

Review Form 3

Journal Name:	Asian Journal of Environment & Ecology
Manuscript Number:	Ms_AJEE_120960
Title of the Manuscript:	Predicting the Carbon Sequestration Potential of Sundarbans Mangroves Via Remote Sensing, Google Earth Engine, and Machine Learning Techniques
Type of the Article	

Review Form 3

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>Currently, the world faces significant challenges from climate change, placing immense pressure on land and water resources needed to feed a growing population. Agricultural systems, predominantly managed by small and marginal farmers, are highly susceptible to the impacts of climate change. These systems often employ intensive farming practices that diminish soil carbon levels. Mangroves emerge as crucial assets in mitigating climate change due to their exceptional capacity for carbon sequestration, effectively acting as carbon sinks.</p> <p>Recent advancements in assessing the carbon sequestration potential of plants have yielded considerable success, largely attributed to GIS and remote sensing technologies. Integrating machine learning models with remote sensing data further enhances the accuracy and reliability of these assessments. This article explores contemporary global issues and innovative methodologies aimed at addressing these challenges.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>"Applying Remote Sensing, Google Earth Engine, and Machine Learning to Predict the Carbon Sequestration Potential of Sundarbans Mangroves"</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The article's summary is completely consistent with the article's content</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The subsections and structure of the manuscript are quite appropriate</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The article takes a new and modern scientific approach, however, in the Background section it should be mentioned why google earth engine as well as machine learning algorithms (SVM, RF...) are used. This section should also provide an overview of related research to further clarify the novelty of the research article.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :</p>	<p>References are too few compared to the number of references in a scientific article (usually greater than 50 articles). Readers need to add an overview of research on gis, remote sensing, google earth engine as well as machine learning and related research in the study area. References should also be numbered according to the newspaper's regulations, and cited in the order they appear in the article.</p>	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The writer should check all the English in the article so that the article is written more clearly and fluently	
Optional/General comments	<ul style="list-style-type: none">- Added introduction and location images of the research area- Added an overview of related research on GIS, google earth engine, machine learning in carbon calculation- added advantages of google earth engine and machine learning algorithms, especially the 3 algorithms used- clarify the amount and type of data used in research, the amount of data included in machine learning, the amount of test set data and the machine learning error- Check the English in whole article	

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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