

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

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Potential competing interests: No potential competing interests to declare.

The abstract provides a comprehensive overview of the study on forest elephant crop depredation incidents (CDIs) in Gabon. Here are suggestions for improvement:

- Rephrase the sentence about conflicts escalating for clarity. Example: "Addressing both villagers' and elephants' needs simultaneously is crucial to prevent conflicts from escalating."
- Clearly state the specific objectives or goals of the investigation regarding CDIs and their contributing factors.
- Include more participant details, such as age range and occupation, for a clearer understanding of the study's sample:
- Spell out CDIs upon first use in the abstract for reader clarity.
- Emphasize the unique insights or perspectives your study offers compared to existing CDI research.
- Simplify complex sentences for improved readability. For example, the sentence about content analysis and categorization can be simplified.
- Include a brief concluding statement summarizing the main findings or implications of the study.
- If applicable, mention any recommendations arising from the study to guide future actions.

Introduction

The introduction provides a comprehensive overview of the issue of Forest Elephant Crop Depredation Incidents (CDIs) in Africa's Congo Basin, highlighting the detrimental impact on both local communities and the critically endangered forest elephant species. Here are some observations and suggestions for improvement:

- The introduction effectively outlines the problem, but consider tightening some sentences for clarity and precision. For instance, the phrase "as elephants always find means to overcome almost every protection method or simply move to areas without any protection" can be rephrased for succinctness.
- Ensure consistent citation style. For example, use either "Et al." or list all authors in subsequent citations for coherence.
- The mention of "increased rural poverty" due to CDIs lacks specific quantitative data or references. Including concrete statistics or studies would strengthen this claim.
- While the introduction cites various studies, a critical review of the existing literature on forest elephant CDIs could provide context and showcase the gap that the current study aims to address.
- The specific objectives are clearly stated, but consider incorporating them into a single concise sentence for better



readability.

- The introduction effectively synthesizes existing knowledge on CDIs, connecting it to habitat disturbances, crop nutritional value, terrain, and proximity to elephant food sources. This synthesis could be further strengthened by elucidating how these factors collectively contribute to CDI persistence.
- The introduction aptly introduces Gabon as a significant home for forest elephants. However, more details on the recent intensification of CDIs in Gabon would enhance the contextual understanding.
- The mention of the government's initiatives such as establishing national parks and the national land use planning system is crucial. Further elaboration on how these initiatives may have unintended consequences on CDIs would add depth to the introduction.
- Clearly articulate how the current study aims to fill the knowledge gap regarding the interaction between landscapescale socioecological changes and site-scale factors influencing CDIs.

This interview procedure is comprehensive and well-organized. Some suggestions are given for the improvement.

Ethical Approval Details: While the study mentions ethical approval, providing additional information about the ethical considerations, informed consent process, and measures taken to protect participants' confidentiality would strengthen the ethical framework section.

Interview Duration Variation Explanation: It might be beneficial to briefly explain why interview durations varied (15 minutes to an hour) to address potential concerns about consistency in data collection.

Translator Influence Mitigation: While it's mentioned that family members translated questions for elderly villagers, acknowledging the potential influence of translators on responses and detailing steps taken to mitigate this influence could enhance methodological transparency.

Discussion of Language Challenges: Given the language diversity among participants, discussing challenges faced during translation and potential implications on data quality could provide a more nuanced understanding of the study's limitations.

Thematic Analysis Rigor: Providing details on inter-rater reliability or steps taken to ensure rigor in thematic analysis would strengthen the trustworthiness of the qualitative findings.

Appendix S1 Inclusion: It would be helpful to include Appendix S1 in the peer-reviewed document or provide a brief summary of the interview questions for readers' reference.

Results Section

Suggestions for Improvement:

Synthesis of Identified Themes: While the breakdown of themes into contexts, drivers, dynamics, and problem types is valuable, consider providing a brief synthesis or summary of the main findings at the end of this section. This could help readers grasp the overall insights gained from the thematic analysis.



Consistent Presentation of Subdrivers: For consistency, consider presenting subdrivers in a standardized format, possibly in a table or list, to enhance readability and comparison.

Explanation of Subthemes: For each theme, briefly explain the significance or interpretation of the main subthemes. This can provide context for readers and help them understand the nuances of each driver or context.

Clarification on Rural Exodus: Since rural exodus is identified as a driver, consider providing a concise explanation or definition to ensure readers have a clear understanding of the term in the context of your study.

