

# Review of: "MCDA - Groundwater prediction analysis for Sustainable Development using GIS Supported AHP in Okeigbo, Southwestern Nigeria"

Gregory Sikakwe<sup>1</sup>

<sup>1</sup> Federal University Ndufu Alike Ikwo

Potential competing interests: No potential competing interests to declare.

Topic: Groundwater prediction analysis for sustainable Development using supported AHP in Okeigbo southeastern Nigeria

Comments

Including line numbers will make for easy tracking.

Topic Write all abbreviations in full, no abbreviations should be in the topic.

Abstract

Write abbreviations in full before introducing abbreviations in brackets as done in line 1 of the abstract

Delete conclusively and start sentence with; Quarts schist and quartzite areas showed..... Do not start sentence with 'but' rephrase the sentence. Conclude abstract with at least one recommendation.

Page 3, paragraph 3 What kind of seismic is it deep seismic or shallow refraction seismic.

Materials and methods

Write as Fig., not Figure. This may depend on Journal formatting guidelines. Please verify.

Page 7 last paragraph why schistose starting with capital letter?

Data acquisition and analysis

Paragraph 1 first sentence recheck

Last paragraph geoelectrical parameters that would ....? Rephrase

Page 10 last paragraph 'pumping test' was carried out not pumping carried out.

There are many needles details in the methodology. Read and summarise. Cite the authors of these formulas.

I have read your work. You need to reorganise the sections of your work. Your literature did not capture previous MCDA

studies within and outside your study area.

Your method of study is disorganised, you should capture MCDA in the method and cite which software was used to integrate geoelectrical data and hydrogeological parameters to produce a groundwater potential map. There is no clear methodological description of AHP. No pairwise comparison matrix of AHP presented. Means of determination of weight thematic layers not presented. What was your consistency ratio? Did you compare it with related studies elsewhere or in your area of study in your discussion section? How did you compare it with previous works to determine the validity of your analysis? What validation test did you used to test your model? Which of the thematic layer influence groundwater occurrence most?

Your data was mostly on geoelectrical and hydrogeological analysis of groundwater studies. I cannot see the place of AHP in your study right from literature to methodology. No flowchart to describe your method of study why? If you cannot incorporate these changes required to retain your topic then change the topic to reflect the contents of the study.

No conclusion given. What you have here is a mere summary of results not conclusion presented. The conclusion does not even indicate how you accomplished the objectives set out for your study.

Effect the corrections from the above comments and resubmit for review.