -Authors are advised to refer to the main text for other comments and revision in track changes. | |
| Optional/General comments | The manuscript is generally informative. However, in its current state, it is far from being ready for publication. Authors need to consider comments raised carefully | |

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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| 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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