

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.

Overall, this study utilized appropriate research methodologies, yielding valuable spatial information regarding soil, which serves as a scientific basis for regional soil management. The following suggestions are offered:

- 1. Is the research area a natural zone? If human agricultural interventions are present in the region, they can easily interfere with the interpolation prediction efficacy of the Kriging method.
- 2. Soil productivity is often determined by the crops on the ground, while different crops require varying nutrients. If soil productivity is assessed through a standardized structure, recommendations for future crop cultivation can also be made based on the assessment results.
- 3. When using FKCN, the prediction accuracy for Class 5 is only 55.6%, with 44.4% entirely leaning towards Class 2, warranting a discussion on why this situation occurs.
- 4. The overall accuracy of this study stands at 86%, leaving room for improvement. Consideration can be given to employing different machine learning methods or multiple evaluation mechanisms.
- 5. In the future, cross-analysis can be conducted between the findings of this study and crop yield, to re-validate this research.

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