

### Review Form 3

Journal Name:	<a href="#">Asian Research Journal of Agriculture</a>
Manuscript Number:	Ms_ARJA_128527
Title of the Manuscript:	Advancing India's Agroforestry Potential: Technology and Participatory Approaches for Carbon Finance Benefits
Type of the Article	

#### **General guidelines for the Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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**Review Form 3**  
**PART 1: Comments**

	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <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><b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b></p>	<p>This manuscript is highly relevant for the scientific community because it deals with the integration of advanced technologies, such as remote sensing, in a participatory way to support agroforestry development in India. Focused on the role of FPOs, it is an innovative contribution to enabling small and marginal farmers to embark on sustainable agroforestry practices. The manuscript places much emphasis on the use of vegetation indices around NDVI for monitoring in agroforestry systems and, therefore, adds valuable knowledge to the ways modern technologies can be applied in mitigating climate change. Moreover, this study has enhanced the literature base with its contribution to agroforestry's potential in offering environmental sustainability with simultaneous contribution to socio-economic development of rural people.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>The current title, "<i>Advancing India's Agroforestry Potential: Technology and Participatory Approaches for Carbon Finance Benefits</i>," is somewhat relevant but places undue emphasis on carbon finance, which is not comprehensively addressed in the manuscript. If the manuscript were to explore carbon finance in more detail, the current title would be more appropriate.</p> <p><b>Suggested Alternative:</b>  <i>"Advancing India's Agroforestry Potential: Leveraging Technology and Community Approaches for Sustainable Development."</i></p>	
<p><b>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.</b></p>	<p>The abstract provides a good overview of the manuscript, emphasizing the role of agroforestry, remote sensing technologies, and participatory approaches in furthering carbon finance benefits. However, the abstract lacks clarity with regard to the challenges or limitations in implementing carbon finance projects in India, which are essential for a full understanding. In addition, although FPOs are mentioned, their contribution or examples are not specifically identified.</p> <p><b>Suggestions:</b></p> <ol style="list-style-type: none"> <li>1. Include a brief mention of the challenges or gaps in leveraging carbon finance through agroforestry in India to provide a balanced perspective.</li> <li>2. Expand on the role of FPOs with specific examples or details about their impact in mobilizing small and marginal farmers.</li> <li>3. Consider briefly mentioning the significance of RS technologies like NDVI in improving monitoring and implementation to strengthen the technical focus.</li> </ol>	
<p><b>Is the manuscript scientifically, correct? Please write here.</b></p>	<p>Scientifically, the manuscript provides a sound, well-researched framework that brings together agroforestry practices with state-of-the-art remote sensing technologies and participatory approaches. The manuscript also provides proper usage of vegetation indices like NDVI, EVI, and SAVI, while the specific applications for agroforestry plantations and carbon sequestration monitoring are properly referenced.</p> <p>However, the manuscript may be further enriched with details on how a carbon finance project will be practically implemented-for instance, the issuance and trading mechanisms of carbon credits-which are not fully explored. Moreover, the data presented, though technically correct, would be further enhanced if quantitative analysis or more case studies were included to support the claims made, especially those on economic benefits to small and marginal farmers.</p> <p>Overall, the manuscript follows scientific norms but lacks the filling of these gaps in order to give more solid contributions to the area.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>The references in the manuscript are related in general but need certain adjustments. Although several DOIs have been included, currently only one is functional, which can limit accessibility for readers of the sources. Also, these should be more updated and directly relevant to the manuscript's focus on agroforestry, remote sensing technologies, and carbon finance. Some seem older or not specific to either the current technological advances or the aspect of carbon finance.</p> <p><b>Suggestions:</b></p> <ol style="list-style-type: none"> <li>1. Include references from more recent years, especially the last 5 years, related to the integration of remote sensing in agroforestry and carbon finance in India.</li> <li>2. All the references must be functional and should be checked for their validity through DOIs.</li> </ol>	

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	<p>3. Add references discussing recent advances in the application of remote sensing technologies to environmental monitoring, carbon markets, and sustainable agriculture practices.</p> <p>More up-to-date and specific references will enhance the scientific credibility of the manuscript and give readers access to the most recent research in the field.</p>	
<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>The manuscript has acceptable quality in terms of language and English expression to effectively communicate with peers. The writing is straightforward and concise, using the proper technical terms in the context of agroforestry, remote sensing, and carbon finance. In some places, the clarity of sentence structure needs more improvement, and there is also a need for smooth transition in some sections.</p> <p>Suggestions:</p> <ol style="list-style-type: none"> <li>1. Review sentence structures for clarity and flow, especially in complex sections where several concepts are introduced.</li> <li>2. Ensure consistency in the use of technical terms and abbreviations throughout the manuscript.</li> <li>3. Certain paragraphs may be reorganized to enhance readability and logical development of ideas.</li> </ol> <p>On the whole, the language is acceptable but needs refinement to make it more scholarly in tone and more readable.</p>	
<p><b>Optional/General</b> comments</p>	<p>The manuscript represents a promising way to advance agroforestry in India through technological and participatory approaches and is focused on climate resilience enhancement and rural livelihoods. The authors have made a strong case for remote sensing technologies used for monitoring of agroforestry systems, and it also identifies the role of Farmer Producer Organizations as an enabling mechanism for small-scale farmers.</p> <p>However, in order to better convey its significance, there are additional areas the manuscript might address, such as the following:</p> <ol style="list-style-type: none"> <li>1. Practical Insights: Though the manuscript dwells on the potential for carbon finance projects, practical insights with respect to their implementation and strategic directions are barely highlighted. Deeper details on what restricts carbon finance adoption at rural levels would add more value when related to specific conditions in these contexts, like access to finance, policy support, and technical capacity.</li> <li>2. Case Studies or Examples: The inclusion of specific case studies or real examples, especially from India, would give a realistic feel to the theoretical aspects. Such examples could depict how agroforestry projects have been successfully executed with the help of technology and community involvement.</li> <li>3. Further Detail on Carbon Finance: While the manuscript mentions carbon finance benefits, it would be important to go into detail on how carbon credits are generated, certified, and the financial mechanisms involved so that farmers and communities can see how they can actually benefit.</li> </ol> <p>Overall, the manuscript is well-structured and presents a novel approach, but addressing the points above would make it more comprehensive and impactful for readers interested in the practical applications of agroforestry and remote sensing technologies.</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)
<p><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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