

Review Form 3

Journal Name:	Asian Journal of Soil Science and Plant Nutrition
Manuscript Number:	Ms_AJSSPN_130503
Title of the Manuscript:	Stability and Sustainability Indices and Mitigation Strategies for Water Conservation in relative to Fruit Crops
Type of the Article	Review Article

PART 1: Comments

	Reviewer's comment	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.	his manuscript is of significant importance to the scientific community as it highlights innovative approaches to addressing water scarcity in relation to fruit crop cultivation. By exploring stability and sustainability indices, it provides valuable insights into the efficient use of water resources while ensuring ecological, economic, and social balance. The manuscript emphasizes the need for strategic water conservation measures, such as rainwater harvesting and improved management practices, to enhance agricultural productivity and resilience to climate risks. Its findings contribute to advancing sustainable agriculture and offer practical solutions for mitigating water shortages, thereby promoting long-term food and water security.	
Is the title of the article suitable? (If not please suggest an alternative title)	The current title, "Stability and Sustainability Indices and Mitigation Strategies for Water Conservation in Relative to Fruit Crops," is clear but could be refined for better readability and precision. Here's a suggested alternative: "Stability and Sustainability Indices for Water Conservation: Mitigation Strategies in Fruit Crop Cultivation" This revised title improves the flow and focuses on the central themes of the manuscript, making it more engaging and concise for the reader.	

Review Form 3

<p>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.</p>	<p>The abstract is generally informative but could benefit from improved clarity and structure. Here are some suggestions for improvement:</p> <p>Suggestions for Addition:</p> <ol style="list-style-type: none">Objective Statement: Include a clear statement about the specific aim of the review to help the reader understand the focus of the manuscript. For example: "This review aims to evaluate the role of stability and sustainability indices in water conservation and their applications in fruit crop management."Key Findings/Insights: Highlight specific examples of strategies, indices, or techniques discussed in the review to give the reader a sense of the practical applications.Technological Innovations: If applicable, mention any technological approaches (e.g., smart irrigation, water recycling) that are emphasized in the manuscript. <p>Suggestions for Deletion or Rephrasing:</p> <ol style="list-style-type: none">Avoid Repetition: The abstract repeats similar ideas, such as the focus on water scarcity and the role of indices, which can be streamlined for better readability.Simplify Technical Language: Certain phrases like "stability indices are used when water management practices help to change the environmental condition" can be rephrased to be more precise and reader-friendly, e.g., "Stability indices assess the adaptability of water management practices to changing environmental conditions." <p>Comprehensive Rewrite (Example):</p> <p>"Water scarcity is a critical global challenge that threatens food security and ecological balance. This review explores the role of stability and sustainability indices in improving water conservation practices in fruit crop cultivation. Stability indices assess the adaptability of cultivation methods to changes in water availability, climatic conditions, and other external factors. Sustainability indices evaluate the ecological, social, and economic impacts of water use, enabling strategic resource allocation and long-term water security. The review also highlights key mitigation strategies, including rainwater harvesting, soil health improvement, and community-driven conservation efforts. By integrating these approaches, the manuscript provides actionable insights for advancing sustainable fruit crop farming and addressing water shortages in agricultural systems."</p> <p>This version maintains the key points but organizes them more clearly and succinctly while reducing redundancy.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The manuscript appears to be scientifically sound, with well-grounded concepts and references supporting the claims made about water conservation, stability indices, and mitigation strategies for fruit crops.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The references you've provided cover a wide range of topics related to water management, irrigation strategies, agricultural practices, climate change, and sustainability. The list includes recent works (2020–2023), along with foundational studies, which is great for providing both current and historical context.</p> <p>However, depending on the scope of your work, I can suggest a few things for improvement or additions:</p> <ol style="list-style-type: none">Current Trends and Innovations: You could benefit from more references on cutting-edge technology in precision agriculture, particularly concerning artificial intelligence, machine learning, and IoT-based irrigation systems. These areas have seen rapid growth and application in recent years, especially related to smart irrigation and automated systems. <p>Examples:</p> <ul style="list-style-type: none">"Application of Artificial Intelligence in Smart Irrigation Systems" (2023)"IoT-based Monitoring Systems in Agricultural Water Management" (2022) <ol style="list-style-type: none">Climate Change & Water Scarcity: Your list touches on these themes, but there could be more references linking climate change adaptation with water management strategies for specific regions (e.g., Asia, Africa, and Latin America). Exploring case studies from these regions would provide a deeper perspective. <p>Examples:</p> <ul style="list-style-type: none">"Impacts of Climate Change on Water Availability and Agricultural Systems" (2023)"Water Scarcity and Sustainable Agriculture Practices in Arid Regions" (2022) <ol style="list-style-type: none">Emerging Water Management Techniques: Some references could focus on new water harvesting technologies, such as fog nets, desalination, and graywater recycling	

Review Form 3

	<p>systems.</p> <p>Examples:</p> <ul style="list-style-type: none">o "Recent Developments in Fog Water Harvesting for Agriculture" (2023)o "Desalination Technologies and Their Role in Agriculture" (2022) <p>4. Policy and Governance: There could be a greater focus on policy-related works that discuss water governance, the role of international institutions, and water rights, especially in water-scarce regions.</p> <p>Examples:</p> <ul style="list-style-type: none">o "Water Governance in Water-Scarce Regions: A Global Perspective" (2021)o "Institutional and Policy Approaches to Sustainable Water Management" (2022) <p>5. Agricultural Water Use Efficiency: There is a need for more research specifically dedicated to enhancing water use efficiency (WUE) across various crops and regions. Research could cover crop-specific practices and how these affect WUE in different climates.</p> <p>Examples:</p> <ul style="list-style-type: none">o "Crop-Specific Strategies for Enhancing Water Use Efficiency" (2022)o "Water Use Efficiency in Drought-Tolerant Crops" (2021)	
Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General 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?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

Name:	Vinay Dwivedi
Department, University & Country	Amity Institute of Biotechnology, Amity University, India