

Review of: "Analysis of Renewable Energy Deployment and Investment for Rural Health Facility Electrification: A Case Study of Kenya, Ghana, and Rwanda"

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Potential competing interests: No potential competing interests to declare.

Review:

1. Significance of the Study and Background

- **Comments:** The paper clearly outlines the role of renewable energy in improving rural health facility electrification, particularly in the case studies of Kenya, Ghana, and Rwanda. However, the manuscript could further strengthen the description of the specific background in each of these countries, especially regarding the direct link between electrification rates and healthcare services.
- **Suggestions:** I recommend incorporating more detailed background information on the countries in the introduction, especially with specific data and examples illustrating the impact of insufficient electricity supply on health facilities, to better support the research question.

2. Literature Review

- **Comments:** The current literature review is rather brief. While it touches upon the relationship between electricity supply and health outcomes, it lacks a deeper exploration, particularly regarding the latest developments in renewable energy technologies and financing models.
- **Suggestions:** Expanding the scope of the literature review to include more recent studies on the deployment of renewable energy and innovative financing models is recommended. A discussion of successful case studies in these areas would provide stronger theoretical support for the paper.

3. Research Methodology

- **Comments:** The paper employs a case study approach, but the details of data collection and analysis are insufficiently explained. Readers might find it challenging to understand how the data were gathered, processed, and analyzed.
- **Suggestions:** It is recommended to provide a more comprehensive explanation of the research methodology, particularly the techniques used for data collection, the data sources, and how qualitative and quantitative analyses were conducted. Further clarification on how data representativeness and validity were ensured would be beneficial.

4. Analysis and Discussion

- **Comments:** The manuscript provides a good discussion of the relationship between electrification and healthcare services, but the analysis could be more in-depth, especially regarding the differences among the countries.
- **Suggestions:** I suggest a deeper analysis of how the differences in electrification across countries impact their health systems, with more discussion on the causes of these differences. Factors such as economic conditions, policy support, and technological development should be explored in greater detail.

5. Conclusion and Policy Recommendations

- **Comments:** The conclusion is concise, but some recommendations are overly general and lack actionable details.
- **Suggestions:** I recommend offering more specific and practical policy suggestions, especially tailored to the unique situations of each country. For instance, what specific policy measures would be most effective in improving rural health facility electrification in each country? How can public-private partnerships be more effectively promoted?

6. Language and Structure

- **Comments:** The paper is generally well-written, but some paragraphs could benefit from a tighter logical flow, especially in the discussion and conclusion sections, to avoid repetition and overly lengthy explanations.
- **Suggestions:** I recommend further editing the manuscript to streamline the language and improve the logical structure, making the arguments clearer and easier to follow.

7. Figures and Data Presentation

- **Comments:** The manuscript seems to lack visual data representation. Graphs and charts could help readers better understand the data and conclusions.
- **Suggestions:** I suggest adding more visual data presentations, such as graphs, charts, or maps, to clearly depict the relationship between electrification and healthcare service delivery and to highlight differences among the countries.

8. Innovation and Originality

- **Comments:** The paper proposes innovative financing models and public-private partnerships, but the feasibility of their implementation is not thoroughly discussed.
- **Suggestions:** I recommend further analyzing the challenges and opportunities associated with these innovative models, particularly how they can be effectively implemented within the political and economic contexts of each country.

In conclusion, while the paper addresses a highly relevant topic, its methodology and analysis could be further developed to provide more compelling conclusions and recommendations. By strengthening the literature review, elaborating on the methodology, enhancing data visualization, and providing more targeted policy suggestions, the overall quality and impact of the paper would be significantly improved.

