

Paper: "The Yaya Reserve: From the Evolution of its Plant Cover to Proposals

for Sustainable Management"

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Corresponding Author: Bi Gala Jean-Marc Zaouri

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Peer review:

Reviewer 1: Gildas Akueson

University of Parakou, Parakou, Benin

Reviewer 2: Nebnoma Romaric Tiendrebeogo

Nazi Boni University, Burkina Faso

Reviewer A:

Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

The title is both clear and fitting with the content of the article. It accurately reflects the two main aspects discussed in the document: analyzing the evolution of the vegetation cover of the Yaya reserve and proposing strategies for its sustainable management. No changes to the title are needed.

The ABSTRACT clearly presents objects, methods, and results.

It is clearly presents the objectives, methods, and results of the study. However, some improvements can be made to enhance clarity and completeness.

There are a few grammatical errors and spelling mistakes in this article.

Yes. See corrections i the document

The study METHODS are explained clearly.

See more comments in the document.

The methodology is robust, utilizing remote sensing data, floristic inventories, and surveys of local populations. However, it lacks detailed justification for the choice of methods. The descriptions of data collection and processing techniques are insufficient. For example, the rationale for selecting 50 plots for the floristic inventory is not provided, and the preprocessing steps for satellite images are not clearly explained. To improve, the methodology should include explanations for plot selection, data analysis techniques, and the tools used, as well as describe the ethical considerations related to the surveys of local populations.

The body of the paper is clear and does not contain errors.

Need few revision. see my comments in the document. Inconsistent use of technical terminology (e.g. "conserved forest" vs. "preserved forest")

The CONCLUSION or summary is accurate and supported by the content. Yes.

The list of REFERENCES is comprehensive and appropriate.

No. many were not found in the list of references and also in the text

Please rate the TITLE of this paper.

[Poor] **1-5** [Excellent]

Please rate the ABSTRACT of this paper.

[Poor] **1-5** [Excellent] 3

Please rate the LANGUAGE of this paper.

[Poor] 1-5 [Excellent]

Please rate the METHODS of this paper.

[Poor] 1-5 [Excellent]

Please rate the BODY of this paper. [Poor] 1-5 [Excellent] 3

Please rate the CONCLUSION of this paper.

[Poor] **1-5** [Excellent] 3

Please rate the REFERENCES of this paper.

[Poor] **1-5** [Excellent] 3

Overall Recommendation!!!

Return for major revision and resubmission

Comments and Suggestions to the Author(s):

Reviewer B:

Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

Yes

The ABSTRACT clearly presents objects, methods, and results.

Not entirely

To improve this summary, it would be necessary to include more details on the pressures placed on the reserve, methods of data collection and analysis, as well as specific recommendations for sustainable management of the reserve.

There are a few grammatical errors and spelling mistakes in this article. very few grammatical errors.

The study METHODS are explained clearly.

Lack of discussion on the reliability of the data collected: Although the passage describes the methods of data collection, it does not discuss the reliability or validity of the data collected. It would be important to discuss potential limitations of data collection methods and steps taken to minimize bias.

- 2. Lack of justification for chosen methods: Although the passage describes the methods used to collect and analyze the data, it does not justify why these specific methods were chosen over other available methods. A justification of the methods chosen would help establish the credibility of the study.
- 3. Lack of details on analysis of interview data: Although the passage mentions that thematic analyzes and descriptive analyzes were carried out on the interview data, it does not provide specific details on the methods used to analyze these data or on the results of these analyzes

The body of the paper is clear and does not contain errors.

At the introduction

it would be necessary to include an in-depth analysis of the causes of deforestation,

details on inadequate management methods, a historical perspective on the evolution of deforestation in Côte d'Ivoire and a more in-depth discussion on the social and economic implications of deforestation for local populations

At the discussion

Lack of in-depth analysis of the causes of deforestation: Although the passage mentions that anthropogenic activities, particularly agriculture and logging, are the cause of deforestation in Côte d'Ivoire, it does not provide in-depth analysis of the underlying causes of these activities, such as demographic, economic or political pressures.

- 2. Lack of discussion of government policies and interventions: Although the passage discusses local people's proposals for management of the reserve, it does not discuss current or potential government policies and interventions to mitigate deforestation and promote conservation in the Yaya reserve. A discussion of these aspects would help assess the effectiveness of existing government measures and identify potential gaps in conservation policy.
- 3. Lack of references to previous research or examples of good practices: Although the passage mentions some previous authors and studies, it does not refer to specific examples of good practices of sustainable forest management that could be applied to the Yaya reserve. The inclusion of such references would strengthen the credibility of sustainable management proposals.
- 4. Lack of perspectives on the future of the reserve: The passage mainly focuses on the current challenges of the Yaya reserve, but does not provide perspectives on the future of the reserve and the measures necessary to ensure its conservation at long term. A discussion of future trends and potential adaptation measures would be beneficial in guiding conservation efforts.

The CONCLUSION or summary is accurate and supported by the content. Prposition

This study has shown that the Yaya Reserve, before its change of status from classified forest in 1992 to reserve in 2019, experienced an evolution of its plant cover between 1986 and 2022. Its dense plant surface cover (well preserved) decreased from 86% in 1986 to 53% in 2005, then increased to 67% in 2022. Several factors explain this evolution. The military-political crises of 1999 and 2002 and the post-electoral crises of 2010 led to the abandonment of this protected area by forestry agents. Left unattended, the forest experienced agricultural colonization in various locations and plundering of woody resources, resulting in a loss of 33% of its plant cover by 2005. By 2022, the forest had regained 14% of the surface area it had lost in 2005. This regeneration is linked to the departure of foreign communities from indigenous villages following the indigenous-foreign conflict related to the post-electoral crisis of 2010, as well as to deterrence patrols and destruction of crops carried out by forestry agents in the aftermath of the post-electoral crisis.

However, to sustainably preserve this reserve, it is important to involve local populations in its management by creating village monitoring committees, to relocate the communities living there outside the buffer zone, and to clearly demarcate the reserve's boundaries so that they are perceptible to both populations and managers.

The list of REFERENCES is comprehensive and appropriate.

Yes

Please rate the TITLE of this paper.

[Poor] **1-5** [Excellent]

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Please rate the ABSTRACT of this paper.
[Poor] 1-5 [Excellent]
3
Please rate the LANGUAGE of this paper.
[Poor] 1-5 [Excellent]
3
Please rate the METHODS of this paper.
[Poor] 1-5 [Excellent]
3
Please rate the BODY of this paper.
[Poor] 1-5 [Excellent]
Please rate the CONCLUSION of this paper.
[Poor] 1-5 [Excellent]
4
Please rate the REFERENCES of this paper.
[Poor] 1-5 [Excellent]
4
Overall Recommendation!!!
Accepted, minor revision needed
Comments and Suggestions to the Author(s):
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