

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.

Review Report for the article entitled "**Groundwater Potential Zone Assessment Using Remote Sensing, Geographical Information System (GIS), and Analytical Hierarchy Process (AHP) Techniques in Fogera Woreda, South Gondar Zone, Ethiopia**" by Likinaw Mengstie, and Belete Getahun

I have gone thoroughly through the manuscript which you requested me to review. Following are my observations/comments to the authors to improve the manuscript. Based on my comments, I am presently declining it for publication. Authors can improve the manuscript after considering these comments and re-submit it as a new submission.

1. Introduction Section: This section was written properly. The references cited are too old. Authors are suggested to add newer references and elaborate the introduction part with more relevant studies of a similar type.
2. Study area: Latitude/longitude are not proper (see line 2).
3. Soil section: Authors did not mention the type of soil, simply mentioned the fine, coarse, and loamy. Authors should clearly mention the type of soil. Moreover, no infiltration rate was mentioned anywhere in the manuscript.
4. Lineament/Drainage: No drainage map was shown, and how authors distinguished drainage density. Similarly, no lineament map was shown in the manuscript.
5. Rainfall: Authors have not shown any rainfall data for the period of 2011-2022. In the map of rainfall patterns, how the sharp boundaries of the rainfall pattern were arrived at.
6. Topography weighted index (TWI): Authors did not mention the values of A , s , and $\tan\beta$ used for the calculation of TWI.
7. Land use/Land cover: No water bodies were seen in this map.
8. River: No names of rivers were given in the key map, and the map of 'Distance from River' is wrong. The scale of the map and distances were not matching.

Besides these, there are several instances like 1) equations were not numbered, 2) some of the references were missing in the reference list, and vice versa.

Based on this, I recommend that the manuscript be rejected for publication.



(Dr. Ratnakar Dhakate)