Journal Name:	Archives of Current Research International
Manuscript Number:	Ms_ACRI_130626
Title of the Manuscript:	Advancements in Post-Harvest Handling and Storage of Vegetables: A Review
Type of the Article	Original Research Article

# PART 1: Comments

	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that
		part in the manuscript. It is mandatory that authors should write
		his/her feedback here)
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 valuable insights into contemporary advancements in post-harvest management, particularly for vegetables, a highly perishable commodity. It highlights critical innovations such as precision harvesting, advanced storage systems, and smart packaging technologies, which are pivotal in extending shelf life and reducing losses. The identified gaps, such as infrastructural deficiencies, which present opportunities for further research and development in sustainable, efficient vegetable post-harvest systems. By addressing both current achievements and future prospects, this work serves as an essential resource for researchers, practitioners, and policymakers in the field of food security and post-harvest management.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title "Advancements in Post-Harvest Handling and Storage of Vegetables" is generally suitable as it clearly indicates the focus on improvements in vegetable post-harvest management. However, to make it more comprehensive and reflective of the article's content, which includes storage, handling, and emerging technologies, a more specific title could be: "Recent Advancements and Innovations in Post-Harvest Handling, Storage, and Technology for Vegetables"  This title highlights not only advancements in handling and storage but also incorporates the focus on innovative technologies, aligning with the article's key themes.	

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 in that it covers the main themes of the article, including the perishability of vegetables, the importance of post-harvest management, and advancements in handling, storage, and packaging technologies. It also mentions the challenges and future opportunities in the field. However, a few suggestions for improving the abstract:	
	<ol> <li>Clarity and Redundancy:         <ul> <li>The phrase "Among all perishable commodities, vegetables are one that suffers the maximum qualitative and quantitative losses after the harvest" is somewhat redundant, as it reiterates a point made earlier. It could be simplified or omitted to improve flow.</li> <li>The phrase "innovative and new methods of storage" could be shortened to just "innovative storage methods," as "new" and "innovative" are synonymous in this context.</li> </ul> </li> <li>More Focus on the Implications:         <ul> <li>While the abstract mentions innovations and challenges, it could emphasize the broader implications of these advancements for food security and economic viability a bit more clearly, perhaps in a concluding sentence that ties everything together.</li> </ul> </li> <li>Future Research Directions:         <ul> <li>You might consider explicitly mentioning that the article suggests areas for further research or development, such as addressing gaps in infrastructure or testing new technologies in different regions or contexts.</li> </ul> </li> <li>My suggestion(Revised Abstract):</li> </ol>	
	Vegetables are highly perishable and experience significant qualitative and quantitative losses after harvest. Advances in post-harvest handling and storage technologies have become critical interventions for maintaining quality, extending shelf life, and reducing waste. This review explores recent developments in post-harvest management, including precision harvesting tools, innovative storage solutions, and smart packaging technologies. It also examines the challenges, such as infrastructural deficiencies, and highlights future opportunities for creating more efficient and sustainable vegetable post-harvest systems. These innovations are vital for sustaining vegetable quality, improving food security, and enhancing economic viability. The article identifies potential areas for further research to optimize post-harvest systems worldwide.  This revision streamlines the abstract and adds a stronger conclusion that reinforces the significance of the advancements and future directions.	
Is the manuscript scientifically, correct? Please write here.	Yes, Yes, the manuscript appears scientifically correct in its description of post-harvest management, advancements in storage technologies, and their relevance to vegetable preservation. The points made about the perishability of vegetables, the need for improved handling and storage techniques, and the role of innovations such as precision harvesting tools, smart packaging, and sustainable storage solutions are aligned with current post-harvest management practices.	
	The mention of challenges, such as infrastructural deficiencies, and the call for further research to optimize systems are valid concerns in the field, reflecting real-world gaps in knowledge and technology.	
	However, for a more detailed evaluation of scientific correctness, it would be necessary to ensure that the claims regarding specific technologies (e.g., smart packaging, precision harvesting) are backed by references to current literature or studies. If these aspects are explored in detail within the full manuscript, and if the review draws from recent and credible sources, the manuscript should be scientifically sound.	
	Additionally, ensuring the manuscript adheres to accepted post-harvest handling principles and includes data or examples from relevant studies would strengthen its scientific foundation	

Are the references sufficient and recent? If you	Yes, the references are sufficient and recent.	
have suggestions of additional references, please		
mention them in the review form.		

