

## Review of: "Growth, Instability and Trend Analysis of Rice Production Indicators in Nigeria"

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Potential competing interests: No potential competing interests to declare.

- How comprehensive and reliable is the secondary-time series data obtained from the FAOSTAT database, and were there any challenges or limitations associated with the data?
- Can you elaborate on the rationale for choosing descriptive statistics, compound annual growth rate (CAGR),
   decomposition analysis, and the Instability Index as the analytical tools for this study?
- Were there any specific considerations or adjustments made during the application of these methods to the rice production indicators?
- Why was the time frame from 1960/61 to 2019/20 chosen for the study, and does it adequately capture the relevant trends in milled rice production in Nigeria?
- How representative is the selected time period for assessing the long-term performance and changes in rice production indicators?
- What factors contributed to the highest yield performance observed between 1978 and 1992, and were there any
  external influences or interventions during that period?
- How does the yield performance during this period compare to global or regional benchmarks for rice cultivation?
- Can you provide insights into the significance of the compound annual growth rates (CAGR) of 15%, 1%, and 16% for harvested area, yield, and rice production, respectively?
- Were there variations in CAGR values for different sub-periods within the study timeframe, and if so, what might explain these variations?
- What specific insights were gained from the decomposition analysis regarding the contributions of cultivated area, yield, and interaction to changes in rice production in Nigeria?
- How do the findings of this decomposition analysis align with existing literature on agricultural production trends and dynamics?
- What factors contributed to the observed instability index values for yield, milled rice production, and area under rice cultivation?
- How does the volatility of these indicators compare to similar studies in the region or globally?
- Given the finding that 58% of the growth in rice production is attributed to increased cultivated area, what implications does this have for the sustainability and resilience of rice production in Nigeria?
- Are there policy recommendations or considerations discussed in the article to address this dependency?
- · How does the lack of current data on rice production indicators up to 2022 impact the conclusions and implications



drawn from the study?

- Were there any efforts to mitigate or address the limitation, and what steps could be taken in future research to overcome this challenge?
- Were there any comparative analyses with other countries or regions facing similar challenges in rice production, and how does Nigeria's experience compare?
- In terms of originality and value, how does the use of decomposition techniques and the Cuddy Della Valle Index contribute to the understanding of rice production dynamics in Nigeria?
- Are there novel insights or methodologies introduced in the study that could have broader applications in agricultural research?

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