

## Review Form 1.7

Journal Name:	<b>International Journal of Plant &amp; Soil Science</b>
Manuscript Number:	<b>Ms_IJPSS_102985</b>
Title of the Manuscript:	<b>Land Use and Land Cover Change Detection in Sawangi Watershed of Yavatmal District, Maharashtra</b>
Type of the Article	<b>Original Research Article</b>

### **General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalijpss.com/index.php/IJPSS/editorial-policy> )

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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><b>Compulsory REVISION comments</b></p> <ol style="list-style-type: none"> <li><b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>Is the abstract of the article comprehensive?</b></li> <li><b>Are subsections and structure of the manuscript appropriate?</b></li> <li><b>Do you think the manuscript is scientifically correct?</b></li> <li><b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<p><b>Title:</b> -The title needs to be modified or revised to read as "<b>Land Use and Land Cover Change Detection in Sawangi watershed of Yavatmal district, Maharashtra</b>"</p> <p><b>Abstract:</b> -The main objective/aim is quite unclear. Authors give a hint or attempts to highlight the main aim in the second sentence or lines (8-9). -Kindly refer to the main text for other comments to improve or revise the abstract. -Kindly rewrite or rephrase this line or the concluding sentence to highlight the contribution or relevance of study findings to the international scientific community and industrial players. <b>Keywords:</b> You can preferably add the country or region to give the paper more audience.</p> <p><b>Introduction:</b> -Authors are advised to revise or use more current literature that spans 5-10 years back. Old studies can be used where necessary. <b>-Kindly consider enriching the literature or introductory section with these current literatures/studies by Sarfo et al.:</b> -Sarfo, I., Shuoben, B., Beibei, L. <i>et al.</i> (2022). Spatiotemporal development of land use systems, influences and climate variability in Southwestern Ghana (1970–2020). <i>Environ Dev Sustain</i> <b>24</b>, 9851–9883 (2022). <a href="https://doi.org/10.1007/s10668-021-01848-5">https://doi.org/10.1007/s10668-021-01848-5</a> - Sarfo, I., Shuoben, B., Otchwemah, H.B. <i>et al.</i> (2022). Validating local drivers influencing land use cover change in Southwestern Ghana: a mixed-method approach. <i>Environ Earth Sci</i> <b>81</b>, 367 (2022). <a href="https://doi.org/10.1007/s12665-022-10481-y">https://doi.org/10.1007/s12665-022-10481-y</a> - Sarfo, I., Bi, S., Kwang, C. <i>et al.</i> (2023). Class dynamics and relationship between land-use systems and surface temperature in south-eastern Ghana. <i>Environ Earth Sci</i> <b>82</b>, 104 (2023). <a href="https://doi.org/10.1007/s12665-023-10755-z">https://doi.org/10.1007/s12665-023-10755-z</a> -Authors can integrate some guiding concepts or standardized theories to improve the introduction. Kindly refer to <b>Sarfo et al.</b> studies on such concepts and driving mechanisms of land use cover change. <b>-Lines 52-56</b> need to be cited appropriately. -The research progress or what's known about the topic is too shallow. Authors need to expand it to appreciate what's known and what's unknown, but important to be studied. -In-text citations are needed for the last paragraph. -Authors need to add one additional paragraph that briefly highlights the contribution or relevance of this study to key players, policy makers, land use strategists and the scientific community, followed by the specific objectives or main aim of the study. These will enhance flow and consistency.</p> <p><b>Methodology:</b></p>	

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	<p>-Authors should check the use of superscripts for the appropriate units/coordinates, and ensure uniformity throughout the manuscript.</p> <p><b>Figure 1:</b></p> <p>-Authors are advised to provide a key or legend for this figure which captures DEM and its range for the high and low areas (i.e., elevation range).</p> <p>-Kindly remove the title "Digital Elevation Model" from the top and place it in the caption under the legend.</p> <p>-authors could use linking arrows to connect the selected region from the main area</p> <p><b>-Table 1:</b> Kindly consider adding the path/row details where necessary.</p> <p><b>-Figures 2, 3 and 4</b> using ArcMap layout tab can be merged as one image that presents all these three images/figures with the given years.</p> <p>-Again, these figures could have one legend to depict or describe the classes or symbology used for each class. Such legend for the classifications is missing and must be included.</p> <p>-Studies of this nature require a flowchart or workflow that visualizes or maps data acquisition/source of inputs or reference maps, image pre-processing and enhancement, classifications/post-class., accuracy assessments and other forms of analysis performed to help readers navigate easily. Kindly consider designing a flow in that regard to improve the robustness and scientific outlook.</p> <p>-The equation or expression for Kappa coefficient was not given. Kindly check and ensure the expression, along with the variables and their interpretations are given clearly.</p> <p><b>Data analysis</b></p> <p>-Since change detection is a key component of this work, it is mandatory or important for authors to integrate expressions used for estimating or quantifying land use changes or rate of change in the area, along with their interpretations.</p> <p>-Other analysis conducted and the type or version of software used must be given under this section.</p> <p><b>Results</b></p> <p>-Must only present results with brief captions. All discussions must be moved to the discussion section</p> <p>-Please ensure all tables or figures are mentioned close to where the figures/tables are first mentioned.</p> <p>-Table 3 must be moved upwards or placed closed to the imagery descriptions or section where classifications are discussed in the methodology section.</p> <p><b>Discussions: Refer to manuscript for more details</b></p> <p>-The results of this study need to be discussed in 2-3 pages. Authors need to compare the results of the current study to other studies conducted elsewhere.</p> <p>-Does the current study agree with other studies conducted elsewhere or highlighted in the research progress given in the introduction? If findings do not agree with other studies, what could be the reasons?</p>	
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	<p>-What are the drivers both domestic and external pressures? Do biophysical factors play a role in land use transitions?</p> <p>-This section is very important and can be designed or organized in sub-sections with sub-headers to capture the drivers, implications and so on. <b>Sarfo et al.</b> among other similar studies could be helpful.</p>	
<p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	<p><b>References:</b></p> <p>-Needs to be revised as some references look out of proportion or incorrect. Kindly refer to the manuscript for other comments and details.</p> <p><b>Other comments:</b></p> <p>-Major grammatical defects and syntax errors were identified throughout the manuscript. Few were corrected/revised. It is suggested that authors check and revise the manuscript thoroughly before resubmission.</p>	
<p><b>Optional/General</b> comments</p>	<p>The manuscript is generally informative and has some application value. However, it's quite far from being ready as a thorough revision and re-organization are required to improve the paper.</p>	

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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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