

REVIEWER'S REPORT

Manuscript No.: JNAVES-030

Title: Sustainable Aquaculture and Environmental Management: Challenges, Innovations, and Future Opportunities.

Recommendation:

Accept as it is
Accept after minor revision.....
 Accept after major revision
 Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity	✓			
Significance	✓			

Reviewer Id: JPR-137

Reviewer's Comment for Publication.

The manuscript provides a comprehensive and relevant review of sustainable aquaculture practices and environmental management strategies. The topic is highly significant due to the increasing global demand for aquatic food resources and the need to balance aquaculture expansion with ecosystem conservation. The manuscript is well structured and clearly presents the major aspects of aquaculture development, including environmental challenges, disease management, sustainable feed systems, innovative technologies, climate change impacts, and policy considerations. The discussion of advanced approaches such as biofloc technology, recirculating aquaculture systems, and integrated multi-trophic aquaculture effectively highlights pathways toward sustainable aquatic food production.

Some minor revisions are recommended to further improve the scientific quality of the manuscript. The authors should incorporate more recent studies and updated global aquaculture statistics to strengthen the current relevance of the review. The sections related to environmental impacts, sustainable feed alternatives, and technological innovations could benefit from additional critical analysis and practical examples from different aquaculture regions. The discussion on policy frameworks and certification systems may also be expanded to highlight their role in promoting responsible aquaculture development. The reference section should be carefully reviewed for accuracy, completeness, and consistency with the journal's formatting requirements. Minor language editing and proofreading are also recommended to improve readability.

Overall, the manuscript provides valuable insights into sustainable aquaculture development and environmental management. Subject to the incorporation of the suggested minor revisions, the manuscript is recommended for publication.