Review of: "Open-Source Remote Sensing Determination of Carbon Emissions From Tropical Deforestation Scenarios in Southeast Nigeria"

Pankaj Kanti Jodder

Potential competing interests: No potential competing interests to declare.

After reviewing the article "Open-Source Remote Sensing Determination of Carbon Emissions From Tropical Deforestation Scenarios in Southeast Nigeria," here are my observations:

Strengths:

1. **Relevance and Timeliness:** The topic is highly relevant, addressing crucial environmental issues like deforestation and carbon emissions using modern remote sensing tools.
2. **Methodological Rigor:** The methodology, employing the Global Forest Watch tool for analyzing tree cover loss and gain, provides a comprehensive approach to quantifying carbon emissions from deforestation.
3. **Data Analysis:** Presentation of results with clear spatial and quantitative analysis strengthens the findings and their implications for environmental policy and conservation efforts.
4. **Recommendations:** The recommendations for bamboo forestry as a mitigation strategy are practical and align with global restoration and conservation goals.

Areas for Improvement:

1. **Literature Review Depth:** The article could benefit from a more extensive review of previous studies to position its findings within the broader research landscape.
2. **Technical Details:** While the methodology is well-described, additional details on the analytical processes and any calibration or validation of the remote sensing data could enhance the credibility of the results.
3. **Discussion on Limitations:** Acknowledging and discussing the limitations of the study, including the potential biases in remote sensing data and the challenges of extrapolating findings to other regions, would provide a more balanced view.
4. **Impacts Beyond Carbon Emissions:** Expanding the discussion to include the broader ecological, socioeconomic, and biodiversity impacts of deforestation in Southeast Nigeria could enrich the analysis.

This article provides valuable insights into deforestation's carbon emissions in Southeast Nigeria using an innovative open-source tool. Future research could build on this work by addressing its limitations and exploring multifaceted impacts of deforestation, thereby offering a more holistic understanding of its environmental consequences.