

# Review of: "Stakeholders' Perception of Socioecological Factors Influencing Forest Elephant Crop Depredation in Gabon, Central Africa"

Vera De Cauwer<sup>1</sup>

<sup>1</sup> Namibia University of Science and Technology

Potential competing interests: No potential competing interests to declare.

The research is interesting and of value for land and park managers. It is well written, although not sufficiently concise, with, for example, a lot of repetition. There are parts that could be improved; especially, more information/context on the study area is needed in the introduction to better understand the CDIs and discuss the results:

- Information on the forest area in Gabon and the study area, and how this has changed over the last decades, is relevant to better understand the landscape dynamics.
- How important and formal is forest logging around the study area? Is it happening all around the park? I assume multiple-use forest is not an official landscape zone and that it is communal land. But who then awards logging concessions?
- Info on how the forest elephant population migrates within the country and region (e.g., across boundaries of parks and countries)? This can be done concisely with one sentence.
- Is there a buffer zone around Lopé NP where no agriculture, logging, or hunting can be performed? If not, this is something that could be considered as a potential solution in your discussion, with a kind of compensation for villages within the buffer zone.
- Are elephants an important attraction for tourists, and thus contributing to the economy, and if so, who in the study area is mainly benefiting from tourism?
- What crops are cultivated in the plantations around Lopé NP? Can you compare their appeal to elephants with other study areas or with forest trees?
- Are elephants foraging at night and day and in every season, or is there a seasonal and daily pattern?
- Why are there only 2 age groups? Why not divide the large age group into 18-40 and 40-65 to separately address those who only have known the area as a NP? Note that the use of a histogram to describe the participant demographic profile would facilitate interpretation much better than text. Also, it may be necessary to indicate how many families the respondents represent, as it seems that members of the same family were often interviewed. But most importantly, you have not used age groups in reporting and interpreting the results.
- Why was there no gender information collected on the respondents? Gender info should be added, and if most were male, it should be motivated why male respondents were chosen. Also indicate if the fields are mainly maintained by women or men, young or old.

- The analysis is - in my view - unnecessarily complicated because of the use of two themes that overlap: “dynamics” and “problem types. This could easily have been combined in one theme, also making figure 5 - which is interesting but rather chaotic - easier to interpret.
- More info is needed on how *rural exodus* can drive CDI. I assume it is because there are less people in the villages, but it should be made more clear.
- Under drivers, you write “The final driver, *disruption of native fruits production*, was identified by 15% of professionals, based on one subdriver related to the decrease in fruit availability due to a changing climate,” however, later you also mention that the decrease is because of logging of native fruit trees. I would remove “due to a changing climate” here as it raises questions. You do address some of these questions later in the discussion, but it should be made more clear in the discussion that it is difficult to point to the main reason for the declining fruit availability as there are two potential factors. Unless you have found a study that can prove this.
- The stars in the figures are very vague and unclear. I would advise to rather show the value of the average.
- Reduced capacity to protect crops: info needed, why is this? Because of the rural exodus? What altered social dynamics is the study referring to?
- Be more concise in the description of figures - they are self-explanatory if well drafted.
- You should try to offer more solutions/advice that can be used by managers. What about planting native fruit trees in corridors that link with and continue within the reserves?