

# 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.

This manuscript assessed groundwater potential zones in the Fogera Woreda area using remote sensing data and the analytical hierarchy process. Although the methodology is not novel, the assessment results may be beneficial to local groundwater development and management.

Overall, the manuscript is well written, except for insufficient demonstrations of data and methodology. Please see the comments and suggestions below for details.

1. Section 2.2: The data used in this study should be elaborated, in addition to Table 1. I suggest moving some descriptions of data from Section 2.3 to Section 2.2. Also, please visualize the data mentioned in Table 1, if possible.
2. Section 2.3: The workflow in Fig. 2 needs to be elaborated. Currently, the text is not clear enough to understand the workflow. Also, please provide details of the analytical hierarchy process (AHP) method, which seems to be the key to the analyses. I also suggest moving equations 3-5 to this section, as these equations demonstrate the methodology.
3. Section 3.1.5: Please clarify the term "lineament." Does it refer to faults? Please also clarify why high lineament density indicates high groundwater potential.
4. Fig.13 is redundant, since Fig.14 is present. I suggest removing Fig.13.