# 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 titled "Yield Forecasting Model for Maize Using Satellite Multispectral Imagery Driven Vegetation Indices" addresses a scientifically relevant and captivating subject. It leverages advancements in remote sensing to forecast corn yields in Bangladesh, highlighting the remarkable efficiency of utilizing data from Landsat-8 and Sentinel-2 satellites in this prediction.**

The comprehensive analysis conducted in this study underscores the substantial potential of NDVI-based models in guiding agricultural decision-making and predicting future yields.

Overall, the manuscript is meticulously written, presenting techniques and research methods of considerable interest. However, to advance through the editorial process, more comprehensive clarifications are necessary, justifying the recommendation for a "Major Revision." Suggestions to enhance the article are listed below:

1. Enrich the introduction by including recent references and previous studies related to corn yields in Bangladesh. This would provide a more comprehensive background.
2. To better illustrate the methodology, consider adding an explanatory diagram visually breaking down each key step of the process used to predict corn yields from vegetation indices derived from satellite images.
3. Consider significantly increasing the sample size as the current one seems insufficient for drawing significant and robust conclusions. A larger sample size will improve data representativeness, strengthen result reliability, and consolidate the validity of your conclusions.
4. Incorporate a broader range of vegetation parameters such as albedo, EVI, and MSAVI into the yield models to compare and analyze their respective performances. This multi-indicator approach offers a more holistic and accurate perspective on plant conditions, enabling a comparative evaluation of different indices in predicting corn yields.
5. Perform a thorough evaluation of the classification model's accuracy. Recommended methods include confusion matrix analysis, Kappa index, and overall accuracy measurement.
6. Enhance the visibility and clarity of the maps presented in Figure 3 for better comprehensibility. Consider adding geographical coordinates to these maps for precise location and contextualization.

In summary, while the study holds substantial importance in the field, major revisions are necessary to address identified gaps and enhance the research's validity, coherence, and clarity. Conducting a thorough revision and addressing raised

concerns will maximize the document's impact, contribute significantly to the research field, and provide more relevant insights for the scientific community.