

Review of: "Spatial Analysis of Soil Fertility Using Geostatistical Techniques And Artificial Neural Networks"

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Potential competing interests: No potential competing interests to declare.

The paper has several strengths, including the use of geostatistical techniques to predict the chemical and physical properties of the soil, the use of a fuzzy artificial neural network algorithm to group the soil fertility classes, the use of the Fuzzy Performance Index (FPI) to measure the quality of the clustering, the validation of the soil fertility class model through a cross-validation process, and the identification of important factors for soil fertility in this study.

The paper has some weaknesses, such as lack of detailed discussion in the discussion and results section, lack of comparison of the results of this research with the results of other researchers. In the materials and methods section, there is no discussion about the limitations of the FKCN algorithm and no comparison between the FKCN algorithm and other clustering algorithms. Also, the limited scope of the study, which only focused on a small area. Additionally, the paper could have included more information on the accuracy of the model in different soil types and land use types.