

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_119889
Title of the Manuscript:	A Review of the Impact of Non-Powered Dams in KSA and as Assessment of their Potential for Hydroelectric Power Generation
Type of the Article	

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> 1. The manuscript addresses the significant issue of water and energy security in Saudi Arabia by evaluating the potential to retrofit existing non-powered dams for hydropower production. This is particularly relevant for the scientific community as it explores innovative solutions to leverage existing infrastructure for renewable energy generation, contributing to sustainability goals. 2. The title is not suitable. 3. The abstract of the article is not comprehensive 4. The subsections and structure of the manuscript are not appropriate 5. The manuscript is scientifically correct yet poorly presented. 6. References are poorly presented. <p>Additional Comments:</p> <ol style="list-style-type: none"> 1. The section is quite unfocused and meanders through various topics without a clear structure. It jumps from environmental impacts to economic benefits to specific dam details in an unorganized manner. A more logical and cohesive flow is needed to enhance readability and comprehension. Specify "KSA" as "Kingdom of Saudi Arabia (KSA)" upon its first mention for clarity. 2. It would be helpful to specify what "MCM" stands for (Million Cubic Meters). 3. Include specific numbers or percentages regarding the capacity and potential power generation for clearer understanding. 4. The phrase "Technical feasibility was carried out" can be rephrased to "A technical feasibility study was conducted." 5. Provide a bit more detail about the criteria for selecting the Jizan dam for hydropower potential. 6. Explain abbreviations like "ROR" (Run-of-River) and "FPV" (Floating Photovoltaic) at least once in the abstract. 7. Clarify the significance of the energy production figure (ROR 159.720 MWh) in context, such as how it compares to current energy production or needs. 8. The conclusion should more clearly state the broader implications of the study's findings. 9. Avoid repeating the same points. Some ideas, such as the benefits of FPV, are mentioned multiple times and can be consolidated. 10. Explain technical terms and abbreviations (e.g., "HEP" for Hydroelectric Power, "ROR" for Run-of-River) upon first use for clarity. 11. Avoid run-on sentences. Break long sentences into shorter, more digestible parts. 12. English and grammar are poor throughout the manuscript. 13. I can not find the proper material and method's heading or methodology heading. 14. There should be a flowchart to explain the whole methodology at the start. 15. Unnecessary headings and extra theory are added which does not need to be in it. 16. I can't see the aim/objective of the study. 17. There is no research gap discussed at the end of the introduction section. 18. The literature review is presented in a very poor manner. 19. The significance of the study is not highlighted. 20. It seems tables are copied from some websites. 21. I did not see any heading from where the results section is started. 22. Very poor formatting of the paper overall. 23. Discussion and Conclusion sections must be separate. The discussion section should include the previous literature to back your findings. 24. References are too just copied and pasted without any effort even not aligned with any style. 25. The discussion on the potential of hydropower in KSA lacks depth. Simply stating that the Jizan Dam has potential is insufficient. Provide more detailed analysis and evidence to support 	

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	<p>this claim, such as specific data on water flows, geographical advantages, and technological feasibility.</p> <p>26. The text frequently makes broad statements without sufficient backing. For example, stating that "all dams are non-powered" and that this is due to a reliance on oil lacks nuance and supporting evidence. A more detailed examination of why renewable energy has not been developed, including economic, political, and technological factors, would strengthen the argument.</p>	
Minor REVISION comments		
1. Is language/English quality of the article suitable for scholarly communications?	No	
Optional/General comments	<p>1. The text is riddled with grammatical errors and awkward phrasing. This not only hampers readability but also detracts from the professional quality of the manuscript. A thorough proofreading and editing for grammar and style are essential.</p>	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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