

## Review Form 1.6

Journal Name:	<a href="#">International Journal of Environment and Climate Change</a>
Manuscript Number:	Ms_IJECC_87384
Title of the Manuscript:	Assessment and Mapping of Groundwater Quality for Irrigation in and Around Areas of Paper Board Industry
Type of the Article	Original Research Article

### **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:

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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)
<b>Compulsory</b> REVISION comments	<ol style="list-style-type: none"> <li>1. <b>Abstract needs to be revised considering the following: 2-3 lines introducing the topic and highlighting the research problem, followed by the main aim, a brief description about methodology, key results and findings, key conclusions and key recommendations.</b></li> <li>2. <b>Typo errors throughout. Please, double check throughout the whole document.</b></li> <li>3. <b>Section 4: Conclusion. I would suggest that to be conclusions and recommendation. This section should be further expanded.</b></li> <li>4. <b>Authors stated this</b> "Highly significant positive correlation (Table 5) was observed between major cations, Na<sup>+</sup> and Mg<sup>2+</sup> (r = 0.74**). Highly significant positive correlation was observed between Na<sup>+</sup> and HCO<sub>3</sub><sup>-</sup> (r = 0.60**) and Na<sup>+</sup> and SO<sub>4</sub><sup>2-</sup> (r = 0.36**). The positive correlation indicates the dissolution of sodium from its respective ion containing minerals. Highly significant positive correlation between Ca<sup>2+</sup> and HCO<sub>3</sub><sup>-</sup> (r = 0.18**) which indicates that the calcite may be a source in the presence Ca<sup>2+</sup>. The correlation between SO<sub>4</sub><sup>2-</sup> and Ca<sup>2+</sup> (r = 0.77**) implies that a part of the SO<sub>4</sub><sup>2-</sup> and Ca<sup>2+</sup> may also be derived by the weathering of Calcium sulphate mineral [22]. The correlation between Mg<sup>2+</sup> and HCO<sub>3</sub><sup>-</sup> (r = 0.60**) between Cl<sup>-</sup> and Na<sup>+</sup> (r = 0.69**) indicates that they most likely derive from the same source of water".  <b>The authors need to be very careful about the interpretation of the correlation coefficient values mentioned in the above paragraph. The authors have stated that highly positive correlation was found for r=0.74, r=0.6, and r=0.36. This is a misinterpretation to the strength of the relationship between two variables. R=0.74 could be considered strong correlation, r=0.6 could be considered as moderate correlation while r=0.36 can be considered as a low correlation. The authors have to revise the interpretation of the values of correlation coefficient.</b> </li> </ol>	
<b>Minor</b> REVISION comments	<ol style="list-style-type: none"> <li>1. Labels of figures to be placed below the figures while labels of tables above the tables. Check this throughout.</li> <li>2. Equations should all be aligned (e.g., see equations 1 and 2 as an example)</li> <li>3. In the methodology section, it is important to mention what technique used to produce the spatial distribution maps (e.g., Fig.1, Fig.2, Fig.3, and Fig. 4).</li> <li>4. Pages should be numbered</li> </ol>	
<b>Optional/General</b> comments		

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

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