

Review Form 3

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_125499
Title of the Manuscript:	Rainfall Analysis and groundwater studies for soil and water conservation in Kodihalli sub - watershed of Haveri district, Karnataka
Type of the Article	

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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>
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>The Rainfall Analysis and groundwater studies in the Kodihalli sub-watershed of Haveri district, Karnataka, are crucial for understanding local hydrology and enhancing soil and water conservation practices. By providing insights into rainfall patterns and groundwater levels, this research can inform sustainable agricultural practices and improve water resource management in a region vulnerable to climate variability. For the scientific community, such studies contribute valuable data that can be used to develop models for predicting water availability and to design interventions that mitigate soil erosion and enhance crop resilience.</p> <p>I appreciate this manuscript's focus on practical applications that can directly benefit local communities and ecosystems. It addresses pressing environmental issues and showcases the interconnectedness of hydrological processes and land management, making it a significant contribution to the field.</p>	
Is the title of the article suitable? (If not please suggest an alternative title)	The title may not fully capture the essence of the study. A more suitable title could be "Rainfall Patterns and Groundwater Dynamics: Implications for Soil and Water Conservation in the Kodihalli Sub-Watershed, Haveri District, Karnataka." This emphasizes both the analytical aspect and the practical implications of the research.	
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>The abstract provides a detailed overview of the study's findings but could benefit from clearer organization and additional context. Here are my suggestions:</p> <ol style="list-style-type: none"> 1. Introduction of the Study Area: Start with a brief sentence introducing the significance of the Kodihalli sub-watershed and its relevance to the study. 2. Purpose Statement: Include a sentence that explicitly states the study's objective at the beginning, to provide context for the data presented. 3. Key Findings: While the abstract includes various data points, summarizing the most significant findings—such as the implications of AET being less than rainfall—could enhance clarity. 4. Conservation Recommendations: Consider emphasizing the practical implications of the study, particularly how the data informs soil and water conservation strategies. 5. Flow and Structure: Organize the information logically (introduction, methods, results, implications) to improve readability. <p>Revised Suggestion:</p> <p>"The Kodihalli sub-watershed, covering approximately 4398.83 ha in Haveri district, Karnataka, is vital for sustainable land and water management. This study aims to analyze rainfall patterns and groundwater dynamics from 2014 to 2021 to inform soil and water conservation efforts. Average annual rainfall was recorded at 783.0 mm, with maximum precipitation occurring from June to September. The Actual Evapotranspiration (AET) varied from 383.0 to 770.0 mm, with an average AET/P ratio of 0.79, indicating potential water stress. Soil infiltration rates differed significantly, necessitating that approximately 85.7% of the area implemented graded bunding to enhance conservation efforts. These findings underline the importance of targeted soil and water management strategies in the region."</p> <p>This revision maintains essential data while improving coherence and emphasizing the study's relevance.</p>	
Are subsections and structure of the manuscript appropriate?	<p>The subsections and structure of the manuscript appear to be generally appropriate, but a few adjustments could enhance clarity and flow. Consider ensuring that each section has clear headings that guide the reader through the research process, such as "Introduction," "Methodology," "Results," "Discussion," and "Conclusion."</p> <p>Additionally, including a brief literature review in the introduction could provide context for the research. In the results section, presenting data with visual aids, like tables or graphs, might improve comprehension. Overall, a more logical organization and clear transitions between sections would help readers better understand the study's progression and significance.</p>	

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<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>This manuscript demonstrates scientific robustness through its rigorous data collection and analysis methods, spanning multiple years of rainfall and evapotranspiration observations. The use of quantitative metrics, such as the AET/P ratio and infiltration rates across different soil types, reflects a sound methodological approach that allows for clear evaluation of water dynamics in the Kodihalli sub-watershed. Additionally, the comprehensive analysis of rainfall patterns and their implications for soil and water conservation further strengthens its technical validity. Overall, the manuscript effectively integrates empirical data with practical applications, making a valuable contribution to the field of environmental science and resource management.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =</p>	<p>Specific suggestions could include:</p> <ol style="list-style-type: none"> 1. Recent journal articles from Water Resources Research or Journal of Hydrology. 2. Studies focusing on soil conservation published within the last five years. 3. Reports from organizations like the Food and Agriculture Organization (FAO) or the Indian Council of Agricultural Research (ICAR) relevant to Karnataka. <p>Ensuring a diverse and current reference list will strengthen the manuscript's foundation and relevance in the scientific community.</p>	
<p><u>Minor REVISION</u> comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>It is good but some of the stances lack of Clarity conciseness and Technical terminology so improve it.</p>	
<p><u>Optional/General</u> comments</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>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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