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

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The manuscript raises an important topic of the link between oil palm cultivation and food security in Indonesia. However, the manuscript could have been written better. It should be shorter, making it easier to grasp the main message. The author needs to clarify the findings. Does oil palm increase or decrease food security? In the abstract, readers can already spot these uncertainties. It is written in the abstract, "The results revealed a strong and negative influence of oil palm expansion on food security status." But a few sentences later, it is written, "This suggests that provinces cultivating oil palm oil have a higher likelihood of achieving food security compared to those that do not engage in the cultivation of this commodity." These are contradicting.

More detailed comments:

1.   Please be aware that palm oil and oil palm are different. I think the title should be "oil palm expansion" instead of "palm oil expansion."

2.   I'm afraid I have to disagree with the statement that the relationship between oil palm cultivation and food security remains unclear. There has been some research investigating this. For example, Chrisendo et al. 2020; Chrisendo et al. 2022; Tabe-Ojong et al. 2023; Sibhatu, 2019; All show that oil palm cultivations are associated with higher food security and better nutrition.

3.   The introduction is long (10 pages). It could have been more pleasant to read it. It could be more precise and focused, with so much back and forth and jumping from one topic to another. The author should be able to tell the study's importance quickly. Otherwise, readers will lose interest. The introduction includes too many things, from oil palm, Indonesian democracy, irrigation infrastructure, food security index, calorie consumption, forest and land fires, RSPO, and religion. And does the author need to explain every detail of the four pillars of food security when they do not analyze it in the discussion?

4.   There are so many facts in the introduction that need citations. Could the author cite relevant literature?

5.   I need help understanding the estimation strategy. What kind of model is used here? What variables are controlled? What is the intuition behind the model and variables? The author needs to explain them in the method section. The method part is also more complex. The first four paragraphs are confusing, explaining something the author does not use in the paper.

6.   Providing a conceptual framework would help to understand the mechanisms of how oil palm cultivation could affect food security, so it does not seem like variables are just thrown into the models.

References:

Tabe-Ojong et al. 2023 https://doi.org/10.1016/j.jclepro.2023.138085

Chrisendo et al. 2022. https://doi.org/10.1016/j.worlddev.2022.106034

Chrisendo et al. 2020. https://doi.org/10.1016/j.forpol.2020.102245

Sibhatu. 2019. https://doi.org/10.3389/fsufs.2019.00075