

Review of: "Groundwater Potential Zone Assessment Using Remote Sensing, Geographical Information System (GIS), and Analytical Hierarchy Process (AHP) Techniques in Fogera Woreda, South Gondar Zone, Ethiopia"

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Potential competing interests: No potential competing interests to declare.

The manuscript title "Groundwater Potential Zone Assessment Using Remote Sensing, Geographical Information System (GIS), and Analytical Hierarchy Process (AHP) Techniques in Woreda, South Gondar Zone, Ethiopia" has been reviewed.

The objective was to map the groundwater potential of Fogera Woreda, South Gondar Zone, Ethiopia, using geospatial and Analytical Hierarchy Process methods. The following observations were made:

- 1. The research has scholarly importance and will contribute greatly to existing literature.
- 2. The abstract needs to be worked on. Some specific information is missing and needs to be included, e.g., in the results and discussion section, the author explained using the cardinal points but did not indicate in the abstract.
- 3. The author gave some literature, but there was no mention of similar research in the country or region under study.
- 4. The literature review in the manuscript should be improved.
- 5. The author used abbreviations without their full meanings, and this can be seen in the whole manuscript. This should be checked accordingly.
- 6. The methods used for the research were not duly explained. The author made mention of the data used but not the importance of the methods used.
- 7. The results and discussion section needs to be revised to give a better understanding of the results.
- 8. Under lithology, "alluvial deposits have been given more weight than lacustrine deposits, plateau basalt, and alkaline basalt" does not provide an understanding of what the author wants to convey.
- 9. What impact do the different soil types in the region have on the groundwater potential?
- 10. Under slope discussion, some ranges of values were mentioned, but the significance or implications of these values were not mentioned.
- 11. The equations in the manuscript were not labeled.
- 12. What do the five classes in the topographic wetness index represent? Clearly specify.
- 13. How do the land use and land cover affect the groundwater potential? Clearly define.
- 14. Tables 2 and 3 are not well explained and should be looked at.
- 15. Generally, the results and discussion section needs to be well discussed. The current research has the results but has not been discussed.



16. Comparing these results to previous works conducted in your region using other methods, does the conclusion confirm the groundwater potential in the region?