

# 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.

## **Positive Aspects:**

The study's subject, addressing a country's capacity to meet its food demands, is undoubtedly significant. Predicting arable land productivity is crucial for informed decision-making, particularly for governments considering food imports.

The article is well-elaborated with clear writing, establishing a commendable final goal. The graphical content, including figures, is of good quality.

## **Areas for Improvement:**

### *Sample Size and Scope:*

- Consider significantly enlarging the sample size, as the current one appears small for drawing substantial conclusions.
- Extend the study to a broader geographic area with diverse climatological conditions for a more comprehensive analysis.

### *Algorithmic Approach:*

- Linear regression algorithms are a primary mathematical approach, perhaps too simple to model a complex problem as prediction crops based on satellite imagery.
- Evaluate more sophisticated algorithms beyond linear regression to address the complexity of predicting crops based on satellite imagery.

### *Justification of Methodology:*

- Properly justify the selection of linear regression for explaining the relationship between NDVI and yield. Clarify assumptions about linearity between these parameters.

### *Technical Details:*

- Enhance the article by providing a thorough explanation of the technical aspects, such as image collection and treatment. Discuss why a wider dataset of images wasn't employed.

## **Conclusion:**

In conclusion, while recognizing the study's significance, substantial improvements are needed for the manuscript to realize its full potential. Addressing these concerns through major revisions and exhaustive review will significantly enhance the paper's quality.