## Review Form 1.7

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| Journal Name: | **Journal of Experimental Agriculture International** |
| Manuscript Number: | **Ms_JEAI_119650** |
| Title of the Manuscript: | **Estimation of soil Nitrogen, Phosphorous and Potassium using IOT based Sensor** |
| Type of the Article | **Original Research Article** |

**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)* |
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| **Compulsory** REVISION comments<br><br>**1. Is the manuscript important for scientific community?**<br>(Please write few sentences on this manuscript)<br><br>**2. Is the title of the article suitable?**<br>(If not please suggest an alternative title)<br><br>**3. Is the abstract of the article comprehensive?**<br><br>**4. Are subsections and structure of the manuscript appropriate?**<br><br>**5. Do you think the manuscript is scientifically correct?**<br><br>**6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.**<br><br>**(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)** | 1) The manuscript presents an important study on the use of IoT-based sensors for real-time monitoring of soil nutrients. This technology is crucial for precision agriculture, allowing farmers to optimize fertilization practices and improve crop yields while promoting sustainable agriculture. The findings of the study, which highlight significant spatial variability in soil nutrient levels, underscore the need for targeted nutrient management strategies.<br><br>2) The title is appropriate and accurately reflects the content of the manuscript.<br><br>3) The abstract is comprehensive, clearly outlining the study's objectives, methodology, and key findings. It effectively summarizes the importance of research and its implications for precision agriculture.<br><br>4) The subsections and structure of the manuscript are appropriate. The paper follows a logical flow from introduction through to conclusions, making it easy to follow the progression of the research.<br><br>5) The manuscript appears to be scientifically sound. The methodology is well-detailed, and the results are clearly presented and discussed. The use of ArcGIS and the IDW method for data visualization is a strength of the study.<br><br>6) The references are sufficient and recent. However, the inclusion of more recent studies from 2022 and 2023 would strengthen the manuscript. Suggested additional references include recent advancements in IoT technology for soil monitoring. | |
| **Minor** REVISION comments<br><br>**1. Is language/English quality of the article suitable for scholarly communications?** | The language quality is generally good but can be improved for scholarly communication. For example, the abstract and some sections of the introduction and results can be refined for better readability and conciseness. | |
| **Optional/General** comments | The manuscript could benefit from a discussion on the limitations of the study and potential future research directions. Additionally, providing a more detailed comparison with other existing methods for soil nutrient estimation would add value. | |

## Review Form 1.7

**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)* |
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| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in details)* | |

**Reviewer Details:**

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|---|---|
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