

**Review Form 1.7**

Journal Name:	<b>International Journal of Environment and Climate Change</b>
Manuscript Number:	<b>Ms_IJECC_119756</b>
Title of the Manuscript:	<b>Impact of AI based irrigation scheduling approaches and drip irrigation methods on chilli (<i>Capsicum annum L.</i>) yield and soil chemical properties</b>
Type of the Article	

**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>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)</b>
<p><b>Compulsory</b> REVISION comments</p> <p><b>1. Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</p> <p><b>2. Is the title of the article suitable?</b> (If not please suggest an alternative title)</p> <p><b>3. Is the abstract of the article comprehensive?</b></p> <p><b>4. Are subsections and structure of the manuscript appropriate?</b></p> <p><b>5. Do you think the manuscript is scientifically correct?</b></p> <p><b>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></p> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<ol style="list-style-type: none"> <li>The manuscript titled "Impact of AI based irrigation scheduling approaches and drip irrigation methods on chilli (<i>Capsicum annum L.</i>) yield and soil chemical properties" is highly relevant to the scientific community. It addresses the critical issue of optimizing water use in agriculture, which is particularly significant in the context of climate change and water scarcity. The use of AI in irrigation scheduling is a novel approach that can potentially revolutionize agricultural practices by enhancing yield and conserving resources.</li> <li>The title is suitable and accurately reflects the content and findings of the manuscript. It succinctly conveys the core focus of the study.</li> <li>The abstract is comprehensive, providing a clear summary of the study's aim, design, methodology, results, and conclusions. It effectively encapsulates the essence of the research and its outcomes.</li> <li>The subsections and structure of the manuscript are appropriate. The manuscript is well-organized with distinct sections for the introduction, methodology, results, discussion, and conclusion. This facilitates easy navigation and comprehension.</li> <li>The manuscript is scientifically sound. The experimental design is robust, and the statistical analyses are appropriately applied. The findings are well-supported by the data presented.</li> <li>The references are sufficient and recent. The manuscript cites relevant and up-to-date sources, which strengthens the credibility of the research. However, including more recent studies from 2022 and 2023 would further enhance the manuscript.</li> </ol>	
<p><b>Minor</b> REVISION comments</p> <p><b>1. Is language/English quality of the article suitable for scholarly communications?</b></p>	<ol style="list-style-type: none"> <li>Improve the language quality of the manuscript. There are several grammatical errors and awkward phrasings that need correction for better readability.</li> <li>Ensure that all abbreviations are defined upon first use.</li> </ol>	
<p><b>Optional/General</b> comments</p>	<ol style="list-style-type: none"> <li>The manuscript could benefit from a deeper discussion on the limitations of the study and potential areas for future research.</li> <li>It would be useful to include a brief overview of the economic implications of adopting AI-based irrigation systems for farmers.</li> <li>Clarify the specific AI techniques used for irrigation scheduling. Are they based on machine learning algorithms, and if so, which ones?</li> <li>Expand on the calibration process of the sensors used in the study. Provide more details to ensure reproducibility.</li> </ol>	

**Review Form 1.7**

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Anik Sen</b>
Department, University & Country	<b>Multimedia University, Malaysia</b>