

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

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Potential competing interests: No potential competing interests to declare.

Greenhouse gas emissions and climate change are the most concerning issues today around the world. It is probable that the authors of the current paper focused on the implications of open-source remote sensing to assess carbon emissions from tropical deforestation scenarios in Southeast Nigeria.

However, the current paper is not suitable for publication because it appears to be incomplete, with several pieces of missing information.

## Introduction

- You mention in introduction annex 2 (where is it?) Also, where is annex 1?
- There is weak information on the context of carbon emissions in Nigeria and the remote sensing approach to assess GHG emissions;
- I suggest making the introduction without a separate context and problem statement section;
- The problem statement section is too confusing; we don't see exactly what justifies your study. Try to be constructive and show exactly what motivated the realization of the current study;

## Methodology

The methodology approach is not suitable. It is difficult to follow what the authors want to show. The approach for carbon emission assessment, which is the key element here, appears to be weakly presented.

## Some incoherent information

- Figure 1 is not clear; add geographical coordinates.
- In page 4, you talk about "Table 3 summarizes the yearly rainfall rates per state that were observed in the South-East of Nigeria between 2012 and 2016," and we see table 1. What about?
- Figure 2, there is less information provided; add geographical coordinates.
- The data collection section is weakly presented. What about the sampling design? And how did you do data collection based on the sampling design? This means that if you have used plots, for example, you have taken GPS coordinates of all of them?

## Results

I think the results presented here are too weakly presented to be considered as a manuscript. In addition, they do not respect in many places the standards of a suitable paper. I think many efforts are required from the authors to improve their manuscript.

Figure 5 - that is not a result. What is the link with the title of this paper? Maybe you can add it in the methodology section?

“This subsection presents the findings of a tree cover gain analysis conducted for the southeast region of Nigeria between 2000 and 2020 as part of this PhD thesis” ???? (unclear)

- Concerning all the results of this section, “Trend of Nigeria's Southeastern Tree Cover Gains, 2000 – 2022,” first, I don’t understand the place of the PhD thesis here. Second, how have you done methodologically for carbon sequestration estimation? Carbon emission estimation? And how did you make to evaluate the trend?

Given the fact that I know many things will be done to improve this paper and the results cannot be exactly the same, I haven’t read the discussion and conclusion because, if results change or undergo a significant improvement, the discussion will also change.