

Review of: "Palm Oil Expansion and Subnational Food Security"

Dhani Setyawan¹

¹ Ministry of Finance

Potential competing interests: No potential competing interests to declare.

The paper explores an important and relevant topic—the impact of oil palm expansion on food security status at the provincial level in Indonesia. Utilizing data from a food security vulnerability map and considering the extent of oil palm cultivation, along with other control variables, demonstrates a comprehensive approach to understanding the relationship between oil palm expansion and food security.

The finding of a strong and negative influence of oil palm expansion on food security status is significant and raises important concerns about the potential trade-offs between economic development through oil palm cultivation and ensuring food security for local populations.

However, the paper would benefit from certain improvements and clarifications to enhance its rigor and clarity:

Data Quality and Representativeness: Discuss any biases or uncertainties that might arise from the use of certain data sources or indicators, and suggest potential strategies to mitigate these limitations.

Causal Inference: While the study identifies a negative influence of oil palm expansion on food security status, it is essential to discuss the possibility of reverse causality or confounding factors. Elaborate on the mechanisms through which oil palm expansion might affect food security and explore potential ways to establish causal relationships.

Contextualization: Provide a clearer context for the findings by comparing them with existing literature on the subject. Discuss how the results align or differ from previous research, and consider potential explanations for any disparities.

Probably, you can argue with this paper:

Arifin, B. and Setyawan, D., 2022. How palm oil industry is having a devastating impact on Indonesia's health, rainforests, and labor market. *International Journal of Environmental Science and Technology*

Consideration of Local Factors: Acknowledge the diversity of contexts within Indonesia and consider how local factors, such as land tenure systems, governance, and community involvement, might influence the relationship between oil palm expansion and food security in different provinces.

Policy Implications: While the current policy implications are valuable, consider expanding them to include specific and actionable recommendations for policymakers at various levels. Discuss how the findings can inform land-use planning, agricultural policies, and rural development strategies to address the challenges posed by oil palm expansion on food

security.

Inclusion of Social and Environmental Indicators: Consider including social and environmental indicators in the analysis to provide a more holistic assessment of the impact of oil palm expansion. This would help capture potential social and ecological consequences that may affect food security status indirectly.

Discussion of Trade-offs: Acknowledge and discuss the trade-offs between economic benefits from oil palm expansion and potential negative effects on food security. Explore how sustainable practices and responsible land-use policies can reconcile these trade-offs.

By implementing these revisions, the paper will provide a stronger and more comprehensive analysis of the impact of oil palm expansion on food security in Indonesia. It will contribute valuable insights to the ongoing discourse on sustainable development, land-use planning, and food security in the context of oil palm cultivation.