

Review Form 3

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_131155
Title of the Manuscript:	A comprehensive review on impact of intensive use of nitrogenous fertilizer on nitrate contamination in groundwater, under sugarcane based cropping system in Indo-Gangetic plains of India.
Type of the Article	Review Article

Review Form 3
PART 1: Comments

	Reviewer's comment Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.	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. A minimum of 3-4 sentences may be required for this part.	This manuscript provides a comprehensive review of nitrate contamination in groundwater due to intensive nitrogenous fertilizer use in sugarcane-based cropping systems in the Indo-Gangetic Plains of India. It highlights the environmental and public health risks posed by nitrate leaching, emphasizing the urgent need for sustainable agricultural practices. The study bridges knowledge gaps by focusing on sugarcane cultivation's unique contribution to nitrate flux, making it a valuable resource for researchers, policymakers, and stakeholders concerned with agricultural sustainability and water quality management.	
Is the title of the article suitable? (If not please suggest an alternative title)	The current title is informative but can be made more concise for clarity. Suggested alternative: "Impact of Intensive Nitrogenous Fertilizer Use on Nitrate Contamination in Groundwater: A Review of Sugarcane-Based Cropping Systems in the Indo-Gangetic Plains"	
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.	The abstract is comprehensive and well-structured. It effectively summarizes key themes, including nitrate leaching processes, environmental and health risks, and mitigation strategies. Minor suggestion: The last sentence could explicitly mention policy implications for stronger impact.	
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically robust, with detailed explanations of nitrate chemistry, sources, environmental distribution, and health risks.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient, diverse, and include recent studies. However, more references from the past 3–5 years could strengthen the discussion on recent advancements in sustainable agricultural practices and nitrate mitigation strategies.	
Is the language/English quality of the article suitable for scholarly communications?	The manuscript is well-written but contains occasional grammatical errors and long, complex sentences. Some paragraphs, especially in the "Nitrate in Surface and Groundwater" and "Leaching of Nitrate in Soil" sections, are overly lengthy, making comprehension difficult.	
Optional/General comments		

PART 2:

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

Reviewer Details:

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