Link to Theoretical Framework: While the study mentions being inspired by Emerson et al. (2012), consider briefly discussing how this theoretical framework guided the analysis or influenced the interpretation of findings.

Consideration of Bias: In reporting the breakdown by stakeholder group, acknowledge any potential bias or differences in perspectives between villagers and conservation professionals that might influence the interpretation of the results.

Consistency in Presentation: For consistency, consider presenting subdynamics in a standardized format, possibly in a table or list. This can enhance readability and facilitate direct comparison between different subdynamics.

Clarification on Emphasis Differences: When highlighting differences in emphasis between stakeholders, consider providing brief explanations or interpretations for why these differences might exist. This could help readers understand the nuances of stakeholder perspectives.

Integration with Previous Themes: Consider briefly connecting the dynamics identified in this section with the previously identified themes (landscape context, drivers, and problem types). This integration could provide a holistic view of how these dynamics contribute to the overall issue of human-elephant conflict.

Link to Existing Literature: Consider briefly discussing how the identified dynamics align with or contribute to existing literature on human-elephant interactions. This could help contextualize the study within the broader research landscape.

Potential Bias Acknowledgment: Given that certain dynamics were identified mostly by professionals, consider acknowledging any potential bias or differences in perspectives between villagers and professionals that might influence the interpretation of the dynamics.

Thematic Figure Explanation: Provide a brief caption or explanation for Figure 3 to guide readers in understanding the visual representation of the dynamics.

The discussion section effectively communicates the intricacies of the relationships explored in the study. Addressing the suggested improvements could enhance the overall coherence, clarity, and impact of the discussion, further strengthening the contribution of the study to the field of human-elephant interactions and conservation.

Visual Support: Consider including more visual aids, such as figures or diagrams, to illustrate the complex relationships discussed. Visual representations can enhance reader comprehension, especially when dealing with intricate ecological and spatial concepts.



Explicit Transitioning: Ensure smooth transitions between different subtopics within the discussion. Clearly indicate when the focus shifts from one landscape context to another or when moving between drivers, dynamics, and problem types. This will aid readers in following the logical flow of the argument.

Further Clarification on Unintended Consequences: When discussing unintended consequences of conservation policies, elaborate on how these consequences contribute to CDIs. Explicitly connect the disruptions in protected areas to the increased presence of elephants in village areas, reinforcing the causative linkages.

Quantitative Insights: If available, consider incorporating any quantitative data or statistical findings related to the prevalence or impact of specific drivers, dynamics, or problem types. This could provide additional empirical support to the qualitative narratives presented.

Potential Limitations Acknowledgment: Acknowledge potential limitations of the study, such as the reliance on qualitative data and the perspectives of stakeholders. Discuss how these limitations may impact the generalizability or applicability of the study's findings.

Consistent Terminology Usage: Maintain consistency in the usage of terms, especially when introducing concepts or citing literature. This ensures clarity and prevents any potential confusion for readers unfamiliar with certain terms.

Policy Implications: Conclude the discussion with a brief exploration of policy implications or recommendations arising from the study. Discuss how the findings can inform conservation strategies, policy adjustments, or community-based interventions to mitigate CDIs.

The **conclusion** effectively summarizes the study's main findings and emphasizes the urgent need for integrated solutions. Enhancing specificity in recommendations, discussing policy implications, suggesting future research directions, and reiterating the significance of the study could further strengthen the conclusion.

Specific Recommendations: Consider providing more specific recommendations for integrated strategies or management approaches. While the conclusion calls for a holistic approach, specifying potential interventions or actionable steps can enhance the practicality and applicability of the findings.

Policy Implications: Extend the discussion to briefly highlight potential policy implications or recommendations for conservation management. Discuss how the study's insights could inform policy adjustments or community-based initiatives in the context of forest elephant conservation.

Future Research Directions: Conclude with a brief mention of potential avenues for future research. Identify specific aspects or gaps in the current understanding that could be explored in subsequent studies, contributing to the ongoing discourse on human-elephant interactions.

Reiteration of Significance: Reinforce the significance of the study by emphasizing how the proposed synthetic framework and the insights gained from stakeholders can contribute to a more effective and sustainable approach to addressing forest elephant crop depredation.



Consideration of Stakeholder Engagement: Acknowledge the importance of ongoing engagement with stakeholders in the implementation of management strategies. Discuss how continued collaboration and dialogue can enhance the success of interventions on the ground.