

Review of: "Yield Forecasting Model for Maize Using Satellite Multispectral Imagery Driven Vegetation Indices"

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Potential competing interests: No potential competing interests to declare.

The article "Yield Forecasting Model for Maize Using Satellite Multispectral Imagery Driven Vegetation Indices" presents an interesting approach to maize yield prediction using remote sensing technology. It effectively demonstrates the use of Landsat 8 and Sentinel 2A imagery for forecasting maize yields in Bangladesh, emphasizing the advantage of Sentinel 2A's finer spatial resolution. The study's methodology and analysis showcase the potential of NDVI-based models in agricultural decision-making and yield prediction, contributing significantly to the field of precision agriculture.

1. The article could benefit from more detailed descriptions of data processing and analysis, as the current methodology section lacks depth in explaining the technical processes used for NDVI calculation and yield prediction.
2. The study is limited to Kaharole upazila, Dinajpur. Expanding the research to include different geographic regions in Bangladesh could enhance the generalizability and applicability of the findings.
3. The article does not provide a comparative analysis with traditional yield prediction methods, it only uses yield data of 2020-2021 for model validation. Including such a comparison would strengthen the argument for the superiority of NDVI-based models.
4. The study uses data from only two growing seasons (2018-19, 2019-20). Utilizing a longer time series could improve the robustness and predictive accuracy of the model.
5. The author does not explicitly detail the reasons for choosing linear regression models for the predictive technique.
6. The article briefly mentions the potential for further enhancements in remote sensing applications for agriculture but does not thoroughly discuss the limitations of the current study or suggest specific avenues for future research. More explicit discussion in these areas would strengthen the paper.