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

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Potential competing interests: No potential competing interests to declare.

I found interesting the manuscript Qeios ID: BLFBTThttps://doi.org/10.32388/BLFBTT by Olumuyiwa and Otuaga Moses. In particular Authors reported that in Southwestern Nigeria, a Multi-criteria decision analysis utilising GIS-supported Analytical Hierarchy Process has been utilized. The objective of this study was to forecast the hydrogeologic importance of the aquifers in relation to the geological units present, namely quartzite, quartz schist, and metadiorite. The study area was comprised of three distinct zones, namely low, moderate, and high, which accounted for 25%, 55%, and 20% of the total area, respectively. The region characterized by high potential is notably present in the mid-central and north central areas. In conclusion, it was observed that the areas consisting of quartz schist and quartzite exhibited higher levels of productivity compared to the meta-dioritic environment. The primary hydrogeological formations containing water in the region are the water table aquifer and the fractured basement. The hydrological catchment area is situated within the low to moderate category of regional drainage basins, exhibiting moderate to high levels of flow connectivity and low to moderate flow direction. There exists a potential for water displacement towards the northern region, which serves as the discharge zone, while the southern area functions as the watershed. These findings were consistent with the topographical elevation drainage maps, indicating that water flow is likely directed towards the northern discharged zone, while the southern region serves as the watershed.In general, streams and rivers exhibit a lower flow direction in the northern regions and a higher flow direction in the southern regions. I think the paper is well organized and deserves to be quickly published, anyway I think it useful to recommend Authors to add or report, if available, previous isotopic parameters of considered groundwaters since water motion is an important feature of the entire paper.