Is the language/English quality of the article suitable for scholarly communications?	The language and English quality of the article appear to be generally suitable for scholarly communication, with clear and coherent writing that effectively conveys the main points. The terminology used is appropriate for a scientific audience, and the concepts are explained in a way that aligns with academic writing standards.  However, there are a few areas where minor improvements could be made to enhance readability and precision:  1. Redundancy: The phrase "new methods of harvesting, innovative and new methods of storage" could be streamlined to avoid repetition. For example, "innovative harvesting and storage methods" would convey the same meaning more succinctly.  2. Clarity and Sentence Structure:  o The sentence "Present developments in handling and storage post-harvest technologies have played a vital role in solving this problem" could be clearer. Consider rephrasing it as: "Recent developments in post-harvest handling and storage technologies have played a vital role in addressing this issue."  o The phrase "These technologies also have the potential to enhance sustainability by reducing waste and improving supply chain efficiency."  3. Tense Consistency: In some parts, the tense shifts slightly, which can be confusing. For example, "Vegetables are very important constituents of a healthy diet" could be followed by "However, their high moisture content makes them particularly susceptible" to maintain consistency.  4. Inclusion of Citations: While citations are included, it is helpful to ensure that all sources are clearly referenced, particularly in a scientific paper where readers expect accuracy in sourcing.  Phrasing:  o "It is often said that the percentage of post-harvest loss in vegetables may be more than 30%" could be made more authoritative by saying, "Research indicates that post-harvest losses in vegetables may exceed 30%, particularly in developing countries."	
Optional/General comments	There are a few suggestions for improvement:	
	1. Clarity and Precision:	
	Avoid some repetitions and there are some phrases need to be rephrased for smoother flow	
	Few examples:	
	<ul> <li>In the abstract:         <ul> <li>"Innovative and new methods of storage" is repetitive. "Innovative storage methods" would suffice.</li> <li>"Among all perishable commodities, vegetables are one that suffers the maximum qualitative and quantitative losses after the harvest" could be rephrased for smoother flow. Consider: "Among perishable commodities, vegetables experience the highest qualitative and quantitative losses after harvest."</li> </ul> </li> <li>In the introduction:         <ul> <li>"Although high water content makes vegetables highly perishable and vulnerable to rapid deterioration during post-harvest, they are quite significant." This could be clearer. Consider: "Although their high water content makes vegetables highly perishable and prone to rapid deterioration, they remain crucial for human nutrition."</li> <li>"It is often said that the percentage of post-harvest loss in vegetables may be more than 30%" can be made more authoritative by citing research directly. For example:</li> </ul> </li> </ul>	

**Review Form 3** "Research indicates that post-harvest losses in vegetables may exceed 30%, particularly in developing countries." 2. Sentence Structure and Flow: • Some sentences can be tightened for improved readability. For example: o "Present developments in handling and storage post-harvest technologies have played a vital role in solving this problem" could be rephrased as "Recent developments in post-harvest handling and storage technologies have been crucial in addressing this issue." "These technologies also have the potential to enhance sustainability by reducing waste and improving the efficiency of vegetable supply chains" could be simplified to: "These technologies enhance sustainability by reducing waste and improving supply

## 3. Consistency in Terminology:

chain efficiency."

• In the keywords section, you could list "post-harvest loss" as one unified term ("post-harvest loss" instead of "vegetable and post-harvest loss"), making it clearer and more standard in academic contexts.

## 4. Grammar and Syntax:

• The overall grammar is solid, but attention to sentence variation and word choice will improve the flow and readability of the article.

## 5. Citations:

Ensure that the references (e.g., Septembre-Malaterre et al., 2018) are consistent in their format, and double-check that each cited study is properly referenced in the bibliography or reference list.

### **Conclusion:**

The article is of high quality in terms of content and scholarly communication. The writing is largely appropriate for an academic audience, but small improvements in clarity, sentence structure, and precision will help elevate it further. These adjustments will improve the overall readability and flow, making it even more suitable for scholarly publication.

Based on the content provided in this manuscript, there do not appear to be any explicit ethical issues in the manuscript.

There are not competing interest issues in this manuscript

# PART 2:

		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:**

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